

Agenda Supplementary

Meeting: Board

Date: Wednesday 7 December 2022

Time: 10:00am

**Place: Chamber, City Hall - Kamal
Churchie Way, London E16 1ZE**

Members

Sadiq Khan (Chair)

Seb Dance (Deputy Chair)

Heidi Alexander

Kay Carberry CBE

Prof Greg Clark CBE

Anurag Gupta

Bronwen Handyside

Anne McMeel

Dr Mee Ling Ng OBE

Dr Nelson Ogunshakin OBE

Mark Phillips

Marie Pye

Dr Nina Skorupska CBE

Dr Lynn Sloman MBE

Ben Story

Peter Strachan

Cllr Kieron Williams

Government Special Representatives

John Hall

Becky Wood

Copies of the papers and any attachments are available on [tfl.gov.uk How We Are Governed](https://tfl.gov.uk/How-We-Are-Governed).

As provided for under section 100B(4)(b) of the Local Government Act 1972, the Chair is of the opinion that these items should be considered as late items. The reason for urgency is that Members need to consider the Budget submission and the Capital Strategy and not all information was available at the time the Board papers were published.

Further Information

If you have questions, would like further information about the meeting or require special facilities please contact: Shamus Kenny, Head of Secretariat Email: ShamusKenny@tfl.gov.uk.

For media enquiries please contact the TfL Press Office; telephone: 0343 222 4141; email: PressOffice@tfl.gov.uk

Howard Carter, General Counsel
Wednesday 30 November 2022

**Agenda - Supplementary
Board
Wednesday 7 December 2022**

5 Commissioner's Report (Pages 1 - 36)

Interim Commissioner

The Board is asked to note the Commissioner's Report, which provides an overview of major issues and developments since the report to the meeting on 12 October 2022 and updates Members on significant projects and initiatives.

7 Draft TfL Business Plan 2023 (Pages 37 - 118)

Interim Commissioner, Chief Customer and Strategy Officer and Chief Finance Officer

The Board is asked to approve: the TfL 2023 Business Plan, the 2022/23 forecast included in the TfL Business Plan as the Revised Budget for 2022/23 and as the reporting baseline for the remainder of this year; and changes to the TfL Scorecard as a result of changing the reporting baseline. The Board is also asked to note the Capital Strategy and London Climate Budget submissions that form part of the GLA Budget submission.

Board



Date: 7 December 2022

Item: Commissioner's Report

This paper will be considered in public

As provided for under section 100B(4)(b) of the Local Government Act 1972, the Chair is of the opinion that this item should be considered as a late item. The reason for urgency is that Members need to consider the Budget submission and the Capital Strategy and not all information was available at the time the Board papers were published. This paper contains information relating to those items.

1 Summary

1.1 This report provides a review of major issues and developments since the meeting of the Board on 12 October 2022.

2 Recommendation

2.1 The Board is asked to note the report.

List of appendices to this report:

Appendix 1: Commissioner's Report – December 2022

List of Background Papers:

None

Andy Lord
Interim Commissioner
Transport for London

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Commissioner's report

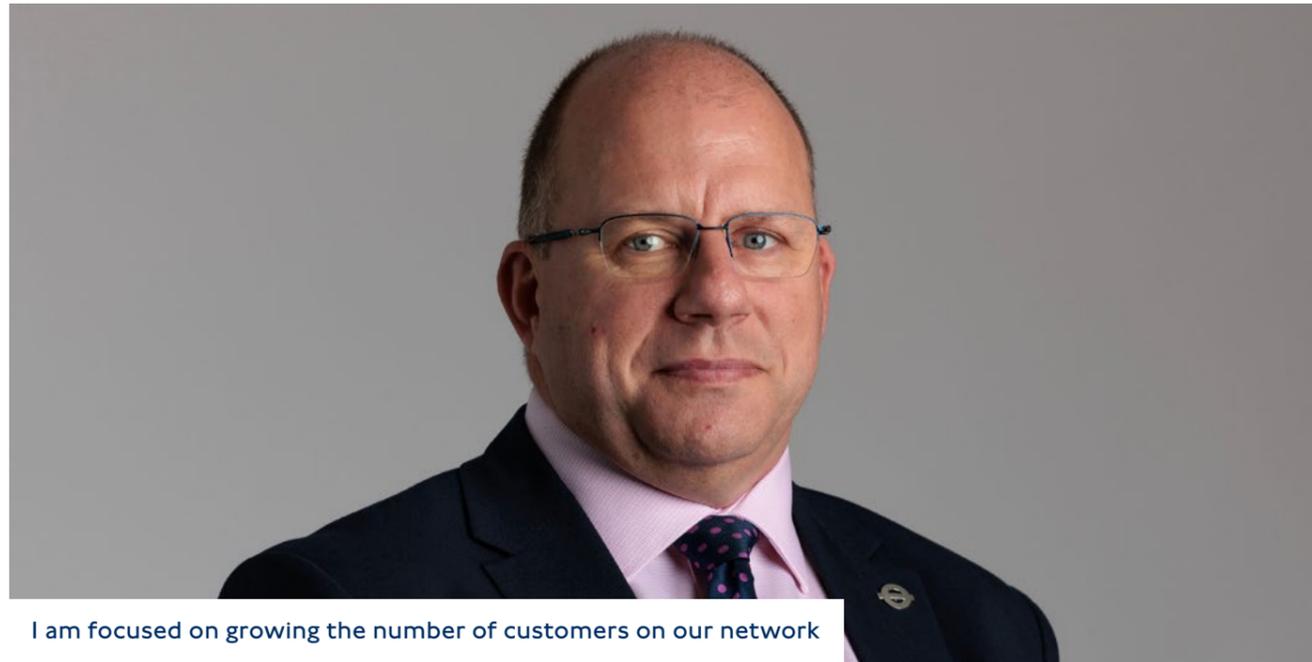
December 2022

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Introduction

I am proud to be leading our organisation and look forward to delivering the priorities I have set out



I am focused on growing the number of customers on our network

I am truly honoured to have taken over from Andy Byford as Interim Commissioner and to be leading an organisation with such heritage and history.

I have set four clear priorities for the organisation. I want our people to be excited about our vision, to know their role in its delivery as we work to become a simpler, more diverse and inclusive organisation. I want their work to be celebrated and for them to understand how they will benefit from a career with us.

I want to attract more customers back to our services in greater numbers and to keep improving the experience they have. Transport enables economic activity and opportunity, and greater passenger

numbers will mean a more prosperous, thriving city – something we all want to see.

We must ensure we are a financially sustainable organisation. Our agreement with the Government sees us through to March 2024 and, although it isn't perfect, we are grateful for the support which enables us to progress our work after more than two years of uncertainty.

Finally, and perhaps most importantly, I am committed to accelerating our contribution to London becoming a net zero carbon city by 2030. Public transport has a vital role to play in our transition to becoming carbon neutral, and this will be a key area of focus for me.

These priorities run through our draft Business Plan which gives an ambitious, optimistic vision as we cement our role as London's strong, green heartbeat. The Mayor and I are excited about the incredible future benefits which our colleagues, customers, contractors and partners throughout London and the UK will enjoy based on the decisions we make now.

One of my first official engagements as Commissioner was opening the new interchange between the Central and Northern lines at Bank station. This fantastic piece of engineering and architectural achievement will increase capacity and vastly improve the overall customer experience at Bank station.

I am also aware of the challenges we face due to the impact the cost of living crisis is having on us as a business and on my colleagues personally. I am working closely with my Executive Committee to ensure that our capital projects and renewals are protected and delivered as set out in the Business Plan, and that our people can feel secure that I am doing everything I can to keep us moving.

