

Board



Date: 25 July 2018

Item: Commissioner's Report

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 23 May 2018 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 – July 2018

List of Background Papers:

None

**Mike Brown MVO
Commissioner
Transport for London
July 2018**

Commissioner's Report

25 July 2018



About Transport for London (TfL)

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

We have a key role in shaping what life is like in London, helping to realise the Mayor's vision for a 'City for All Londoners'. We are committed to creating a fairer, greener, healthier and more prosperous city. The Mayor's Transport Strategy sets a target for 80 per cent of all journeys to be made on foot, by cycle or using public transport by 2041. To make this a reality, we prioritise health and the quality of people's experience in everything we do.

We manage the city's 'red route' strategic roads and, through collaboration with the London boroughs, can help shape the character of all London's streets. These are the places where Londoners travel, work, shop and socialise. Making them places for people to walk, cycle and spend time will reduce car dependency and improve air quality, revitalise town centres, boost businesses and connect communities.

We run most of London's public transport services, including the London Underground, London Buses, the Docklands Light Railway, London Overground, TfL Rail, London Trams, London River Services, London Dial-a-Ride, Victoria Coach Station, Santander Cycles and the Emirates Air Line. The quality and accessibility of these services is fundamental to Londoners' quality of life. By improving and expanding public transport, we can make people's lives easier and increase the appeal of sustainable travel over private car use.

We are moving ahead with many of London's most significant infrastructure

projects, using transport to unlock growth. We are working with partners on major projects like Crossrail 2 and the Bakerloo line extension that will deliver the new homes and jobs London and the UK need. We are in the final phases of completing the Elizabeth line which, when it opens, will add 10 per cent to London's rail capacity.

Supporting the delivery of high-density, mixed-use developments that are planned around active and sustainable travel will ensure that London's growth is good growth. We also use our own land to provide thousands of new affordable homes and our own supply chain creates tens of thousands of jobs and apprenticeships across the country.

We are committed to being an employer that is fully representative of the community we serve, where everyone can realise their potential. Our aim is to be a fully inclusive employer, valuing and celebrating the diversity of our workforce to improve services for all Londoners.

We are constantly working to improve the city for everyone. This means freezing TfL fares so everyone can afford to use public transport, using data and technology to make services intuitive and easy to use, and doing all we can to make streets and transport services accessible to all. We reinvest every penny of our income to continually improve transport networks for the people that use them every day.

None of this would be possible without the support of boroughs, communities and other partners who we work with to improve our services. We all need to pull together to deliver the Mayor's Transport Strategy; by doing so we can create a better city as London grows.

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I Introduction

This report provides a review of major issues and developments since the Board meeting of 23 May 2018.

2 TfL Scorecard

Period 3

Breakdown of scorecard measures categories:

Safety and Operations: **25%** Customer: **25%** People: **25%** Financial: **25%**

Long-term objectives	2018/19 scorecard	Period 3 / Q1		Year to date	
Outcome	Measure	Actual	Target	Actual	Target
Healthy Streets and healthy people (18%)					
London's transport system will be safe and secure	Reduction in people killed or seriously injured on the roads from 2005-09 baseline (%)	39.3	38.1	39.3	38.1
	Reduction in people killed or seriously injured on roads from 2005-09 baseline (incidents involving buses) (%) ¹	72.6	51.8	72.6	51.8
	Injuries on the public transport network	889	877	2,673	2,719
London's streets will be used more efficiently and have less traffic	Operational improvements to sustainable travel	3,921	3,754	3,921	3,754
London's streets will be clean and green	Number of London buses that are Euro VI compliant ²	50	n/a	4100	n/a
More Londoners will travel actively	Healthy Streets scheme assessment (%)	7	10	7	10
A good public transport experience (17%)					
Journeys by public transport will be fast and reliable	Tube excess journey time (minutes)	4.25	4.46	4.36	4.35
	Average bus speeds (mph)	9.3	9.1	9.3	9.2
Public transport will be accessible to all	Additional time to make step-free journeys (minutes)	10	10	10	10
Journeys by public transport will be pleasant	Customer satisfaction (percentage of Londoners who agree we care about our customers) (%)	48	49	48	49

¹ Reduction in KSIs: Measured in calendar years (YTD is January to March 2018). KSI figures are provisional and subject to change

² Number of London buses that are Euro VI compliant : The full year target for this measure is 6,050 buses. There are no quarterly targets due to the unpredictability of when operators will offer new buses. The retrofitting programme is on track

Achieved Partially achieved Not achieved

Long-term objectives	2018/19 scorecard	Period 3 / Q1		Year to date	
Outcome	Measure	Actual	Target	Actual	Target
New homes and jobs (2.5%)					
Transport investment will unlock the delivery of new homes and jobs	The percentage of affordable houses we take to market in the year (%)	40	40	40	40
Mode share (5%)					
80% of journeys will be made by sustainable modes in 2041	Improve sustainable mode share improvement ³	0 of 3	3 of 3	0 of 3	3 of 3
All MTS themes (7.5%)					
All MTS outcomes	Deliver key investment milestones (%)	100	90	100	90
	Open Elizabeth line central section	On track	On track	On track	On track
People (25%)					
A capable and engaged workforce representative of London	Workforce representativeness ⁴ - all staff (%)	See note	n/a	n/a	n/a
	- director/band 5 (%)	See note	n/a	n/a	n/a
	Inclusion index (%) ⁵	See note	n/a	n/a	n/a
	Total engagement (%) ⁵	See note	n/a	n/a	n/a
Financial (25%)					
We are prudent and cover our costs	Net operating surplus (£m)	47	33	133	96
	Investment programme (£m)	147	159	458	538

³ Sustainable mode share improvement: The walking survey is due to begin at the end of Q3. Therefore, this element is not included in Q1 results.

⁴ Workforce diversity: Data will be available from P4 following a data transfer between systems. As a result, the 2018/19 targets may need to be rebaselined

⁵ Total inclusion index / total engagement: These measures are a result of the annual Viewpoint survey. Results are expected to be available in Q3

3 Safety and security

Croydon tram overturning

Our thoughts remain with all those affected by the tragedy at Sandilands and we continue to do all we can to support them. The Sarah Hope Line provides continuing help with counselling and other support.

In May, we began the tender process for the installation of a new safety system on the London Trams network that will automatically apply the brakes should the speed limit be exceeded at high-risk locations. The system would also automatically alert the operations control centre.

It will initially be configured to priority locations as suggested by the Rail Accident Investigation Branch, but will have the potential to be introduced elsewhere on the tram network. A contract notice has been issued through the Official Journal of the European Union, and we are inviting interest from companies who have innovative solutions to meet the specification. Following the qualification process, an official Invitation to Tender will be issued in the summer, with the contract due to be awarded by the end of the year.

Customer safety

Last year on the London Underground network, we focused on improving customer safety through better communication. We made a number of changes (including installing new 'Hold the handrail' signs on escalators, better local announcements and clearer posters) at the 10 stations with the most escalator accidents. Statistics published in May 2018 show that the number of accidents on escalators at these stations dropped by 29 per cent following these improvements. We are now making these changes in all London Underground stations with escalators.

Our other area of focus for 2018/19 is to reduce the number of accidents caused by the gap between the train and the platform. We are rebuilding the edges of 86 platforms across the network to reduce this gap, with the last six platforms set to be completed by the end of August.

We have also upgraded the camera quality and positioning on a number of platforms to improve the train operator's view of the platform train interface, and we will be making sure the cameras give the train operators a clearer view on 95



platforms between now and April 2021.

Workforce safety

This year our plans address key areas of risk for our staff and contractors so that they can work safely on our network. This includes reducing the number of injuries sustained from working at height; slips, trips and falls; workplace violence; and the risk of accidents while working on the track.

A key element of all our plans is improving the safety culture across the organisation. We have launched a new 'Safety conversation' approach for our London Underground maintenance team and created open forums for discussing safety issues with our staff and contractors who work on-site.

As part of our campaign to reduce the chance of falls in the track environment, we started a programme of work in April

2018 to clear redundant materials from across the Underground network.

Major project safety

We have identified that there is a higher likelihood of injury on major projects in the summer holiday season. We are using the prompt: 'What do you need to do to keep yourself safe once you return to work?' as a new safety campaign over the summer months. We are also asking our suppliers to engage with us to develop a 'back to work' campaign.

Alongside this work we are promoting the health and safety message: 'Don't walk by'. We are also encouraging better use of our incident reporting system, and exploring how we can make this system work better. Keeping a good record of reported incidents is already helping ensure issues are kept visible and that appropriate action is being taken to prevent recurrence.



We have run a number of joint campaigns with the police to tackle knife crime on public transport

Bus safety campaign

Our latest set of published collision statistics reported there were no fatalities on the bus network between January and March. This has been achieved by building a stronger safety culture on the bus network, in conjunction with the operators, boroughs and the London Cycling Campaign.

We are continuing to develop the Bus Safety Standard, which will apply to all buses in London. We expect to roll out the first phase of the standard in January 2019, which all new buses in our contracts from this point on will need to meet. The standard will require additional safety features to be fitted such as Intelligent Speed Assistance and new mirrors to improve driver vision.

Reports on the trials of each potential component of the standard are due at the end of July. Following this, we will decide what will be included in the first version.

We have also been testing and evaluating enhanced designs and the most promising vehicle safety technologies, such as automated emergency braking and vehicle detection systems, so that they can become part of the new bus specification for London. We will also be developing a longer term plan for technological advances that are not yet ready to go into vehicle production, so that the standard can continue to evolve over time.

Our bus operators are also continuing to trial innovative approaches to improving safety, including acceleration control equipment and new ways to monitor and help drivers deal with fatigue.

Tackling knife crime and keeping people safe on public transport

We have run a number of joint operations with the Metropolitan Police Service (MPS) and the British Transport Police (BTP) to prevent knife crime and serious violence on London's transport network. During a week in May 2018, uniformed and plain-clothed patrols were deployed. As part of this, the BTP used stop and search powers and confiscated a significant number of knives and weapons as part of the intelligence-led operation.

Safer Travel at Night campaign

The Safer Travel at Night campaign relaunched on 16 May 2018 with a range of activities designed to highlight the risk of using un-booked minicabs and to encourage the public to use taxis or booked, licensed minicabs instead. Our compliance officers worked alongside MPS and BTP officers to carry out vehicle and driver licensing checks, to visit private hire operators, to engage with the public and to undertake other activities to detect drivers who are breaking the law. We stopped and inspected more than 12,000 taxi and private hire vehicles as part of our targeted work. We found 1,782 vehicles that were non-compliant.

When we find a non-compliant vehicle, taxi and private hire Compliance Officers will issue either an Advisory Notice or an Unfit Notice, dependent on the severity of the issue. Drivers who are issued with an Unfit Notice are required to present the vehicle at an NSL test centre within 14 days to undergo a special inspection to confirm the fault identified has been repaired or corrected. Driver non-compliance is dealt with via warning letters.

Support for the Mayor's Taxi and Private Hire Action Plan

All taxi and private hire compliance officers now have a new digital platform for recording taxi and private hire offences on mobile devices. The expansion of our digital enforcement solution – Mercury – to include taxi and private hire offences will significantly increase the efficiency of our officers, prosecutors and the court system by replacing a paper-based system.

Court of Appeal judgment – Voice Contact Requirement

Our appeal in relation to the Voice Contact Requirement for London private hire vehicle (PHV) operators has been allowed by the Court of Appeal. We introduced the Voice Contact Requirement in June 2016, which required that London PHV operators make someone available for passengers to speak to during operating hours if they want to make a complaint or discuss other matters relating to their booking.

The court considered that a requirement for passengers to be able to speak to PHV operators at all times was proportionate to the public safety, equality and convenience benefits that customers are entitled to. The court considered that the suggested alternative of passenger contact with operators in emergency situations only did not go far enough and was not practicable. We have set a compliance date of 1 October 2018 in order to allow operators time to implement changes. We encourage operators to comply sooner if possible.

Streetworks

On 20 June 2018, we successfully prosecuted Virgin Media for five streetwork-related offences committed in the course of executing works on the Transport for London Road Network (TLRN). The works took place in Wandsworth High Street, Stonehill Court and Wickham Road, between October and December 2017. Virgin Media failed to serve the required statutory streetwork notices confirming the actual start and end dates for the works, which resulted in roadwork coordination difficulties.

Virgin Media pleaded guilty to all five offences and were fined £3,000 and ordered to contribute £3,494 towards the legal costs we incurred. In sentencing the Court remarked that 'these offences appear to occur quite regularly according to the records presented to me and a total of 66 fixed penalty notices have been incurred in the last year alone.

That to me is a pattern of carelessness towards your compliance obligations and not acceptable'.

We have prosecuted Virgin Media on three previous occasions and have issued them with 659 fixed penalty notices since 2010, of which 66 were issued in the last year.

Uber outcome

Uber London Limited's (ULL) appeal against our decision to refuse them a PHV operating licence in September 2017 was heard in the Westminster Magistrates' Court on Monday 25 and Tuesday 26 June 2018.

Having considered all of the evidence and submissions presented in the appeal, the Magistrate decided that we were right to conclude that ULL was not a fit and proper person to hold an operating licence when it refused its application for a new licence in September 2017. ULL also accepted that our decision to refuse a licence had been correct.

The Magistrate went on to consider whether ULL was, at the time of the appeal hearing, a 'fit and proper person' to hold an operating licence now taking into account the changes made by ULL since they were refused a licence, in particular changes to corporate governance. She considered whether, in light of these changes, ULL could be trusted when it says it has changed and whether it will maintain the changes it has committed to, if granted a licence.

The Magistrate also considered representations from the LTDA that London licensed Uber drivers working outside of their licensed area – in particular where Uber do not hold an operating licence – is unlawful and is a matter that should be taken into account by the Court when considering whether ULL is fit to hold a licence.

The Magistrate concluded that while ULL was not a fit and proper person to hold a licence at the time of our decision and in the months that followed, it had provided sufficient evidence to the Court about the changes that it had made since the decision to demonstrate that it was now, in the Magistrate's view, fit and proper to hold an operating licence.

In considering the duration of the licence, the Magistrate said that the rapid and very recent changes undergone by ULL led her to conclude that a licence of shorter than usual duration was appropriate as that would enable us to test out the new arrangements ULL had put in place while ensuring the public are kept safe.

The Magistrate therefore granted ULL a licence for a period of 15 months and attached a number of conditions to the licence covering the following areas::

- Corporate governance and intra-group relationships within Uber including a requirement for ULL to maintain a Board with a majority of independent directors, one of whom shall be the chair of the Board. The ULL Board is to have ultimate responsibility for ULL's licensed operations under private hire legislation
- The maintenance by ULL of arrangements so that they are notified by other companies within the Uber group of matters that could be relevant to ULL's obligations as a licensed operator and arrangements for those other companies to support ULL in its compliance with those obligations
- The maintenance by ULL of an independent assurance procedure designed to review and validate the effectiveness of its systems, policies, procedures and oversight mechanisms intended to promote compliance with its obligations as a licensed operator. ULL is required to provide TfL with a copy of an independently verified assurance procedure report produced every six months and a summary of actions it proposes to take in response to the report

- The giving of notice to us of any material change to ULL's operating model, systems or processes that may affect compliance with its obligations as an operator under private hire legislation and the conditions attached to its licence, including in relation to data handling and changes relating to safety and security of passengers and drivers
- The reporting of data breaches, and the use, or proposed use, of any software or any other mechanism designed to interfere with or evade regulatory action or for any other improper purpose in any jurisdiction where a senior manager or director of ULL is or has been employed by the Uber group at the time
- Other conditions relate to the need for ULL to be transparent and open with us in relation to Uber investigations; to maintain arrangements with the police about reporting of alleged criminal behaviour against drivers and to keep that policy under review; and to assess complaints, decide on any appropriate action and notify us about any decision to take action against a driver, within 48 hours of receiving a safety related complaint

We will be keeping compliance with these conditions under close review for the duration of the licence.

The Magistrate also ordered ULL to pay our legal costs of the appeal, in the sum of £425,000.

PHV operator licence fees

The High Court has dismissed the Licensed Private Hire Car Association's claim for judicial review in relation to our decision of September 2017 to change the structure of London PHV operators' fees.

Our number one priority is the safety of the public. This is why when faced with the huge growth of the private hire industry, it was appropriate to ensure our regulatory and enforcement capabilities were suitable. We robustly defended our position in court and welcome the decision that the changes we made to the licence fee structure for PHV operators are lawful. The changes to the fees fund an additional 250 compliance officers who do a crucial job in driving up standards and ensuring Londoners remain safe.

General Data Protection Regulation (GDPR)

As part of our preparations for the implementation of the GDPR on 25 May 2018, we expanded and updated the information we publish on how we protect our customers' personal information and comply with the new rights introduced by the legislation. More than six million customers were directly informed by email of the changes. Staff were also informed about the changes to legislation. We have joined the 'Your Data Matters' initiative launched by the Information Commissioner to promote and support the rights introduced by the GDPR.

4 Healthy Streets and healthy people

Oxford Street transformation

We were surprised and extremely disappointed with Westminster City Council's sudden and unexpected decision to pull out of the Oxford Street transformation project, despite previous commitments to work in partnership with us. Westminster's decision to not be involved in the proposals that we jointly consulted on raises questions about the future for Oxford Street, which is one of London's most important economic hubs and which supports thousands of jobs. We are exploring whether any benefits of the scheme can still be delivered.

Walking and cycling

Cycle Superhighways

Following the opening of the full eastern section of the East-West Cycle Superhighway in mid-December 2017, we have continued work on the remaining non-core parts of the route. This includes the design work for North Carriage Drive within Hyde Park. We plan to start building this section in summer 2018, subject to approval.

We published the public consultation factual reports on Cycle Superhighway 9 (Kensington Olympia to Brentford) and Cycle Superhighway 4 (Tower Bridge to Greenwich) on 27 February and 23 March 2018 respectively. We are now reviewing the responses and plan to publish the full consultation reports for both routes later in 2018.

Work continues on Cycle Superhighway 6 (CS6), which connects with the first phase of the North-South Cycle Superhighway at Stonecutter Street and continues to King's Cross. This is on track for completion over the coming months.

As part of the work for CS6 we introduced new pedestrian crossings at Greville Street and Cowcross Street on 30 May 2018, ready for the increase in pedestrians that will use Farringdon station once the Elizabeth line and the Thameslink Programme upgrades are complete. We also commissioned new signals at Clerkenwell junction on 15 June 2018, and introduced cycle lanes on Clerkenwell Bridge for the first time. The southbound cycle track between Charterhouse Street junction and Stonecutter Street junction opened on 20 June 2018.

This summer we will begin work on site for Cycle Superhighway II (CSII), which will run between Swiss Cottage and the West End. The scheme is due to be finished by 2020. We have received an application for a judicial review of our decision to proceed with the construction of CSII, from Westminster City Council, which we are robustly defending.