In addition, the last few months have been challenging due to the ongoing industrial action across a number of modes and services in the capital, including National Rail, London Underground, Woolwich Ferry, London Overground and buses. We continue to negotiate with our trade unions to seek mutually agreeable outcomes to disputes and work with colleagues to provide a reliable transport service.

On 6 November, we marked the latest phase in the Elizabeth line's progress with a more frequent, better connected service that now operates seven days a week. Journeys on the line are already proving popular, just in time for the run-up to the festive period, and I want to thank the teams behind the latest delivery milestone: your efforts have been phenomenal.

On 9 November, we marked the sixth anniversary of the tragic Sandilands tram overturning. Our thoughts remain with the families and friends of those who lost their lives, and with all those affected.

On 11 November, I laid a wreath at City Hall's Remembrance Day Service on behalf of our organisation. I'd like to thank everyone who supported this year's London Poppy Day appeal on the network and helped raised more than £1m for the Royal British Legion.

It was a privilege to celebrate our people at our You Matter Awards on 16 November. I have also been meeting key partners in the Government, notably the Secretary of State for Transport Mark Harper and new Department for Transport minister Richard Holden, reiterating that there is no UK recovery without a London recovery, and no London recovery without a properly funded transport network.

I look forward to continuing Andy Byford's success as Commissioner and delivering on the priorities I have set out.

Safety and environment

We work to make our network as safe as possible for our customers and our people

Safety incidents on the network

On 4 October, as a route 325 bus was progressing around a bend on New Barn Street in Newham, a bus passenger fell against the rear doors. The door leaf gave way and the passenger fell out of the moving bus, sustaining multiple injuries to their head, pelvis and arms. A thorough investigation was promptly initiated into the circumstances surrounding the incident, focusing on working with the manufacturer to establish the root causes for the door failing in this way. A technical bulletin has been produced to improve door maintenance and enable risk-based fleet checks which are now concluding.

On 31 October a route 76 bus collided with a traffic light signal which fell down and struck two pedestrians waiting to cross the road. The bus driver had been trying to avoid a stationary motorcycle when the incident occurred. The two people were taken to hospital by the emergency services where they received treatment for the potentially life-changing injuries they sustained. The incident is under investigation.

Sandilands tram overturning

As we marked sixth anniversary of the Sandilands tragedy on 9 November, our thoughts remain with the friends and families of Dane Chinnery, Donald Collett, Robert Huxley, Philip Logan, Dorota Rynkiewicz, Philip Seary and Mark Smith who lost their lives. We continue to do everything we can to ensure a tragedy like this can never happen again and remain committed to supporting everyone affected in any way we possibly can.

The Office of Rail and Road (ORR) is prosecuting TfL, Tram Operations Limited and the driver of the tram for health and safety offences. The driver of the tram has indicated a not guilty plea and a pre-trial review hearing will take place in March 2023.

National Hate Crime Awareness Week

Together with our policing partners, we proudly supported National Hate Crime Awareness Week, which took place from 8 to 16 October. To mark the launch on 9 October, we attended the annual Act of Hope and Remembrance, a special service for those affected by hate crime held at St Paul's Cathedral. This year's event focused on the experience of East and Southeast Asian communities who experienced a significant increase in racist hostility throughout the coronavirus pandemic.

Working with the Metropolitan Police Service (MPS), more than 50 events took place during the week, and we engaged directly with the community and faith groups. The events took place across the capital, including at Finsbury Park Mosque and transport hubs such as Golders Green Bus Station. Working with local authorities and charities such as Mencap, the learning disability charity, events featured community engagement stands and leaflet drops by our Safer Transport Teams and the British Transport Police (BTP). During these events, we provided information and advice to raise awareness of hate crime: explaining what exactly it is, how seriously we and our policing partners take it and how to report it.

For the second year running, we also promoted our 'Hands Up' campaign, which emphasises the impact of showing solidarity in tackling hate crime and makes it clear that this type of crime is not tolerated on our network. Our work to support National Hate Crime Awareness Week also included social media posts, a live Instagram discussion with the BTP, a new disability hate crime leaflet, training sessions and a new video.

Begging, rough sleeping and supporting homeless people

People sleeping rough on and near our network are a safeguarding priority for us. This is because rough sleepers are highly vulnerable, often have health problems, are at greater risk of assault and have a life expectancy half that of the general population.

We work closely with outreach services and local authorities to give the person sleeping rough the best possible chance of finding a way off the street, with specialist support for additional health problems or substance use issues, where necessary. The latest quarterly reports from the Combined Homelessness and Information Network database shows an increase in rough sleepers across London so far this year compared to the same period last year: a 16 per cent increase from April to June and 24 per cent from July to September. This information is collated by outreach teams and is a count of the number of people visibly sleeping rough on the streets and in public places across London.

Due to improved reporting levels and resources, our Compliance, Policing, Operations and Security (CPOS) teams are managing an increasing number of complex locations across our services and infrastructure.

In addition, due to the cost of living crisis, local authority outreach support and emergency accommodation is expected to be under more pressure, although recent longer-term funding through the Government's Rough Sleeping Initiative is expected to help local authorities better plan for changing demand over the next three years. In London, the initiative supplements both local authority and the Greater London Authority's (GLA's) rough sleeping budgets.

For us and the support services to give the best help to this vulnerable group of people, it is vital to know where people are rough sleeping, which is why CPOS teams encourage all staff to report rough sleepers using the correct channels.

When rough sleeping also includes anti-social behaviour, such as begging or drinking, our enforcement teams can use byelaws and other powers to complement the work of support services to try and provide long-term support.

The homelessness charity Thames Reach has been commissioned to provide outreach services for our public transport networks. The team works at night and focuses on the six busiest bus routes for rough sleeping, responding to StreetLink referrals and providing support to London Underground stations. They use the SMS data from bus drivers to inform their deployments and shifts.

Our customer safeguarding team recently attended a meeting at Tottenham Bus Garage to discuss rough sleeping, including the issue of persistent long-term rough sleepers. A trial is now planned as a result, with Arriva to report persistent long-term rough sleepers directly to our safeguarding teams who will then work to support these individuals.

The safeguarding team is also working to raise awareness of rough sleeping and homelessness on the transport network. On World Homeless Day on 10 October, we teamed up with Shelter and Thames Reach charities as they hosted knowledge hubs and conducted fundraising to help engage people in the problems and issues faced by those who are, or are likely to become, homeless.

Operation Safer Travel at Night

Operation Safer Travel at Night (STaN) is a joint initiative between the Mayor, the MPS, the City of London Police and us. The operation aims to make it safer and more secure to travel in the capital at night, with a focus on taxi and private hire services.

During the programme, officers are out on the streets providing a visible and reassuring presence for the public while raising awareness of the safe ways to use taxi and private hire vehicles or to get public transport. They use a broad range of tactics to identify and deter non-compliant or illegal taxi and private hire activity, including driver and vehicle checks. To support ongoing activity, we have reviewed the current STaN customer communications and developed digital toolkits to share with universities and our partners in the night-time economy. The toolkits include posters, social media posts, photography and video content for our partners to use to champion safer travel at night.

During the STaN campaign carried out in October, 557 officers completed 212 deployments, which led to 4,457 customer and driver interactions. Operations officers reviewed records at 114 private hire operating centres and checked complaints, drivers, vehicles and booking records to ensure they complied with regulations. Officers stopped and checked 6,741 taxis and private hire vehicles and drivers, resulting in 1,176 reports and offences.