Work continues on our Cycle Superhighway network, including CS6

Mini-Hollands, Quietways and the Central London Grid

We continue to make good progress on the Mini-Hollands, Quietways and Central London Grid programmes with a focus on completing and opening significant sections of these routes.

Construction is almost complete on 110km of the planned 250km network of routes. We have delivered 17km of additional wayfinding along these routes, and more will be introduced on a further 45km this year. We have begun construction on Quietway 14 along the Thames Path, Quietway 22 along Newham Greenway, Quietway 2 from Notting Hill to East Acton, Quietway 23 from Ealing to Greenford, and Quietway routes linking Barking town centre to Cycle Superhighway 3, Greenwich to Bexleyheath, and Greenwich to Kent House. These new routes will join four completed Quietways from Belgravia to Earl's Court, Waterloo to Greenwich, Kilburn to Gladstone Park, and Oval to Clapham Old Town.

Twenty-six of the 103 Mini-Holland schemes (98 infrastructure and five supporting measures) are now complete. Six schemes started on site this quarter, including four Quieter Neighbourhood schemes in Enfield and two schemes connecting Kingston town centre. Twenty-five schemes are under way, including the Kingston station scheme, the Lea Bridge Road scheme in Waltham Forest and the A1010 South scheme in Enfield.

We are continuing construction of the 85km Central London Grid cycling network across the City of Westminster, the City of London, the Royal Borough of Kensington and Chelsea and the boroughs of Hackney, Islington, Lambeth and Southwark, with 50km already complete or under way. Wayfinding has been introduced on 37km of this network. As part of the future Grid programme, we are prioritising 65km of additional Grid routes for delivery and we plan to take 39km through the initial design phase in 2018/19.

Santander Cycles

Our flagship Santander Cycles hire scheme saw two record-breaking months in a row, with 1.2 million hires in June and 1.1 million in May. This followed 2017, where an unprecedented 10.4 million journeys were made. This summer, even more people are exploring London on two wheels. Santander Cycles has been able to meet this demand by providing extra bikes at parks during weekends and launching a new trial in Westminster and the City to provide more bikes during peak times.

Since the scheme was launched in July 2010, there have been more than 70 million journeys made using the cycles and there are now more than 770 docking stations covering 100 square kilometres of London.

Records were also broken on Cycle Superhighways on Blackfriars Bridge and Victoria Embankment in July, where cycle counters were installed in February. These counters show that more than 1.2 million cyclists have now used CS3 and CS6. The highest number of cyclists was seen on 26 June, with nearly 13,000 bikes passing the counters.

Improving the urban realm

The London Borough of Merton has completed works in Mitcham town centre to improve the urban realm, including providing a bus-only road to bring passengers into the heart of the town centre, delivering stepped cycle tracks and improving pedestrian crossings. This was delivered as part of the Local Implementation Plan (LIP) funding that we use to support London's boroughs to deliver schemes across the city.

LIP funding is also helping boroughs to remove traffic-dominated gyratories in town centres and to improve walking and cycling in Stratford, Baker Street and Tottenham Court Road. The London Borough of Haringey has also started construction of improved pedestrian facilities in White Hart Lane in conjunction with the redevelopment of the Tottenham Hotspur football stadium.

We have also completed a project to improve pedestrian facilities on Streatham High Road at the St Leonard's junction in Lambeth, along with signal

modernisation and resurfacing work. This forms part of our Healthy Streets Local Schemes programme, and is in direct response to calls from the local community for an improved crossing.

We are continuing to work with the London Borough of Haringey to deliver £2m of improvements to Bruce Grove town centre that will enhance the local environment for pedestrians, cyclists and bus passengers, with expected completion in July 2018.

The Mayor's Air Quality Fund

The Mayor's Air Quality Fund (MAQF) is a £20m fund over ten years to support new projects by London boroughs to improve air quality. The first round of funding supported a wide range of projects, including freight consolidation, green walls, low emission vehicles, reducing pollution from construction sites and digital signage to reduce engine idling.

In round two of the MAQF, £5m was awarded across 28 boroughs. Projects started in April 2015 and include:

- Electrifying Hackney Council's vehicle fleet
- Continuing the London Low Emission Construction Partnership to reduce the industry's impact on air quality
- Fitting low-cost electric vehicle charging points onto lamp columns across Hounslow

- Establishing a green courier service in Waltham Forest that provides a same-day delivery service using cargo bikes and electric vehicles
- A variety of infrastructure and communication projects to enhance walking and cycling, and reduce lorry movements

These projects will be completed by March 2019. The third round of the MAQF will open for applications (for projects commencing in April 2019) in summer 2018.

Lowering emissions from our buses

Around 45 per cent of our 9,000-strong bus fleet now meet the ultra-clean Euro VI standard following our programme to upgrade around half our vehicles and replace remaining vehicles. We are accelerating this transition through the introduction of Low Emission Bus Zones beyond the proposed Ultra Low Emission Zone (ULEZ) and are working with the Mayor's Office to launch further zones as soon as all routes along these corridors have been raised to the same ultra-clean level.

Our bus retrofit programme has upgraded more than 1,300 buses to date. Around one-third of the fleet is now bringing much lower emissions to large parts of London, directly benefiting the Mayor's programme to improve air quality. With every vehicle retrofitted air quality benefits are immediately brought to London as its proportion of nitrous oxides and particulates falls by up to 95 and 85 per cent respectively.

In addition to this, most new vehicles entering the fleet are fitted with hybrid systems which reduce CO₂ by up to 30 per cent. A small but growing part of the fleet (around 100 vehicles) is made up of zero emission electric and hydrogen fuel-cell buses which emit no exhaust fumes at all.

Electric vehicle rapid charging infrastructure

To support the growing number of Zero Emission Capable taxis and the take-up of electric vehicles, we are building a network of rapid charge points across London. We have installed 115 to date, of which 58 are dedicated to taxis. This will increase to 150 by the end of December 2018, which is a major step towards our target of 300 rapid charge points by December 2020. At present, there are nearly 300 Zero Emission Capable taxis licensed in London – more than a 300 per cent increase since March 2018.

Around 45 per cent of our bus fleet now meet ultra-clean emission standards



Roads

Trialling pedestrian portage for 'last mile' deliveries

We are working to improve our understanding of 'last mile' deliveries to reduce freight-related congestion. As part of this programme, we partnered with delivery company Gnewt to ensure parcels were passed from electric vehicles to awaiting pedestrian porters who made the last mile of the delivery journey by foot. The trial focused on two commercial parcel delivery rounds in the City of London and the London Borough of Southwark. Gnewt reduced their requirement for kerbside space by 50 per cent and time spent driving by approximately 35 per cent, boosting the interest of other operators in the

industry. We are working with Gnewt to gauge this trial for larger scale delivery companies, enabling them to incorporate 'portage' into their business models, and reduce freight congestion in London.

Safer Junctions

The Safer Junctions list we published in April 2017 identified 73 junctions on our strategic road network with the highest vulnerable road user collision rates between 2013 and 2015. We have now completed the first draft of safety studies at 13 junctions. This involves compiling collision reports, making site visits, and holding stakeholder feedback sessions. We will then complete feasibility design work of five sites in 2018/19.



Work has started on the transformation of Highbury Corner

We have completed improvement schemes on the A202 Camberwell New Road and on Flodden Road, and introduced Cycle Advanced Stop Lines at Chelsea Embankment. We have also completed a consultation on removing roundabouts at Millbank, by Lambeth Bridge, with a design which replaces them with fully signal-controlled crossings, including pedestrian and cycle facilities. We continue to develop the detailed design for Charlie Brown's Roundabout in South Woodford, with construction planned for summer 2018.

Highbury Corner

On 28 June 2018, we began construction on the transformation of Highbury Corner junction, which will replace the outdated one-way system with two-way traffic, improving safety for cyclists and pedestrians. The 1960s roundabout will be removed and replaced with two-way roads with segregated cycle lanes on all three remaining sides of the roundabout. We will also be creating a new public space for residents and visitors to enjoy. We expect the work to continue until late 2019.

Pedestrian town centres

We will begin public consultation on proposals for Tooting town centre in summer 2018, which include improvements for bus passengers, pedestrians and cyclists, as well as a reduction in vehicle speed limits. The

proposals also include a new public space on Totterdown Street, and widened footways. In Peckham, we are currently working on a feasibility design to develop the town centre including a package of measures to improve safety for pedestrians.

Bridge work updates

Over the 2018 late spring bank holiday we successfully completed the final phase of the demolition of the Ardleigh Green Bridge on the A127 in Havering. This was undertaken during a full closure of the A127 and the Shenfield–Liverpool Street railway, which runs below. Excellent progress was made during this bank holiday and we were able to complete all works in a single weekend, avoiding the need for a second weekend and the associated disruption to both road and rail users. The second half of the new bridge has now been delivered to site and works will focus on installing this over the railway as well as construction of the carriageway approaches. We plan to reopen this road to four lanes of traffic in spring 2019.

As part of the Power Road Bridge replacement project on the A406 Gunnersbury Avenue, we completed the construction of the new structure and began the final phase of constructing the new carriageway. We plan to reopen the bridge to full, four-lane traffic capacity in autumn 2018.

Rivers

Rotherhithe to Canary Wharf crossing

Design development work continues on our provisional preferred option of a navigable bridge. Progress has been made on the design options looking at all elements, for example opening mechanism, height and landing options, and the project team have been working hard on design development and assessment of options. Contracts for constructability and marine consultants have been awarded, to Costain and Marico Marine respectively, to also support us with this work. We have been meeting regularly with London Boroughs of Southwark and Tower Hamlets to keep them updated on this progress.

Woolwich Ferry

We are replacing the three existing Woolwich ferries with two new ferries which will be more reliable and environmentally friendly. Piling began on site in early June 2018 for new berths that are being installed at the north and south piers. Fit-out and testing continues on the boats which were successfully launched in Poland on 15 May 2018. A period of dock trials will now be completed in advance of the sea trials which will begin in early August ready for the new service to begin at the end of 2018.

Events

We have successfully supported the delivery of sporting and ceremonial events, in what has been a busy period for major events in London. This is against a background of many music festivals and fixed-venue activity including the Chelsea Flower Show and Wimbledon tennis fortnight; the Vitality Westminster Mile and Vitality 10km; the two-day 10k race in the City of London and Westminster; and the annual British Heart Foundation London to Brighton charity ride.

On Sunday 10 June the 'Procession' took place – a march and art event to celebrate 100 years of women having the vote, supported by the Department for Digital, Culture, Media & Sport.

Several major ceremonial events also took place, including the Queen's Birthday Parade (Trooping the Colour) on 9 June 2018 and RAF100, a ceremonial consecration of new RAF colours to mark the centenary of the creation of the Royal Air Force from the Royal Flying Corps in 1918, on 10 July. Many people were attracted by the flypast of 100 RAF fixed-wing and rotary aircraft, probably one of the largest formations of aircraft in this country since the end of World War Two.



Celebrating Pride

On 7 July, we supported the annual Pride in London Parade, which attracted more than 30,000 participants and thousands of spectators, who lined the route to celebrate the LGBT+ community. To mark the event, we installed new Pride rainbow roundels across the network, including the hashtag #EveryLoveMatters, which encourages everyone to be proud of themselves, and love who they are as well as others. We also created a new roundel in pink, blue and white, inspired by the Trans flag. The roundels were at a number of locations across the network, including Tottenham Court Road and Vauxhall Tube stations, Romford TfL Rail station and Embankment Pier.

Shoreditch High Street Overground station was also transformed with rainbow and trans-inspired benches, while City Hall and our 55 Broadway office proudly flew the rainbow flag all week to celebrate the capital's diversity. A number of limited-edition Santander Cycles were also decorated with rainbow livery on their rear mudguards.

Our LGBT+ staff network, known as OUTbound, also took part in the parade. We were proudly represented by around 100 OUTbound members, who took part on a float that had been specially converted into an Elizabeth line carriage.

5 A good public transport experience

Elizabeth line

The Crossrail project is now more than 93 per cent complete. In June, I visited Maidenhead station with Crossrail's Technical Director, to provide the Prime Minister with an update on the project and a tour of one of the new Elizabeth line trains, which will serve her constituency in 2019.

Progress continues to be made, although schedule pressures remain. These continue to be actively managed by Crossrail Ltd and supported by us. On 11 June, a significant milestone was achieved when, for the first time, a Class 345 unit ran (at low speeds) through the tunnels from Pudding Mill Lane to Westbourne Park. This followed the completion of the overhead electrical lines in the central section and energisation of the section between Stepney Green and Westbourne Park on 22 May.

The infrastructure is still being installed and testing is under way. However, a significant amount of testing remains to be done, along with completion of the remaining installation and fit-out of systems in stations and tunnels before handover of the infrastructure to our future managers. In addition, there remains an intense focus on preparing the documentation required to prove the railway is safe to operate.

Crossrail Limited's programme of stakeholder and public engagement continues with a series of station showcase events in support of the Year of Engineering. The latest were at Whitechapel and Tottenham Court Road stations, where the contribution of suppliers from across all parts of the UK to the Elizabeth line was demonstrated.

Old Oak Common

Our new, purpose-built train depot at Old Oak Common is now in use. This is a major delivery milestone for the Elizabeth line. The depot will house and maintain up to 42 of the Elizabeth line's 70 trains at a time. The maintenance infrastructure at Old Oak Common will play a critical role in the day-to-day operation of the line.

More than 30 per cent of our new maintenance facility will be powered by an innovative renewable energy system. The hybrid system integrates ground source heating and cooling from a combination of energy piles and 150 metre deep bore holes, with three different types of thermal technology creating an innovative system that will control the temperature of the main depot building. Old Oak Common's environmentally-friendly measures will help us reduce our running costs and will save over 500 tonnes of CO₂ emissions each year (compared to a depot without these energy sources).



Bombardier, who is building the Elizabeth line trains, is operating the Old Oak Common depot. The depot employs 80 staff, including eight apprentices. This will increase to 110 by summer 2018, including an additional eight apprentices.

Network Rail's surface works for Crossrail

The upgrade of the existing rail network for Crossrail, being undertaken by Network Rail, continues. There have been some further challenges on the timescales for the award of contracts for enhancement works on western stations, but Network Rail remains committed for these stations to be upgraded by December 2019, when the full Elizabeth line will be in operation.

London Underground **Northern line extension**

The Northern line extension (NLE) will provide two new stations – at Battersea Power Station and Nine Elms – and will include two new railway tunnels, linking Battersea with the existing Northern line at Kennington.

At the new Battersea station, we have completed the ticket hall floor slab and constructed both platforms. Blockwork walls are being built which will create the public and back of house spaces.

At the new Nine Elms station, the station box base slab has been completed and we have begun constructing the platforms. Breeze block walls are being built throughout the station to create the ticket hall and other spaces. At the platform level the secondary concrete-lined walls are being cast and encasement of columns continues.

We have laid track in the northbound running tunnel from Battersea station to Nine Elms station, and begun laying track in the southbound tunnel. We have also started the installation of the cable management system, made up of thousands of heavy duty brackets fixed to the tunnel walls. We have completed the excavation of the Kennington Green head house basement, and are now working to construct the head house itself. At Kennington Park, we have

removed the acoustic enclosure and begun work to break out the slab before we excavate a new basement.

At the existing Kennington station, where the NLE will join the rest of the Northern line, we are working to construct four new cross passages between the Bank branch and Charing Cross branch platforms. This work is essential to improve passenger flow when the extension is operational. To facilitate this work, trains will be non-stopping on the Bank branch of the Northern line at Kennington until mid-September 2018 and there will be no interchange between the Bank and Charing Cross branches at the station.

We have been carrying out an extensive communications campaign to give customers the most warning and best real-time updates about the work. By bringing together frontline staff, project, contingency and closure planning teams, Travel Ambassadors and our travel demand management team, we have kept the customer message consistent and helpful. Our early monitoring suggests that this campaign has been very effective, with minimal customer complaints or operational impact. During the first full week in June 2018 we observed a 41 per cent increase in Bakerloo line journeys and a 26 per cent increase in local bus journeys, as customers have been following our travel

advice and making use of spare capacity on alternative routes.

Modernising the Circle, District, Hammersmith & City and Metropolitan lines

We are installing a new digital signalling system on the Circle, District, Hammersmith & City and Metropolitan lines, enabling trains to run closer together and increasing frequency and capacity. Overall, the modernisation will make journeys quicker on 40 per cent of the Tube network.

We have brought together the service control teams for all four sub-surface lines under one roof for the first time at the new Hammersmith service control centre. This will deliver more capacity, a quicker and more reliable service and better customer information.

We will be introducing the new signalling system progressively in sections. This follows extensive testing and close working between the project team and our instructor operators, signallers, controllers, service managers and signalling service managers.

The signalling sections will be rolled out across the Circle, District, Hammersmith & City and Metropolitan lines over time, through to the project's completion in 2023.

We have fitted 10 more S-stock trains with the automatic signalling system this period, bringing the total to 100 out of a fleet of 192. We have also completed installation and testing of the automatic signalling equipment on two more engineering vehicles.

Modernising the Piccadilly, Bakerloo, Central and Waterloo & City lines

On 16 June, we gave notice of our intention to award a contract to Siemens Mobility Limited. The initial order will be to design and build 94 new generation Tube trains that will transform the experience of millions of Piccadilly line customers. This long-term investment will support London's growing population, which is set to increase to 10.8 million by 2041, and support new jobs, homes and growth, benefiting the whole UK economy.

More than 700,000 customers use the Piccadilly line every day. However, the combination of a limited fleet size and old signalling technology has restricted our ability to increase capacity across the line for many decades.

Twenty-two UK suppliers have been identified in the bid to work with Siemens Mobility Limited on the build of the trains. In addition at least 50 new apprentice and graduate positions could be created.

As announced earlier this year, the award of this contract will be a significant step in enabling Siemens Mobility Limited to progress its plan to build a new factory in Goole, East Yorkshire. The factory is planning to employ up to 700 people in skilled engineering and manufacturing roles, plus up to 250 more during construction of the factory. As a result, around 1,700 indirect jobs would be created throughout the UK supply chain.

This order – the first under the Deep Tube Upgrade Programme – will mean replacing the entire 1970s Piccadilly line fleet. From 2023, 94 new state-of-the-art Inspiro trains will be delivered enabling up to 27 trains per hour to operate at peak times by the end of 2026 (up from the current service level of 24). This is a train every 135 seconds at the busiest times.

Combined with a signalling upgrade and the purchase of additional trains, peak period capacity on the busiest central sections of the Piccadilly line will increase by more than half by the end of the 2020s and will mean an additional 21,000 customers will be able to board trains every hour during peak times.

The four Deep Tube lines make up a third of the Underground network, carrying around two million passengers per day on key corridors linking the City, the West End, King's Cross and Heathrow Airport. The Deep Tube Upgrade Programme will deliver a 36 per cent increase in capacity across the four lines by 2035.

The existing Piccadilly line trains were introduced in 1975. The new trains will have a host of new design features that will significantly increase customer comfort. They will have walk-through, fully air conditioned carriages and improved accessibility, and will be specially designed to optimise the space constraints in the narrow Deep Tube tunnels. Customers will also benefit from in-train information systems helping them to plan their onward journey more easily.