Zero tolerance to sexual harassment and bystander intervention campaigns

A year ago, we launched our Zero Tolerance to Sexual Harassment campaign with our policing partners. The campaign, which includes posters across the network and social media activity, aims to challenge sexual harassment and related behaviour, and send a clear message to offenders that it is illegal and will not be tolerated on our services. We are also asking those that experience or witness sexual harassment to report it so that we can work further to prevent it and to take action against perpetrators.

We are now approaching the roll out of the second phase of this campaign, which focuses on the role of bystanders who witness such behaviours. The campaign answers the call by London TravelWatch to provide Londoners with advice on what to do in such situations, as their research found that many people felt helpless and were unsure of how to help. The campaign gives practical advice, such as ignoring the offender and providing direct support to the person experiencing the harassment. While the campaign is due to launch early next year, a social media plan is in full swing and includes a bystander video piece filmed with a key stakeholder and known activist, as well as an Instagram live stream featuring frontline members of staff who have intervened to support victims of sexual harassment.

Since the Zero Tolerance to Sexual Harassment campaign went live in October 2021 and was relaunched in August this year, 1,813 sexual offences on our network have been reported to the police. This compares to 1,067 offences in the same period the year before with the majority of reports being sexual assault (non-consensual touching), harassing behavior and exposure. The increase in reporting was anticipated and is a positive sign that the campaign is working, given that sexual harassment is significantly underreported. Research to track people's experience of sexual harassment on the network has not shown an increase in behaviour.

White Ribbon

Earlier this year, we were accredited by White Ribbon UK, a charity that is working to end male violence against women by engaging with men and boys to make a stand against violence. Male allies from across our organisation have signed up to the White Ribbon pledge: to never commit, excuse or stay silent about male violence against women. This helps show our customers and staff how seriously we take this issue and what we are doing to tackle it. Male allies are playing an important role to improve culture in our workplace by talking about the issues with colleagues.

Each year, together with our policing partners, we get involved in support of the International Day for the Elimination of Violence against Women on 25 November, and the 16 days of activism that follow.

Tackling work-related violence and aggression

To deliver our work-related violence and aggression strategy, we committed to doubling the size of our dedicated team and are currently recruiting new roles to develop and grow the team. These roles will work on activities to help prevent work-related violence and aggression and provide support to colleagues who are victims to this behaviour, including providing investigation services to our policing partners.

We continue to develop our plans to provide staff with the technology to help reduce work-related violence and aggression. In November, we completed the roll out of body-worn video cameras to River Services, Woolwich Ferry, Dial-a-Ride and a number of other teams that undertake customer-facing activities. We have also completed procurement for a further 500 emergency communications devices to help keep our staff safe by alerting colleagues that they require urgent assistance with an incident.

We continue to successfully prosecute those who commit offenses of violence and aggression on our network and against our members of staff.

One example of a recent court prosecution was in relation to an incident on 22 February where two members of staff were assaulted and racially abused at Farringdon Underground station. Police were called to the incident, with one person arrested and that person assaulting a police officer during the arrest.

On 18 August, the defendant pleaded guilty to four charges and was ordered to pay £75 compensation to each of the four victims and a £75 fine for each offence, a total cost to the defendant of £600.

Another example of a recent court prosecution was in relation to an incident on 11 May 2021, where station staff at Camden Town Underground station were called to a customer making repeated attempts to pull another customer from a train to fight. Two members of staff were repeatedly pushed and one was punched. The suspect was arrested and charged with assault and actual bodily harm against a member of the public, criminal damage and an assault against an emergency services worker.

On 22 August this year, the defendant was sentenced to 17 weeks imprisonment suspended for 18 months, alcohol abstinence and monitoring for 120 days, 80 hours unpaid work and a victim surcharge of £128.

Vision Zero Motorcycle delivery company road safety forum

On 8 November, we hosted the first motorcycle delivery company road safety forum. The forum brought together grocery and meal delivery companies for the first time to talk collectively about improving the safety of their motorcycle couriers on London's roads.

The grocery and meal delivery industry has expanded dramatically since the start of the pandemic, and we estimate that up



A number of our teams now use body-worn video cameras

to 40,000 motorcycle couriers are now working in London. We know that people riding motorcycles are the most vulnerable group on our roads, with figures showing that they are 80 times more likely to be killed or seriously injured than people travelling by car.

Motorcycle riders are also most likely, per journey, to be involved in a collision which kills or seriously injures another road user. In addition, riding a motorcycle for work can carry additional risks, with couriers

required to navigate unfamiliar roads, carry loads, deliver to tight schedules, ride at night and in bad weather as well as often working long shifts.

Organisations throughout the industry came together to raise awareness of road safety, discuss issues, share good practice and secure commitment to collaborate in the future. The ongoing ambition is to improve the safety of this vulnerable group of people and everyone they share the roads with.

Motorcycle training courses

Demand and attendance on both our motorcycle safety training courses remains strong, with 810 riders attending the one-to-one Motorcycle Skills course between 12 December 2021 and 12 November this year.

In the same period, the Beyond Compulsory Basic Training: Skills for Delivery Riders course, specifically aimed at those who ride for work, was attended by 589 riders.

Road danger reduction publications

On 19 October, we published our road danger reduction statistics factsheet for 2021, along with an updated version of our road danger reduction dashboard with improved functionality that enables users to explore the collision history of any location in London.

In 2021, there were 23,139 reported injury collisions in the capital, resulting in 75 people being killed, 3,505 being seriously injured and 23,092 being slightly injured. This number of fatalities was a record low, marking a reduction of 22 per cent compared to 2020. This decrease meant the Mayor's Transport Strategy target to reduce fatal and serious injury incidents involving Buses by 70 per cent from the 2005 to 2009 baseline was met.

The publication of the 2021 factsheet on our website was timed to coincide with the Project EDWARD (Every Day Without A Road Death) week of action from 17 to 21 October.

Police activity to support Vision Zero

Police activity and enforcement is an essential part of our approach to achieving our Vision Zero ambition of eliminating all death and serious injury on the road network by 2041. Throughout the month of October, our policing partners dealt with a total of 2,161 traffic offences for risky, dangerous and antisocial driving such as excessive speed, distraction, drink and drugs, no insurance and noncompliance with road rules. This included 135 arrests for drink and drug driving. During October, the MPS issued an additional 64,420 speeding offences through the use of safety cameras. With the Roads and Transport Policing Command (RTPC), we started using mobile safety cameras at the end of January to enable us to be more responsive to local community concerns and emerging issues. By the end of October, about 32,000 speeding offences had been enforced.

As part of its efforts to tackle road danger, the RTPC participates in monthly national campaigns coordinated by the National Police Chiefs' Council. These are themed around national road danger enforcement priorities and are an important element of the RTPC's operational activity.

Project Edward, which ran from 17 October to 21 October, focused on changing drivers' minds and behaviours through the delivery of specific initiatives. Operation Close Pass is a road safety initiative that focuses on educating drivers to give cyclists the necessary space when passing them on

our road network. The Exchanging Places programme gives cyclists the opportunity to see the road from an HGV driver's cab and highlights the importance of being visible to a driver and where blind spots can occur. Both initiatives encourage road users to be more aware and responsible. The council's speed enforcement operation ran from 10 to 30 October during which 953 traffic offence reports were issued.

On 8 November, we held our first road safety forum for the grocery and meal delivery industry, bringing companies together to improve road safety for motorcycle delivery riders. Our Chief Safety Health and Environment Officer, Lilli Matson, introduced the session, while colleagues from Health and Safety outlined updated guidance relating to motorcycle safety, and our Safety, Health and Environment team discussed our Vision Zero work and relating data.

The companies discussed barriers and opportunities relating to road safety for delivery riders. The session was well received and there was commitment from all involved to continue working together, including exploring a collective road safety charter.