While this order is for an initial 94 trains, the contract will be awarded on the expectation of a single manufacturer building the trains for all four Deep Tube lines. Creating a single train design will mean we can maximise cost savings through greater standardisation of train operations, staff training, equipment, spares and maintenance.

Jubilee line

Hundreds of thousands of our Jubilee line customers are benefiting from quicker and more frequent journeys. In response to the 30 per cent increase in customers on the Jubilee line due to employment growth, housing development and an increase in leisure activities, we have doubled the length of the peak service periods, creating room for 10,000 extra customers.

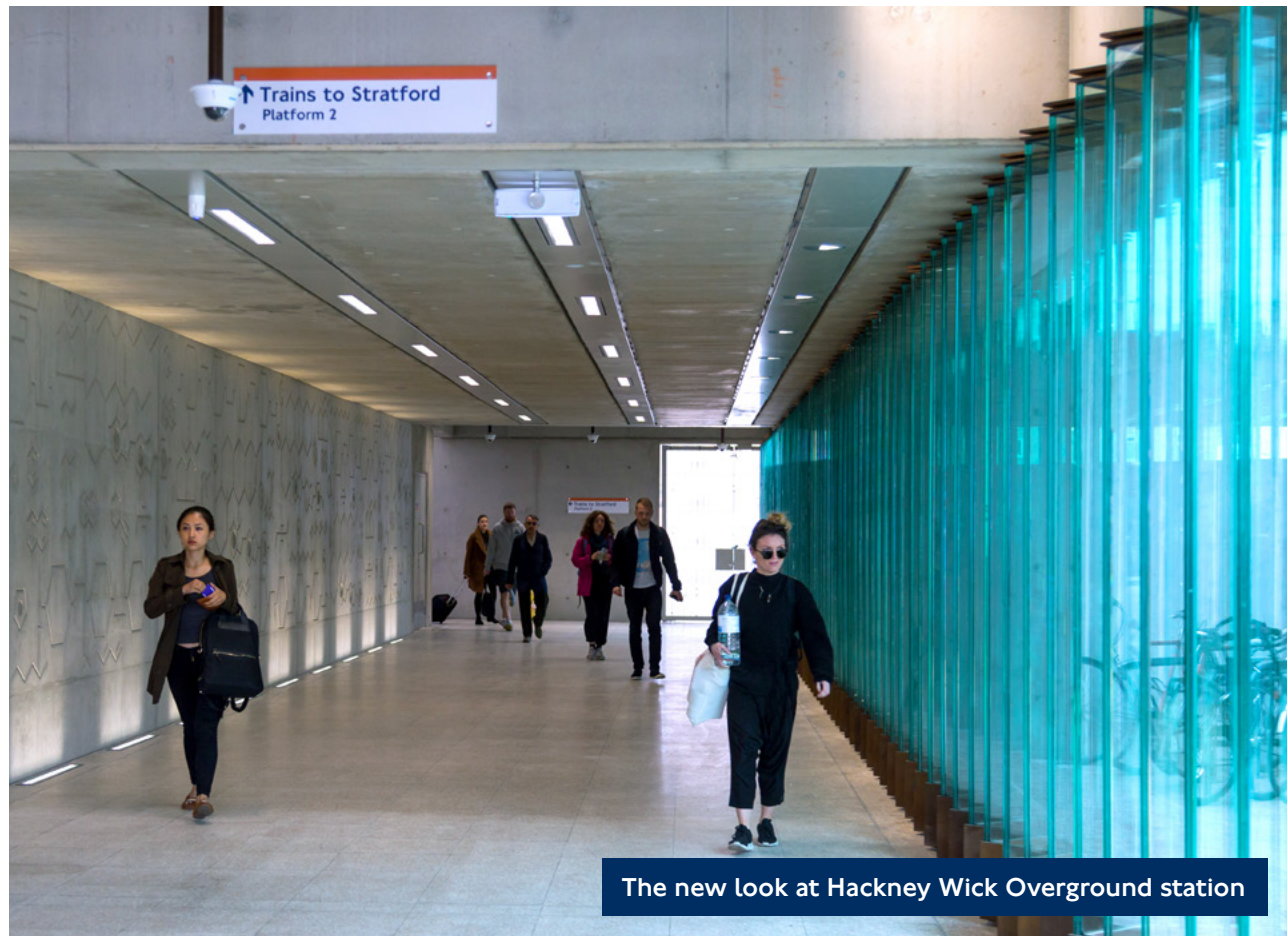
Previously, demand during the morning peak time came from the west end of the line to Canary Wharf. Demand has now shifted; with the majority of journeys coming from the east end of the line between Canada Water and Stratford, as well as there being a large number of customers interchanging from c2c and London Overground.

We are running a longer peak service of 30 trains per hour, extended from 60 minutes to at least two hours between West Hampstead and North Greenwich. We have also extended most weekday off-peak, evening and weekend North Greenwich trains to Stratford, increasing the service from 20 to 24 trains per hour.

Bank

At Bank station, we are boosting capacity by 40 per cent. This includes creating a new Northern line tunnel and platform, a new entrance on Cannon Street, step-free access to the Northern line and DLR platforms, and a moving walkway between the Central and Northern lines to speed up interchange.

Tunnel works remain on schedule, and work continues on the moving walkway tunnel. We are progressing well with hand-mining of tunnels at various interfaces with the existing station tunnels, and the construction of the walls and columns for the new station entrance is well underway. We have begun commissioning the new transformers and switchgear for the high voltage relocation works, enabling tunnelling for the new Central line escalator.



The new look at Hackney Wick Overground station

The fit-out of the new Waterloo & City line entrance within the Bloomberg building basement is approaching completion with the majority of floor walls and ceilings in place, and only enamel panels and skirting to complete. We have installed cashless ticket machines and new gates, and WiFi and other technology services are also largely complete and being tested.

Victoria

We have built a new northern ticket hall at Victoria, as well as 300 metres of subways, and have increased the size of the southern ticket hall by 50 per cent. Progress continues on the east and westbound link passages to the District and Circle lines and associated lifts. Work on fire and communications systems, and the mechanical, electrical and architectural fit-out is progressing in the remaining tunnels linking to the southern ticket hall.

Step-free access to all platforms, which will be completed in summer 2018, will meet the needs of the 83 million customers who use the station each year.

We are continuing to rebuild the Duke of York public house, which was demolished to enable jet grouting works for the tunnels. The steel frame and floor slabs from basement to roof are complete and we are now rebuilding and restoring the new and existing facades.

Buckhurst Hill

Buckhurst Hill Tube station is now step-free, improving access to the transport network for thousands of people. The station serves the Central line, the second busiest Tube line, and the improvements are part of the Mayor's £200m fund to boost accessibility across the Capital.

It is the 74th station to become step-free on the Underground and is the first of five stations on the eastern section of the Central line that will be made step-free over coming years. The Mayor's investment, announced in December 2016, will provide step-free access at a number of stations around London in order to help make 40 per cent of the Tube network step-free by 2022 – a significant increase on the current level of 27 per cent.

Rail

First new state-of-the-art London Overground train unveiled

On 20 June 2018 we unveiled the first new, state-of-the-art, British built and designed London Overground train. The fleet of 54 trains is being designed and built by Bombardier Transportation in Derby, and each train will carry almost 700 people and feature a high capacity walk-through layout, air conditioning, WiFi, USB charging points and a brand new seat moquette. The trains will also have digital information screens, giving customers higher quality live travel information.

The trains are constructed from strong but lightweight material, making them much more energy efficient to operate. They will also offer improved accessibility, with more wheelchair spaces.

The first new trains will be in passenger service by November this year and will run between Gospel Oak and Barking, doubling capacity and replacing trains that are 35 years old.

Improvements at Hackney Wick

On 24 May 2018 we unveiled a new look London Overground station at Hackney Wick, which will deliver major improvements for Londoners and businesses in the surrounding areas. Passengers are now able to get to their trains more quickly and easily than before with a new underpass, lifts and overall improved access to the station, as part of a £25m scheme. A new light and airy ticket hall has also been built at ground-floor level and new stairwells and lifts provide easier access to the platforms.

High Speed 2 (HS2)

Plans for HS2 include new stations at Euston and Old Oak Common. The line will bring a large number of additional passengers to these areas, and as part of that, the Department for Transport (DfT) committed through the High Speed 2 Act to enhance a number of our services and facilities. This includes enhanced Underground and bus station services at Euston, and new cycling and walking facilities. In May 2018, we had a number of meetings with the HS2 station designers to support their design process and to ensure that our requirements in terms of passengers, operations and infrastructure are properly addressed.

We met with Lendlease, the master development partner appointed by DfT and HS2 to redevelop the Euston estate, to understand their plans for the development and the demands this will place on the transport system. We will continue to meet with them as they further develop their plans to make Euston a successful transport interchange, supporting the new jobs and homes that the development will bring.

DLR Rolling Stock Replacement Programme

We are purchasing 43 trains to replace two-thirds of the fleet, which is nearing the end of its design life, and to provide additional capacity to support growth around the DLR network. We are now evaluating bids for the replacement trains, which will start to enter service in 2022. A tender has also been issued for design work to expand Beckton depot, which will be delivered as part of this project.

Improvements to the tram network

London Trams went cashless on 16 July 2018. This follows a period of significant decline in the use of the ticket vending machines with pay as you go customers now benefiting from the lower fare costs offered by Oyster and contactless payment methods. This includes the Mayor's Hopper fare which gives unlimited tram and bus journeys for £1.50 within one hour of touching in on the first tram or bus journey.

On the Elmers End branch of the network we are adding a second operating track and a second tram platform at Elmers End station to improve passenger journey times and provide system-wide reliability and resilience to support additional growth in Croydon and south London. The remaining funding for the project was secured in spring 2018 from our Growth Fund, and we are expecting to award a contract for the works in late 2018.

Dial-a-Ride fleet renewal

We have begun the procurement of 90 ULEZ compliant vehicles for the Dial-a-Ride fleet, ahead of the introduction of the first stage of the ULEZ in April 2019. We are expecting to award the contract for the new vehicles later in summer 2018.



Customers can now use cashless payments on London Trams

Traffic signal timing review update

We have a rolling programme in place to review the timing of traffic signals on the roads to keep London moving and encourage sustainable travel. In April and May 2018, we completed 116 traffic signal timing reviews across the Capital, and we are on track to meet our quarterly target. We have measured the difference in performance before and after these reviews for bus passengers and pedestrians, and found that these reviews have saved 2,549 person hours per day. Bus benefits are dominant, as buses carry the highest proportion of people using sustainable modes through junctions, but pedestrian benefits still account for 15 per cent of the total delay saved.

Real-time optimiser contract

The Surface Intelligent Transport System programme achieved a major milestone at the end of June 2018, when a contract was signed with Siemens to jointly develop a world-leading road network management system.

The cutting edge real-time optimiser (RTO) system will revolutionise the current traffic light control system. It will help us use the road space better by optimising the traffic light timings to enable more people and goods to move on the capital's road network with fewer delays.

When roads are disrupted by an unplanned incident, planned work or events, our 24/7 control centre will have a more sophisticated tool to help return the road network to normal as quickly as possible.

The new RTO technology will be able to take in a range of new data sources, connect to new types of sensors and support innovation, including sharing data with connected vehicles, which could include autonomous vehicles in the future. Data generated by the system can then be used to better inform road users of current or expected road conditions to support improved journey planning.

Lane Rental – Innovation Challenge

At the last Lane Rental Governance Committee meeting, Innovation Challenge funding of £350,000 was approved to deliver an exciting new approach to solving some of the adverse effects caused by roadworks. The industry is tasked with identifying issues with work promoter stakeholders and then canvassing market innovators to submit their ideas to solve them. The proposals that are shortlisted will then be developed into a viable product that will be showcased to investors and stakeholders across the industry. If this novel approach is proven to succeed it may well lead to a cultural shift in the way future problems are tackled across the business.

Lane Rental – latest funding approved

Charging Lane Rental means we can incentivise behaviour change and minimise the length of roadworks by applying a daily charge for companies to work on the busiest roads at the busiest times. Last year over 6,000 days – equivalent to 18 years – of disruption was avoided through work being done outside peak traffic times, and more efficiently and more collaboratively.

Projects that have recently received funding include an innovative method of repairing potholes in Hammersmith and Fulham, and traffic signal updates to help reduce congestion.

Buses

Brent Cross

As part of the redevelopment of Brent Cross shopping centre a new bus station is being delivered by the developer, Hammerson and Standard Life Investments, at no cost to us. The new bus station will include additional bus stopping and standing capacity, as well as much improved facilities for passengers. Work on the new station is expected to begin in 2019 and it is anticipated to become operational in mid-2020.

Automatic passenger counting to improve customers' journeys

On 8 June, we began a three-month trial to identify how best to automatically count passengers on buses. The trial will assess which techniques capture passenger numbers in real time with the most accuracy. This could enable us to improve services, provide better real-time travel information and help prioritise investment – all while being cheaper and more reliable than current manual counts.

A better understanding of how full London's buses are could mean:

- Customers are provided with improved real-time information for better journey planning and information such the available accessible space
- More effective management of the bus network, helping to ensure any unplanned diversions minimise passenger disruption
- Better bus planning and forecasting for the future, including allowing buses to better support London's growth

The trial will run on seven buses and will assess the following automatic counting techniques:

- Cameras aimed across the bus floor observing the footsteps of passengers getting on and off the bus

- Real-time analysis of existing safety camera footage
- Sensors over each door of the bus
- Analysis of the changes to the buses' weight and air pressure
- Use of depersonalised WiFi connection data

All WiFi data collected during the trial will be automatically depersonalised at the point of collection. No browsing data will be collected and no individuals will be identified. Buses trialling the CCTV, sensors or WiFi techniques will display posters to ensure passengers are aware of the trial, and further information is available on our website.

Art on the Underground

Art on the Underground has unveiled 'my name is lettie eggshrub', a new commission by British artist Heather Phillipson, on the disused platform at Gloucester Road station. It is Art on the Underground's most ambitious project to date, and is on display for 12 months.

The artwork is a focal point of Art on the Underground's year-long programme of women artists, which forms part of the Mayor's #BehindEveryGreatCity campaign. This major new campaign is designed to draw attention to the progress made by women over the past 100 years and champion the achievements and contributions that women make to London.

'my name is lettie eggshrub' features various large-scale fibreglass sculptures including two four-metre-high 3D eggs, a huge automated whisk, twelve 65" video screens and 16 printed panels alongside oversized suspended images. Phillipson's surreal, comic, and at times uncomfortable aesthetics will extend over the entire length of the 80 metre platform. In addition to this installation, Phillipson has created a sequence of images and slogans on vinyl panels that will run the length of the escalators at Notting Hill Gate and Bethnal Green stations.

Deaf Awareness Week

To mark Deaf Awareness Week, which was 14–20 May 2018, Art on the Underground held two tours for hearing-impaired customers. The tours, co-led by Art on the Underground and a British Sign Language interpreter, showcased some of the best-known artworks in Tube stations across London.

The first tour started at Heather Phillipson's new installation at Gloucester Road station, then went on to John Maine's Portland stone commission at Green Park station. It ended at Piccadilly Circus with Langlands & Bell's 'Beauty < Immortality' – a homage to the visionary former London Transport Chief Executive Frank Pick, whose legacy of iconic designs has had a profound influence on the appearance of the Tube. From there the second tour continued to Tottenham Court Road station to look at Daniel Buren's bold and colourful 'Diamonds and Circles' works and Sir Eduardo Paolozzi's famous mosaics.

#Platform88

On 26 June, Jamie Cullum launched the third and final #Platform88 piano at King's Cross St Pancras as part of the partnership between us and Yamaha with the aim of bringing more music to Tube customers. Three pianos will travel from station to station as part of a two-year programme.

The #Platform88 project, which takes its name from the number of keys on a piano, provides opportunities for anyone to play the instruments and entertain fellow passengers. During the next two years, the pianos will 'commute' around our network, giving millions of passengers the chance to showcase their musical talents.

Currently at Tottenham Court Road station, the first #Platform88 piano was launched in November 2017 by multi-instrumentalist, composer and producer, Tokio Myers. On 18 April, Jools Holland launched the second #Platform88 piano. These are now enjoyed by thousands of customers every day.

Pay As You Go fares added to journey planner

Following recent upgrades, customers using our journey planner can now see how much a planned journey on public transport in London will cost. The latest improvements added to our online journey planning tool provide customers with adult 'pay as you go' fares for their trip. Customers can now also view additional information to see how the fare is calculated, allowing them to make more informed choices. Journey planner will also reflect the Hopper fare, which offers unlimited bus and tram journeys within an hour for the price of one.

More than 2.5 million people a month use journey planner on Tube, Bus and rail services in London. The tool can calculate the quickest route from more than 225 million possible journey combinations on London's public transport, and automatically factors in any planned engineering works or disruption. Results can also be filtered to only show step-free or accessible journeys, or mode-specific journeys depending on customers' preferences.

This information has also been added to our free open data feed to allow third party developers to share accurate fares data with the widest possible range of customers. There will be further improvements throughout 2018, as well as providing new data to our open data feeds, such as showing more walking options when it's the quickest option and better accessibility information.

Fifteen Years of Oyster card

Launched on 30 June 2003, the transport smartcard has transformed the way our customers pay for travel. More than 100 million people from around the world have benefited from more convenient travel in London in the last fifteen years thanks to Oyster card.