Safer Junctions

Design work is continuing on the remaining 30 Safer Junction locations including high-risk locations such as the Holborn gyratory, which were prioritised due to the high number of fatal or serious injury collisions involving pedestrians, cyclists and motorcyclists.

Since October 2022, we have completed detailed design work for improvements on Holloway Road in Islington to provide 10 new and improved crossing points along this busy corridor, as well as at York Road roundabout in Wandsworth, which will see improvements to the surrounding circulatory area and crossing points. We plan to start construction on site for both schemes in early 2023.

In July 2022, we invited the public to share their views on how our plans to reduce road danger for pedestrians and cyclists at Battersea Bridge junction with Cheyne Walk would impact safety. Consultation on proposals started on 29 November and will conclude in January 2023. This is the second phase of the scheme, following the installation of a new pedestrian crossing over Battersea Bridge in December 2021.



We continue to work toward our Vision Zero ambition

Lowering speed limits

Work is progressing well on the lowering speed limits programme. To date, almost 110km of our roads now have a 20mph speed limit. Lowering speeds is one of the most important things we can do to make our streets safer, with a person about five times less likely to be fatally injured if hit at 20mph than at 30mph.

A safer speed limit has been introduced on 1.7km of our roads in Greater London: the A205 in Richmond, representing 1.5km of new road with a 20mph speed limit; and the A12 Gants Hill in Redbridge, representing a 0.2km extension to an existing 30mph speed limit over a crossing serving the Tube station and local bus stops.

Detailed design is under way on five further projects to deliver 28km of reduced speeds, which will see a consistent 20mph speed limit on the majority of roads across the boroughs of Camden, Islington, Hackney, Tower Hamlets and Haringey. Local residents and businesses have been contacted by post with details of the proposals and we have updated our online Have Your Say page. We aim to deliver this scheme by the end of March 2023.

A further 65km of our roads across the boroughs of Greenwich, Lewisham, Southwark, Lambeth, Wandsworth and Kensington and Chelsea is nearing completion of concept design. This is scheduled for delivery by October 2023.

The remaining 12km of our roads across the boroughs of Wandsworth, Richmond, Merton, Sutton, Hounslow and Enfield are in concept design stage. This is scheduled for delivery by March 2024.

Bus safety

We are continuing to roll out the Bus Safety Standard to new vehicles joining the fleet. The number of new buses meeting these specification continues to climb, with around 849 buses now in the fleet meeting the new standards. The safety measures include Intelligent Speed Assistance (ISA) technology which limits the speed of a bus to the posted speed limit. Around 30 per cent of London's bus fleet has now been fitted with ISA, including buses which have been retrofitted.

Other measures in the safety standard include an Acoustic Vehicle Alerting system, which is now operating on 709 quiet-running buses, and Camera Monitoring Systems aiming to reduce blind spots, which have been fitted on 755 buses.

In addition to the latest technologies being installed on new buses coming into the fleet, subject to funding, we are actively exploring retrofitting Bus Safety Standard technologies onto existing buses. This would enable a much faster reduction in the potential number of casualties than relying only on new vehicles entering the fleet being compliant with the standard. This is a particular advantage in terms of achieving our Vision Zero target of no one being killed in or by a London bus by 2030.

We have engaged with key stakeholders, including bus operators, drivers and manufacturers, Unite the Union, and lobby groups for road safety and other transport modes on the development of a Bus Safety Strategy to set out how we intend to achieve Vision Zero on the London bus network. This document will be published in the new year.

Capital programmes

We have taken further steps to integrate safety, health and environment requirements within our procurement and supplier management processes. We have recently launched, a new internal Management Framework for our procurement and commercial activities, as well as training which provides teams across the business with best-in-class guides, tools and templates to support them through each stage of the procurement and commercial lifecycle.

Suicide Prevention Programme

Comparing data from recent years has shown us that, since 2018, our Suicide Prevention Programme has helped reduce the number of suicides by 45 per cent across the Underground network.

We have trained 90 per cent of the 6,000 London Underground station staff in suicide prevention so far and we continue to train all new starters as part of their induction. The training is open to all our employees and we have recently opened the course to some of our stakeholders, including the BTP and the London Fire Brigade.

Upcoming inquests

On 18 February 2019, a person and their three-year-old child were tragically struck by a train at Taplow station. Taplow station is owned by Network Rail and leased to MTR Crossrail (now known as MTR Elizabeth Line) (MTREL). MTREL operates services at Taplow station under a Concession Agreement which was awarded by Rail for London. Murphy & Co Limited was undertaking temporary works at the station at the time of the incident and were contracted by Rail for London.

We, along with Network Rail, MTREL and Murphy's, are Interested Persons and have provided information to the Assistant Coroner on roles in relation to the management of the station, refurbishment works in place at the time of the incident and other issues related to the incident, and will attend the inquests to give evidence. The inquests began on 14 November and are ongoing.

On 18 September 2019 Christian Tuvi, a self-employed contractor working for Cleshar Contract Services, was fatally injured while cleaning a traveller at Waterloo station. We are an Interested Person in the inquest. A pre-inquest review hearing has been listed to take place on 2 December at Southwark Coroner's Court, and the inquest is likely to take place in June 2023 before a jury.

We have also provided assistance to the Coroner for Inner South London in relation to a fatality at Clapham North station on 7 April 2020. TfL was an Interested Person. Witness evidence was provided in

writing and in person at the inquest which took place on 16 November. The evidence concerned CCTV footage at the station and action taken since the incident. The Coroner gave an open conclusion, and was unable to reach any other conclusion on the balance of probabilities with the evidence provided.

Penalty fare proposal

The penalty fare system establishes clear and immediate financial consequences for those travelling without a valid ticket. Subject to consultation and an equality impact assessment, we propose to increase the value of the TfL penalty fare from £80 to £100, reduced by half if paid within 21 days. This would bring us in line with the Department for Transport (DfT) announcement that the penalty fare for the national rail network would be increased from £20 (or twice the full applicable single fare to the next station at which the train calls, whichever was the greater) to £100. The Mayoral consultation on this proposal is set to complete on 11 January. We will consider the responses to the consultation before taking any further steps.

We are now taking stronger action against customers who have been issued with a penalty fare but have failed to pay it. Previously, customers would have been sent follow-up letters chasing payment of the fine and their details would have been added to our enforcement systems in the event of coming to our attention again.

Now, customers who have not paid their penalty fare within 39 days and have not made us aware of any mitigating factors will



Our aim is to have an fully zero-emission bus fleet by 2034

be prosecuted for the original offence, this approach will bring us in line with other train operating companies. This applies to penalty fare notices issued from 1 April 2022. The first prosecutions under this revised approach took place in November.

Zero-emission buses

We have more than 860 zero-emission buses in the fleet and, with the longer-term funding deal, are now able to confirm more contract awards with new buses. This includes two types of buses, battery electric and hydrogen fuel-cell, operating on multiple routes in the capital, helping to improve the environment for all Londoners.

In October, innovative pantograph bus charging technology providing fast, high-power top-ups launched at Bexleyheath bus garage.

The new technology uses a pantograph, an arm-like structure that attaches itself to the roof to deliver a quick, high-power charge to buses. Wireless technology is used to enable communication between the bus and the pantograph. It is the first time this technology has been used in London and it is being used to power the all-electric route 132.

This is the latest step in our transformation and commitment to a zero-emission bus fleet, as outlined in our Bus action plan. We have already committed to ensuring all new vehicles entering service are zero emission and, subject to additional funding, could bring forward the target from 2034 to 2030. We are also working with bus manufacturers to develop a vibrant and competitive zero-emission market, alongside work with stakeholders to ensure necessary infrastructure is available to enable the transition.