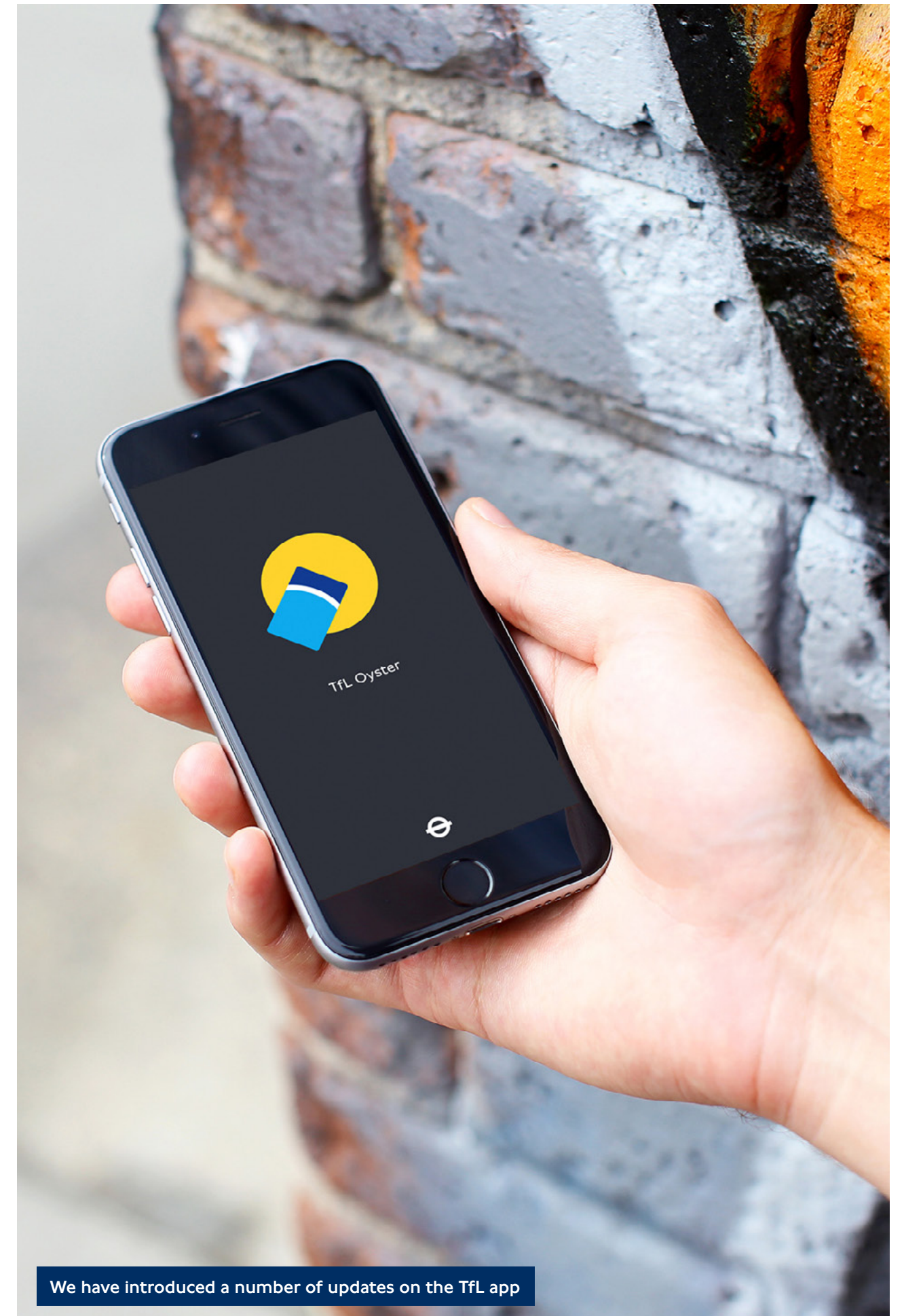
Oyster card has become an essential part of London and helped provide more affordable and convenient travel for everyone. The system has enabled daily capping and the Mayor's Hopper fare. Since it launched, the system has expanded to cover more than 650 Tube and rail stations across London and the South East, as well as all London buses, trams, Emirates Air Line and Thames Clippers River Bus services. Next year, Oyster will also be extended further outside London when the Elizabeth line opens to Reading.

Later this year we will also be introducing 'Monday to Sunday' weekly capping. This major upgrade will mean that customers who regularly travel using an Oyster card will see their travel capped at the equivalent of a weekly Travelcard.

Contactless journeys on the free TfL app

In June we updated the TfL app, enabling customers using contactless payment cards to view their journey and payment history and see if they have any 'incomplete' journeys. Customers can now also use their smartphone to quickly add 'pay as you go' credit or season tickets to their Oyster card. Half of all Tube and rail 'pay as you go' journeys in London are now regularly made using contactless payment cards or mobile devices, and since we launched the app in September 2017, there have been more than 800,000 downloads.

New features of the app also include updated maps to show TfL Rail services between Paddington and Heathrow, and design changed to improve the customer experience. We are working to introduce further improvements to make all the functions of the app available to customers using concessionary cards such as Zip and Student photocards.



We have introduced a number of updates on the TfL app

6 New homes and jobs

Crossrail 2

Following the borough elections in early May 2018, renewed engagement has now begun with local communities and the boroughs. We have written to all leaders of London's boroughs to offer the opportunity to meet with us to hear about progress and the next steps for the project. Outside of London, there is also continued interest from county and district councils supporting the successful delivery of Crossrail 2, with meetings scheduled to take place over summer 2018.

A Crossrail 2 All-Party Parliamentary Group was held on 23 May 2018 with the Mayor of London as the guest speaker. Chaired by David Lammy MP, this was a well-attended event with representation from government, business and local authorities. The Mayor reiterated his commitment to delivering Crossrail 2 as well as provided an update on the important work of the Independent Affordability Review (IAR).

Under the chairmanship of Mike Gerrard, the Crossrail 2 IAR panel has been reviewing three principal subject areas – cost and risk, funding and finance, with the stated aim of making Crossrail 2 more affordable to the UK taxpayer. An interim report is expected to be submitted to the DfT and TfL this summer. A huge amount of work has been completed and continues to progress well, however it is crucial for this work to stay on track

so that we can work with the DfT to update the Strategic Outline Business Case. Subject to a positive response from the Secretary of State this autumn, a firm commitment to Crossrail 2 in the Comprehensive Spending Review is expected in early 2019.

Affordable homes

New homes – Kidbrooke, Landmark Court and Blackhorse Road

We have started consultation and engagement with local communities on our first three sites.

At Kidbrooke in Greenwich we are bringing forward 600 homes and at Blackhorse Road in Waltham Forest we are delivering 350 homes. At both of these sites, 50 per cent of the homes will be affordable.

We are proposing 80 new homes, and 130,000 square feet of commercial space at Landmark Court, in Southwark.

Small sites

We have selected the London Community Land Trust (CLT) to deliver 67 affordable homes at Cable Street in Tower Hamlets, and at Christchurch Road in Lambeth. We piloted these sites as part of the Mayor's Small Sites, Small Builders programme, which makes small plots of publicly-owned land more accessible to London's small and medium-sized builders.

There was significant interest in the pilot, which included 10 small sites, and resulted in 132 bids from 80 organisations. Bidders ranged from developers and community-led housing to registered providers and architect-developers. Following the successful pilot we are now looking at the next wave of sites to be added into this programme.

Growth Fund

The Mayor recently announced the latest schemes to receive funding from our Growth Fund. The funding, which totals around £24m, will help accelerate the delivery of a range of transport improvements across the Capital, and help to unlock homes, jobs and growth.

The Growth Fund is designed to help finance sustainable transport schemes in some of London's most important growth areas. The four latest schemes receiving funding are:

- The upgrade of Walthamstow Central station on the Victoria line which will help support around 2,000 new homes and provide capacity for future growth in the area. This scheme includes a second entrance to the station as well as step-free access
- A new station building at Colindale which will provide step-free access and new pedestrian and cycle links, as well as help support around 10,000 new homes, 1,000 jobs and the wider regeneration of the area

- Enhancing capacity on the Elmers End branch of London Trams by creating double tracking of the branch line and a second platform at Elmers End tram station which will provide additional facilities to enable service improvements and address reliability issues on the network. Once delivered, this will support growth in Croydon and Bromley and future growth along all parts of the tram network

- A new southern entrance at Ilford station on TfL Rail to help accommodate the increase in passengers from growth and development in the area; this new third entrance will reduce pressure on the main entrance and help bus passengers from stops along Ilford Hill

We are working with local councils, developers and stakeholders to finalise the funding for these four schemes, in the hope that work can begin later in 2018.

We expanded our Growth Fund to £550m in December 2016. By providing this funding to schemes, we can leverage additional funding from developers and third parties to create complex transport schemes and provide improved services at less well connected sites. More than 15 schemes have been supported so far, including new stations in Tottenham Hale and White Hart Lane, as well as road and public realm schemes in Wandsworth and the new London Overground Barking Riverside extension, which will be delivered by summer 2019.

7 Our people

Best company for work/life balance

In June 2018, we won the UK award for best work/life balance, as researched by the world's largest job site Indeed, beating companies like Google and Apple to the top spot. This accolade was all the more rewarding as it was given as a result of reviews left by current and previous employees rather than by a judging panel. The award recognised that we offer more than just a salary, and seek to offer a good work/life balance through good holiday allocation, flexible working hours and the support offered by our staff network groups. This enables our employees to feel supported and to deliver their best performance for our customers.

Dedication to diversity receives Royal recognition

Congratulations to Victoria Harrison-Cook who was recognised with an MBE in the Queen's Birthday Honours for her services to diversity in PR. She leads our Stuart Ross BAME Internship and, in her 11 years with us, has supported 28 young people through our Press Office internship scheme.

Victoria's leadership of this unique internship and her efforts to create a more diverse work environment for everyone regardless of their background, gender or ethnicity is an inspiration to us all.

Our Press Office was named 'Best Place to Work' by PRWeek in 2016 and 'Best Internship' by the PRCA in 2015, which would not have been possible without Victoria's leadership. In 2007, only eight per cent of the team came from BAME communities – now it is almost a third.

Awards Everywoman

Harriet Glen has been recognised as a role model in the 2018 Freight Transport Association's everywoman in Transport & Logistics Awards.

The awards celebrate exceptional women who are transforming transport and logistics in the UK, while showcasing the range of fulfilling and exciting career opportunities across our industry.

Harriet, a Principal Transport Planner for Crossrail 2, won the everywoman Industry Champion Award for her impact on attracting women to and retaining them in the industry.

The European Women In Construction & Engineering Awards

Esther Halahan, Lead Tunnel Engineer, won the Best Woman in Tunnelling & Underground Construction Award at the 2018 European Women In Construction & Engineering (WICE) Awards.

Established in 2015, the WICE Awards recognise the breadth and depth of the contributions women make across the industry. The categories cover all the roles involved in construction and engineering, from the different engineering disciplines to HSE and construction planning.