From next year, a further extension of 'opportunity charging', with pantographs conveniently located at each end of a bus route, will be trialled in another first for London. The 15-mile route 358 between Crystal Palace and Orpington is one of London's longest, and a standard garage

charge alone would not sustain a zero-emission bus the entire day. Due to the length of the route, a pantograph at each end of the route, rather than back at the garage, will mean buses will be able to receive a quick boost on the spot. This means that, with minimal turnaround time, fewer buses can again provide the same level of service. The 358 route will also benefit from new buses that resemble a tram, with enhanced customer features and the latest bus safety features, while retaining the iconic red livery.

Taxi and private hire vehicles

Taxi age limits

On 1 November, the maximum age limit for non-Euro 6 diesel taxis was reduced to 12 years. This is the final reduction in the maximum age limit introduced to reduce harmful emissions from taxis and improve air quality in the capital. As a result of this initiative and the support provided to taxi owners to transition to cleaner, greener vehicles, more than 40 per cent of the taxi fleet now comprises zero emission capable (ZEC) vehicles.

Private hire vehicle WAV Exemption

We used an existing exemption process to enable exemptions to the ZEC licensing requirement on a case-by-case basis for specialist, wheelchair-accessible vehicles which are new to licensing. We put this exemption in place in recognition of the fact that the supply of larger, specialist, wheelchair-accessible vehicles that meet the ZEC requirements have not developed at the same pace as other vehicle types, such as saloon cars.

This exemption will be applied to those who provide a service which requires specialist vehicles. For instance: where large wheelchairs which are not easily secured or do not easily fit within taxis or other ZEC vehicles are regularly transported to hospitals, schools or care homes; where the services provided require electric wheelchair lifts and alternative securing mechanisms to be installed; or where the vehicle must be of a sufficient size and layout to give those with diverse and complex disabilities, such as autism, enough personal space so as to not feel uncomfortable or to travel with sufficient support staff. We will monitor market developments and keep the use of these exemption under review.

Taxi fares and tariffs consultation

We review taxi fares on an annual basis, using a cost index, to ensure they remain viable for both customers and taxi drivers. This cost index includes a number of different components including operating costs (such as vehicle costs, parts, servicing and insurance) and average national earnings.

We will shortly be opening a consultation on taxi fares and tariffs, with any changes coming into effect in April next year. Respondents will be asked for their views on:

- options for changing taxi fares, ranging from no change, implementing only a proportion of the cost index across the four different tariffs, or increasing

fares by the full cost index figure of 11.64 per cent

- removing the requirement to add the £2 extra for a booked taxi
- changes to the fixed-fare shared-taxi scheme that operates during the Wimbledon Tennis Championships. We are proposing an increase to some of the fixed-fares and a small amendment to the authorised place where the fixed-fare, shared-taxi scheme operates from

Removing obstruction to the highway

Since 1 October, the environmental activist group Just Stop Oil, acting in coalition with Insulate Britain, has been staging protests in London including on a number of our roads, resulting in obstruction of the highway and significant road traffic disruption.

In response to protests on our roads, we made an application to the High Court seeking an interim order to protect 17 of the most important roads on our road network, preventing further protests designed to obstruct the highway by any persons, including Just Stop Oil and 62 named members. The interim injunction was granted on 18 October. A return hearing took place on 27 October and a further application was made to extend the interim injunction to six additional roads on our road network and to add 121 named defendants. That application was granted on 31 October and the injunction was also extended to remain in force until 28 February 2023 or until any other order is made. We continue to keep the position under review.

Air quality and the environment Greener buses campaign

The greener buses campaign has been set up to inform people across London, including current bus users and drivers, that all our buses are low or zero-emission (at the tailpipe). London-wide activity started in July and continued through to the end of November, including bus wraps, posters, radio adverts, bus sides and bus rears. Local campaigns were launched at the end of November with activity promoting specific routes that converted to electric buses.

Air quality challenge and Green Skills Hackathon

Over the summer and early autumn, London Transport Museum and the TfL STARS schools accreditation team collaborated to deliver the first Air Quality Challenge for London schools. This invited pupils aged between 12 and 18 to pitch their ideas for tackling the urban air quality crisis to a panel of industry experts from companies including us, bus operator Abellio and transport technology company Cubic Transportation Systems.

Four schools were named as delivering the top pitches at the museum's Green Skills Hackathon in October. Their ideas ranged from the use of liquid hydrocarbons and photosynthesising bikes to carbon capturing paint and behaviour change.

On 17 October, London Transport Museum hosted a Green Skills Hackathon. This brought together 87 students and

17 teachers from London secondary schools with 29 transport business representatives. The event aimed to raise awareness and encourage debate about the future of green jobs and the skills needed to tackle the climate challenges facing London and its public transport network.

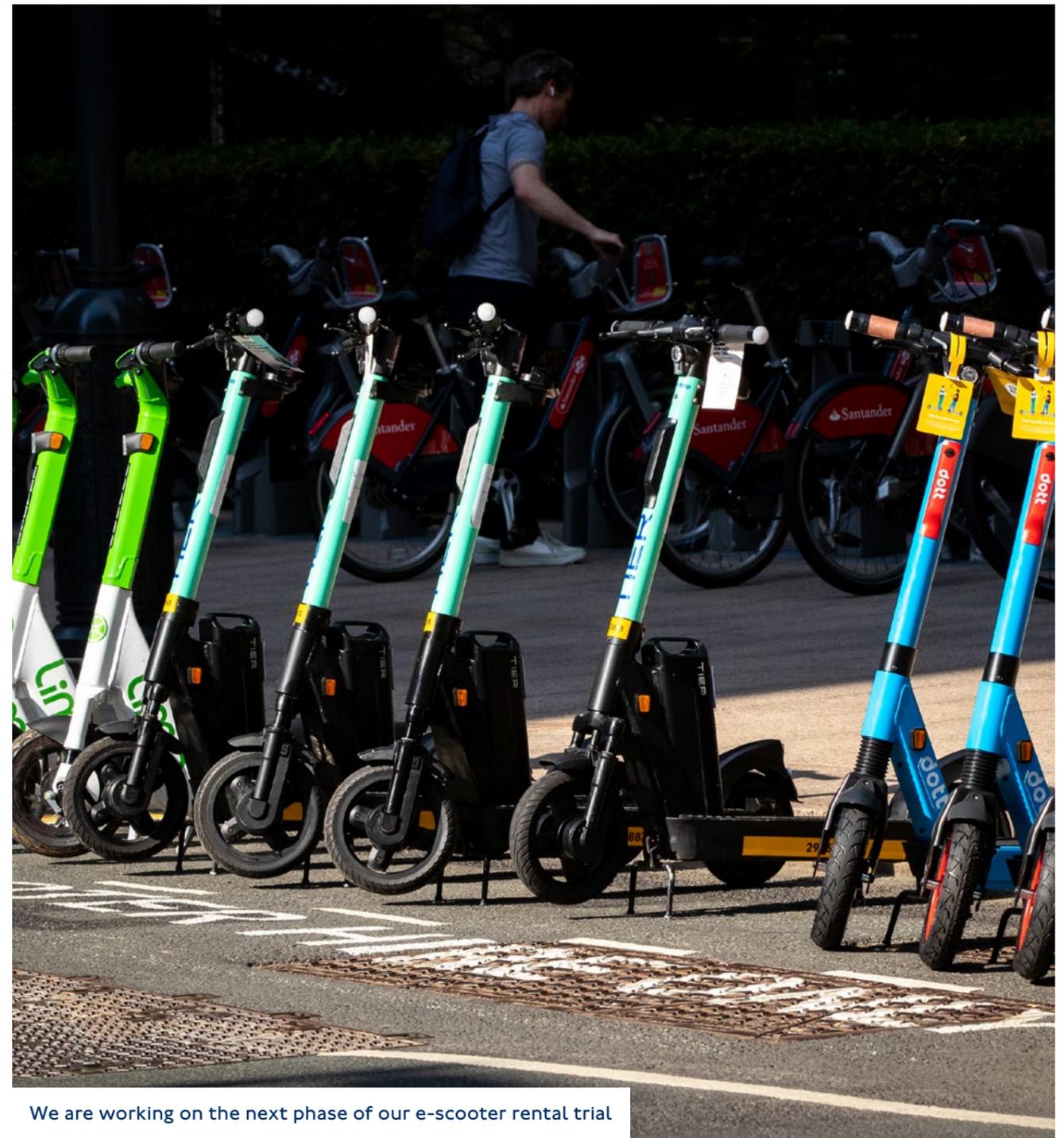
The Hackathon was created by the museum in collaboration with 17 students from Uxbridge High School. Lilli Matson, our Chief Safety, Health and Environment Officer was the keynote speaker. Transport industry representatives from our organisation, Cubic Transportation, Mott MacDonald, Thales and Siemens Mobility supported the event. The event's keynote speech and industry panel Q&A were livestreamed to pupils at schools joining remotely.

Freight servicing and deliveries

To help improve London's air quality and congestion, we delivered communications materials encouraging customers, retailers and employers to choose and promote sustainable online shopping delivery options ahead of Black Friday on 25 November, which is one of the busiest periods of the year for deliveries. This included publishing a new online toolkit for employers, giving them guidance and tools to promote green shopping options to their employees.

E-scooter rental trial

The London e-scooter rental trial has been operating for 18 months, with ten participating boroughs making up a continuous trial area. In the period ending 20 November 2022, 125,000 trips were made



We are working on the next phase of our e-scooter rental trial

with a total fleet size of 4,425 vehicles. This brings the total to just more than two million trips for the trial to date. In response to recently updated DfT guidance, e-scooter trials are now able to run across the UK until 31 May 2024.

We launched a competitive procurement process to select operators for the next phase of the trial. The current contracts with operators Dott, Lime and TIER have been extended to continue services until this procurement is complete.

TfL Youth Panel

On Friday 4 November, the TfL Youth Panel held its first assembly-style hearing to continue their exploration of the links between equality and diversity, and environmental sustainability. The hearing was facilitated by GLA Assembly Member Siân Berry and members of the panel asked experts a range of questions. Over the next few months, the Youth Panel is exploring the connection between equality, diversity and inclusion and environmental sustainability. This work includes desktop research, interviews with leading voices, formal hearings, written submissions, discussion groups and engagement through social media. The exploration is supported by a partnership consisting of colleagues from TfL and consultants from Arcadis, Arup, Deloitte, Jacobs, McKinsey and WSP who are volunteering their time to support the work.

London-wide Ultra Low Emission Zone

After considering a number of options to address the triple challenges of toxic air pollution, the climate emergency and traffic congestion in London, in March 2022, the Mayor asked us to consult on expanding the current ULEZ London-wide in 2023. The public and stakeholder consultation began on 20 May 2022 and ran for a period of 10 weeks.

On 18 November, the Mayor's Transport Strategy revision which updated the policy foundation for future road user charging was published with the support of the London Assembly. The revision included a proposal that the Mayor, through us and the boroughs, will seek to address the triple challenges of toxic air pollution, the climate emergency and traffic congestion through road user charging schemes including by expanding the ULEZ London-wide.

On 25 November, following consideration of the consultation report, including responses, and an integrated impact assessment and other relevant information, the Mayor announced he intends to proceed with the expansion of the London-wide ULEZ with a start date of 29 August 2023. The expansion of the ULEZ to outer London (to the Low Emission Zone (LEZ) boundary) will build on the hugely successful expansion to inner London. Around 4,000 premature deaths in 2019 were attributed to air pollution, with the greatest number in outer London.

The expansion of the ULEZ London-wide is forecast to reduce emissions of nitrogen oxides (NOx) from cars and vans in outer London by 10 and seven per cent respectively in 2023 compared to the baseline without the scheme. London-wide, the reduction in road transport NOx emissions is expected to be five per cent in 2023 compared to without the scheme, equivalent to 362 tonnes of NOx.

To support people on lower incomes and disabled Londoners, microbusinesses, sole traders and charities to prepare for the London-wide ULEZ, the Mayor also announced a new £110m scrappage scheme for vehicles that are not ULEZ compliant, which will open for applications on 30 January 2023. Additionally, the Mayor is introducing a new grace period for all non-compliant wheelchair accessible vehicles and for people receiving certain disability benefits.

On 18 November, we published our Scrappage Evaluation Report which reviewed the Mayor's previous scrappage schemes to support the proposed introduction and expansion of the ULEZ and tighter LEZ standards.

Scrappage schemes have been an effective policy intervention in improving air quality, reducing car ownership and changing travel habits to sustainable modes of transport, with a third of respondents to an evaluation survey of the car and motorcycle scheme saying they did not purchase a replacement vehicle and 22 per cent no longer having access to a vehicle in their household.

Learnings from the report have been incorporated into the design of the Mayor's newly announced scheme. For instance, the scheme will include the opportunity for people to take up a mobility credit option, providing a lower level grant payment with up to two annual bus and tram tickets, for a higher overall value than the cash only option. The consultation also asked people for their views on the future of road user charging. Those responses will inform the development of future proposed scheme, which would be subject to public and stakeholder consultation.

Electric Vehicle Infrastructure Strategy and Delivery

Our Electric Vehicle Infrastructure Strategy showed London may need between 40,000 and 60,000 electric vehicle charge points by 2030, up to 4,000 of which would be rapid chargers. This will support a reduction of carbon dioxide emissions of between 1.5 and 2.6 million tonnes per year by 2030. We now have more than 11,000 publicly accessible electric charge points in the capital. While this is a significant increase, more is needed to further increase supply.

The Electric Vehicle Infrastructure Delivery project is identified as the key commitment within the strategy and has been designed to use GLA member organisations' land to accommodate charge point infrastructure. Work continues at pace on the first phase, with the aim of delivering an initial 100 rapid charging bays before further expansion.

Following detailed market engagement, including interviews with key industry suppliers and charge point operators, we have finalised a procurement strategy. Tender on the first batch of sites went to market on 30 November, using a delivery model that doesn't require longer-term capital investment from us or GLA member organisations, while leasing out sites to charge point operators and negotiating a share of revenue.

Our initial assessment is that more than 1,500 potential charge point locations are available across the GLA estate, with about 70 per cent passing this first stage of evaluation. We are also building a timetable of planned sites to ensure a constant flow of charge point delivery.

Bus priority programme

The programme team has refocused the bus priority programme to meet the DfT target of delivering 25km of new bus lanes across London by 2025. To date, 2.84km of new bus lane has been delivered against this target, with schemes delivered in the boroughs of Bexley, Camden and Lambeth. Work has begun to identify further sites. A longlist of more than 170km of potential locations has been reviewed by internal stakeholders, and the dedicated bus task force has engaged with boroughs and delivery partners to develop and agree a delivery programme for 2023.