Every year since their inception, we have had great success at the WICE Awards, a testament to the pool of talent working within our organisation. To date we have had 12 finalists, five of whom have gone on to win their category.

Royal Academy of Engineering

On 27 June, Khoulood El Hakim received the Sir George MacFarlane medal at the Royal Academy of Engineering Awards for excellence in the early stage of her engineering career. Khoulood was a Project Engineer on Crossrail's Farringdon station, managing design and construction assurance, and was responsible for the integration of the London Underground station with the new Crossrail facilities.

Environmental excellence on the Paddington-Bakerloo line link

The Bakerloo line to Crossrail link at Paddington has been recognised by a major award for outstanding environmental performance. The 170-metre-long pedestrian tunnel links the Paddington Elizabeth line station and the Bakerloo line platforms.

The civil engineering works for the tunnel have been completed without any noise, dust or vibration complaints. Construction of the tunnel has also seen reductions in energy usage; the installation of energy-efficient lift and escalator models; a switch to LED lighting; and recycling of 99 per cent of excavation waste rather than sending it to landfill.

All construction and civil engineering work with an estimated total cost of £50m or more must achieve the Civil Engineering Environmental Quality Assessment and Award Scheme certification of at least 'very good'. The Bakerloo line link went one better, achieving the 'excellent' standard.

The project is estimated to have saved £240,000 a year and 640 tonnes of CO₂ emissions by connecting to mains electricity on a renewable energy tariff instead of using generators. Eliminating external chillers has also saved 29 tonnes of CO₂. There was a reduction in carbon emissions through minimising lorry movements and transporting spoil by rail.

The site is surrounded by sensitive neighbours – including hospital buildings and hotels – so the project team aimed to reach the highest environmental and sustainability standards.

The Royal Society for the Prevention of Accidents – Gold Award

The Northern line extension has achieved a Gold Award from The Royal Society for the Prevention of Accidents (RoSPA).

The RoSPA Awards is the longest-running industry award scheme in the UK, recognising achievements in health and safety management systems, including practices such as leadership and workforce involvement.

With almost 2,000 entrants every year, the awards are highly respected in the health and safety arena, requiring organisations to demonstrate excellence in the workplace, as well as a commitment to the wellbeing of all involved in a project. Entries are received from organisations around the world.

Modelling World 2018

Our Network Performance Modelling and Visualisation team were awarded a 'Master of Modelling Award' at Modelling World 2018 in Birmingham on 6 June. This was in recognition of their significant capabilities in transport and traffic modelling and the application of state-of-the-art visualisation software and techniques to help present complex modelling results to decision makers and customers. The team's visualisations are insightful, extensively published on the internet and many have ended up in the national news.

Dementia-Friendly London Summit

On 21 May 2018, the Alzheimer's Society held its first annual Dementia-Friendly London Summit at the Greater London Authority. It was a fantastic event attended by more than 100 guests. Attendees heard from the Deputy Mayor, Joanne McCartney and the Chief Executive of the Alzheimer's Society, Jeremy Hughes, as well as some powerful speeches from two people living with dementia.

Our Director of Diversity and Inclusion, Staynton Brown, sat on the panel discussion along with representatives from the NHS, the Metropolitan Police Service and the Alzheimer's Society. Staynton outlined our commitment and the actions we are taking to become a dementia-friendly organisation. The Mayor also attended and pledged his commitment to making London the first dementia-friendly city in the world.

In addition to the summit, we ran dementia-friendly sessions across our offices to mark Dementia Action Week 2018, which ran between 21–27 May and we created 37 new Dementia Friends across our organisation. Several sessions also took place in bus garages and we now have a total of 200 Dementia Friends among bus operational staff in London with each garage now having at least one Dementia Friend.

A Dementia Friend learns a little bit about what it is like to live with dementia so they can turn understanding into action and know about the small ways that can help. This can be anything from telling friends about Dementia Friends to visiting someone who is living with dementia.

International Women in Engineering Day

As part of our celebrations to mark International Women in Engineering Day (23 June 2018) we profiled a number of engineers across the Tube network with their inspirational messages about why they got into the profession. Customers can see them at Canning Town, Cannon Street and Loughton Tube stations.

The displays form part of the Year of Engineering campaign, led by the Department for Transport and taking place over the course of 2018. The displays and campaign aim to debunk some of the myths around the profession, including it being a 'profession for men', and to inspire the next generation of engineers. It is incredibly important that more people are brought into engineering roles as it is anticipated that there will be a shortfall of more than 55,000 people equipped to work in transport infrastructure by 2020.

The displays showcase the range of female engineering talent at TfL, and we hope that both girls and women looking for a change of career will read the tips and be inspired to consider engineering as a profession.

We also held an Inspire Engineering event at the London Transport Museum's Acton Depot, attended by the Deputy Mayor for Education and Childcare, Joanne McCartney. Students from the Sarah Bonnell School in Newham and Plumstead Manor School in Greenwich took part in interactive sessions and career discussions with our own engineers with the aim of inspiring the next generation to consider a career in transport and engineering.

Carer passport scheme

It is estimated that one in nine employees juggle caring responsibilities with work commitments, and this will increase over time. We know carers have a valuable contribution to make to our workforce. Juggling these responsibilities can be difficult and wherever possible, we want to give our staff the flexibility and support they need. To help achieve this, in June 2018 we began trialling our new Carer Passport. This passport aims to help employees move roles whilst still maintaining any previously agreed flexibility and support to accommodate their caring responsibilities.

Mentoring partnerships

In June 2018, we successfully launched our first ever cross-company mentoring scheme with Fujitsu. Seven members of our Technology & Data department have been matched with mentors at Fujitsu to learn new ways of working from experts outside our organisation, and to develop those individuals who have been identified as having high potential. An inaugural event was held on 30 May, with employees from both companies sharing tips and best practice on how to get the most from the mentoring process.

Mentor Matching

We are also placing a strong focus on internal mentoring during the coming performance year. Mentor Matching has recently been set up to link potential mentees to a suitable mentor. Our leaders have a wealth of knowledge and experience to share – and perhaps even more importantly, understand the landscape, politics and idiosyncrasies of the business better than anyone. For mentees, this is a chance to explore individual personal goals and get a different perspective on careers and development opportunities in the organisation.



We have been sharing tips and best practice through our mentoring scheme

8 Securing value and generating income

Reducing costs

We continue to make good progress in reducing costs and are on track to reach a net operating surplus by 2021/22. This means that we will be able to cover all our day-to-day operating costs and also contribute to new capital investments. Our cost reduction programme is a core component behind this.

We are continuing to modernise and improve how we work across our organisation, so that we are more effective and efficient. All I2 business areas that began organisational change in January and May 2017 have now closed formal consultations and are live with their new structures.

We have also now closed consultation on our Major Projects team. The new directorate brings together all our major, complex projects, such as the Northern Line extension and the Silvertown Tunnel, into one team, so we can deliver them more affordably and efficiently.

We are continuing to consult in a number of business areas including Engineering, our biggest business area undergoing transformation, and reviewing opportunities for where further improvements could be made to how we work.

Long-term insurance renewal

A comprehensive review of our long-term insurance programme was undertaken at the beginning of 2018. Working alongside our brokers, Marsh, we launched the renewal process and completed this on 30 June 2018. Our main insurer relationships are now with QBE on Casualty and Property and RSA on Construction. We have agreed a premium rating that will apply to the main programme for the next three years.

Generating income

Advertising investment

Our investment in new, bigger, brighter and more engaging digital advertising formats continues.

Our 'DX3' Cross Track Projection product is now selling well across the initial installation of 60 sites. Work is now under way in terms of surveying and designing the implementation of a further 60 sites across the Underground network.

Two hundred of our 403 new 'D6' assets have now been installed, with 146 live and playing commercial content. These larger 75- and 86-inch assets will replace our current, soon to be life-expired, 55-inch LCD screens. In addition, 24 out of 54 of our brand new 'D12' assets have been installed, with 18 live and playing sold content. These new assets are a brand-new addition to our estate, offering advertisers the opportunity to display high-quality content on very large landscape screens.



Sherlock Gnomes greeted passengers at Baker Street as part of a promotional event

Telecoms launch

In June 2018, we started the search for a partner who will help us unlock one of the UK's most high-profile connectivity hotspots – the Tube. We are expecting a wide range of interest from companies across the world. Our plan is that from 2019, customers will be able to check their emails, read the latest news and social media updates as well as check for live travel information on 4G while travelling on the Underground.

Sherlock Gnomes

Customers travelling through Baker Street Tube station found that the station had been taken over by gnomes to celebrate the release of the new Sherlock Gnomes film, the sequel to the 2011 film Gnomeo and Juliet.

Throughout the day, Gnomeo, Juliet and Sherlock Gnomes were on platforms and in the ticket hall, hunting for clues to the whereabouts of missing gnomes and handing out activity sheets for children. The Sherlock Holmes silhouettes on the

platform were transformed into Sherlock Gnomes; whiteboards carried tongue-in-cheek messages; and public service announcements were made in the voice of Sherlock Gnomes. There were posters showcasing the film characters on the northbound Bakerloo line and on sites across the network.

The two-week long marketing campaign generated £60,000 revenue for TfL. Our partnership with Exterior Media provides creative, bespoke advertising opportunities, such as this one, to an audience of more than 1.5 billion customers on London Underground, London Overground, the DLR, London Trams, and Victoria Coach Station and, from 2018, the Elizabeth line. Through the partnership's innovative approach to technology and transforming physical advertising assets on stations, advertisers increasingly have more flexible and dynamic opportunities to connect with their target audiences, while helping to bring in vital income to invest in London's transport network.