London's boroughs have been allocated funding for this in 2022/23. This will fund the construction of a number of schemes

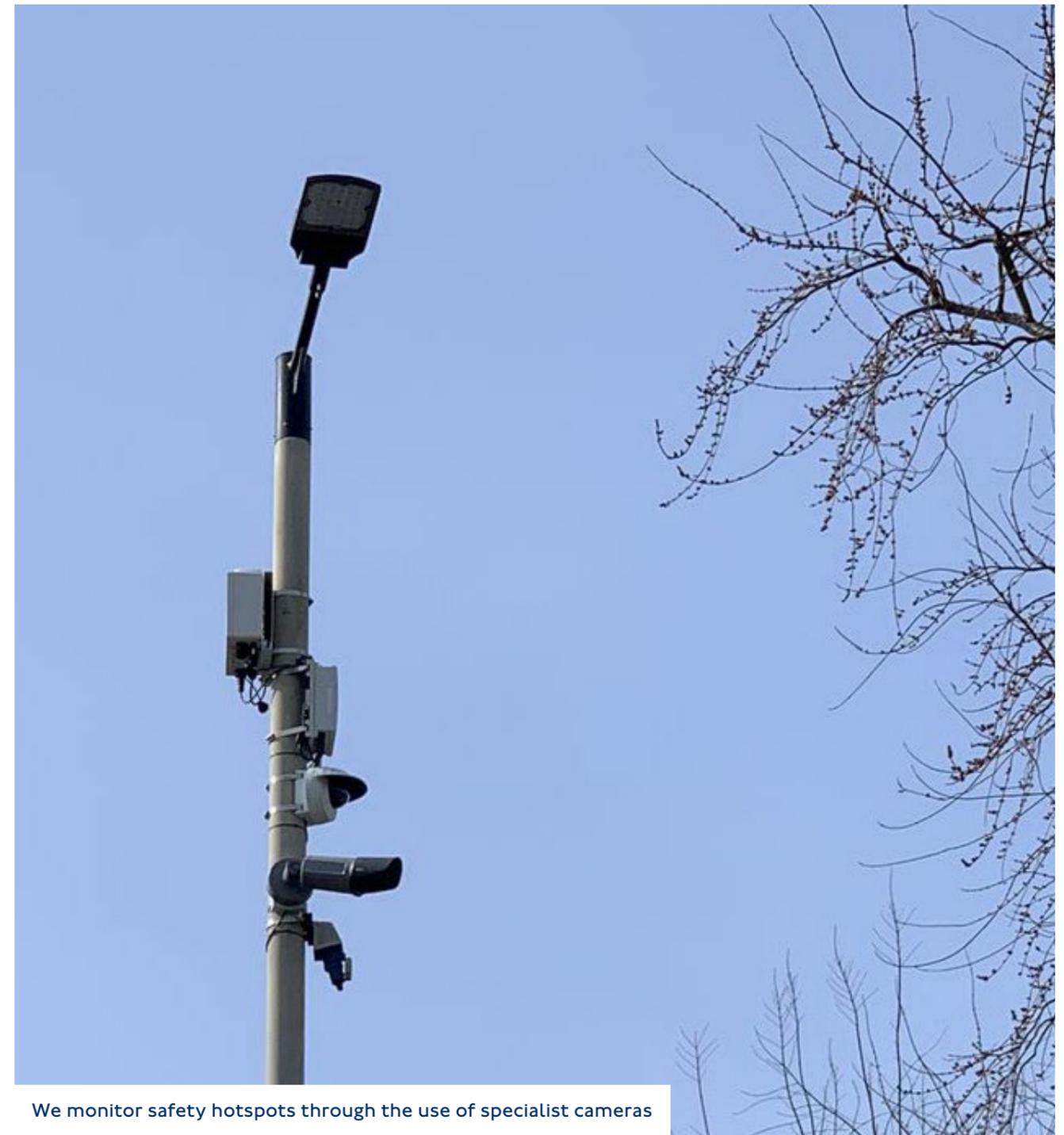
which will improve access at bus stops as well as the development of new schemes to help meet the DfT target on bus lanes. We are supporting the boroughs by providing resources for design and other matters where required. Work is to start soon on site in Newham, which will see improvements to bus journey times along Prince Regent Lane, as well as a new bus lane. The Wealdstone Town Centre improvements in Harrow are nearing completion, which will also see improvements to bus journey times.

Work on the London-wide programme of converting bus lanes to operate 24 hours a day, seven days a week has entered its final phase, with designs complete for parking bay amendments and works due to start on site in the new year.

The review of the operational effectiveness of traffic signals across London continues, which has resulted in a saving of more than 7,000 bus passenger hours this year.

Compliance, enforcement and safety technology

We are continuing to progress the roll-out of deployable enforcement cameras on our road network. These cameras allow us to target specific safety and non-compliance hotspots and will make a significant contribution to helping us meet our Vision Zero goal. To date, we have installed these cameras at 42 high-priority locations, which were selected due to their safety and compliance records over the last few years.



We monitor safety hotspots through the use of specialist cameras

We are now closely monitoring the changes these cameras are having on driver behaviour and road safety at these locations, with early indications suggesting that these cameras have already delivered some significant benefits with some locations seeing compliance increases of 60 per cent. We have now launched the second phase of camera installations, starting surveys to find the most appropriate safety and non-compliance hotspots, with the intention to widen the use of these cameras to an additional 50 sites by early 2023, followed by 195 sites in the year 2023/24.

These cameras have already resulted in more than 40,000 penalty charge notices (PCNs) being issued. Any money we recover from PCNs will be reinvested in maintaining a safe and efficient road network for everyone travelling in the capital. The cameras are used for enforcement of civil traffic rules only and are fully compliant with data protection legislation.

Public transport technology

We are maintaining and developing technology to operate our public transport network and improve customer experience. This includes upgrading the critical technology systems that underpin the bus network, such as the iBus system which provides real-time information on bus locations. The tender process to select suppliers for the iBus2 software replacement project is progressing well. Bidders who were successful in the earlier selection questionnaire phase submitted their proposals and these have been evaluated.

In July, the shortlisted bidders progressed through to the competitive dialogue phase, which ran until late October. This phase has enabled the project team to clarify bidders' technical and commercial proposals with them to ensure that any proposal submitted at final tender represents the best value for money. Following this phase, the project team has updated the contract schedules as required in order to issue the invitation to submit final tender in early December, for bidders to respond in the new year.

The Countdown 3 project will procure new sign support contracts for the supply, installation and maintenance of real time arrival information at more than 2,700 bus stops and stations across London. Countdown 3 will also have the ability to receive real time information directly from iBus2, enabling the existing Countdown back-office system to be removed and thereby bringing associated cost savings to the business.

Procurement is also under way for a replacement booking and scheduling system for Dial-a-Ride, which will give passengers the option to book online and enable us to deliver more trips with the same number of vehicles. Shortlisted bidders were invited to submit their final tender in April, with a preferred bidder later selected and contract finalisation taking place in November. Delivery is set to start at the beginning of 2024.

Santander Cycles

On 6 October, we launched 500 e-bikes into the Santander Cycles scheme, following changes to the tariffs and new membership options which came into effect on 12 September. The new e-bikes will help break down the barriers that stop some people from cycling, including fitness, age and journey length, with the new tariffs being more flexible and easier to understand. Almost 50,000 e-bike hires took place in October, the equivalent of about five hires per e-bike per day.

Six new Santander Cycles docking stations opened between August and September in the London Borough of Southwark in areas not previously covered by the scheme, enabling even more customers to hire cycles. Nearly 3,000 hires had taken place from these new docking stations by 31 October.

The free NHS promotional code, which was redeemed more than 160,000 times until it came to an end on 9 September, has now been replaced by a 50 per cent reduction in the annual member's tariff.

Road technology

We are leading the way in delivering innovative new road management systems. These are delivered within the Surface Intelligent Transport Systems programme and will enable a multi-modal approach to managing the road network. The programme continues to deliver the two core replacement systems – the Real Time Optimiser to manage traffic lights more effectively and the Common Operating View Incident Management System which will enable more effective management of

incidents. These systems will reduce delays and improve journey times. Both of these projects are prioritised as operationally critical renewals.

Future of temporary active travel schemes

We continue to work on the Future of Temporary Schemes Programme, to determine the next steps for each scheme delivered through the Streetspace for London Programme. During the summer, we delivered improvements for buses on the temporary cycle lane on Park Lane, ahead of a public consultation that launched on 13 October to help inform a decision on the future of the scheme. We have also recently undertaken a public consultation on the CS7 Clapham to Oval cycle route and will now review feedback before deciding on next steps for the scheme.

Work continues on site to make improvements to the Cycleway 4 extension, before the scheme transitions to an experimental scheme. We have also recently completed works at East Sheen to replace the temporary barriers delivered during the pandemic with bollards.

On 1 November, the London Borough of Haringey opened its final Low Traffic Neighbourhood at Bruce Grove. This was funded through the Active Travel Fund.

Leisure walking plan

On 4 November, we published the capital's first plan to boost the level of walking for leisure. Leisure walking provides people with an affordable and easy way to support good health, and physical and mental wellbeing while protecting and improving

the environment. The new action plan will enhance and expand leisure walking routes and better connect London's communities with green spaces, building on the increase in leisure walking seen since the pandemic.

As part of the Leisure Walking Plan, we have partnered with Go Jauntly to digitise the Walk London network and make it available through the Go Jauntly app. This will ensure that everyone in the capital can have access to high-quality leisure walking routes and have the opportunity to connect with nature.

The Walk London Network is one of the largest walking networks of any city in the world, comprising seven routes split into sections, to encourage leisure walking in London. Digitising the network means that people will be able to use the Go Jauntly app to navigate all seven routes, including the Thames Path and London LOOP. Accessible by public transport, these walking routes pass through 28 London boroughs, with each route split into sections to make them easier to navigate.

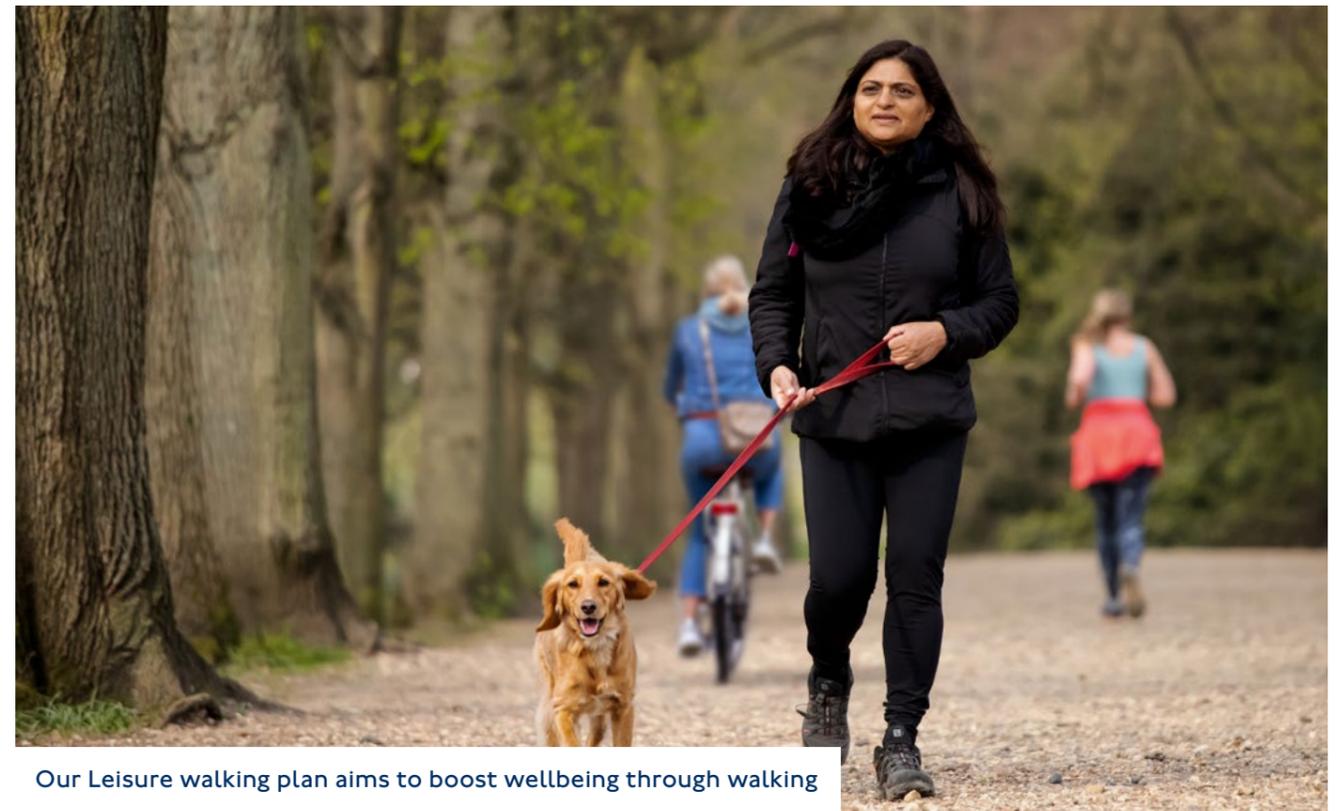
The Leisure Walking Plan also sets out further commitments to boost leisure walking in the capital. We will carry out an audit of signage on the Walk London Network and look to improve existing wayfinding signs, to enable even more people to make the most of the routes in their area. We will also use funding from the Mayor's Green New Deal fund to identify further ways of improving the network, including by resurfacing existing paths to make them more attractive and easier to use.

The plan will help to ensure London's streets are accessible and inclusive for the diverse range of people who live, work and visit the capital. Since the pandemic, walking for leisure has become the top reason for Londoners walking more. In a survey conducted this year, of those who said they walk more in London than they did the previous year, 39 per cent cited leisure as the reason, compared to 37 per cent who walked more to travel somewhere and 31 per cent who walked as part of a public transport journey.

To help coordinate the delivery of the plan, we will work closely with the London Walking Forum, whose members include organisations such as Living Streets, Sustrans, Ramblers, London Councils and the Canal & River Trust. We will work with our partners in the forum to assess the progress of the delivery of the plan's key actions, and work together to maximise opportunities to boost leisure walking across the capital.

TfL Capital safety

On 26 October, our Capital division held another 'Keeping in touch' session. Led by the Safety, Health and Environment team, these events are an opportunity for our own staff to meet with representatives from our contractors, away from site, in order to share experiences and both develop and encourage best practice. Each session focuses on different topics, with this recent session concentrating on temporary works, including the parts of a construction project that are needed to enable the permanent works to be built, such as scaffolds, and work-related road risk.



Our Leisure walking plan aims to boost wellbeing through walking

Within the construction sector, temporary works are sometimes regarded as an area of operation where risk is not managed as well as it could be, but we have clear guidance on this topic and support that suppliers can utilise. Work-related road risk is a broad-ranging topic, but one which affects very many suppliers, especially those with a fleet of vehicles.

Representatives from 20 different suppliers attended this latest session and, as always, it was encouraging to see participants' willingness to share experiences – both good and bad – for everyone's benefit.

In November, we organised a Safety Week event for those colleagues working on the Four Lines Modernisation Programme to upgrade the District, Hammersmith & City and Metropolitan lines in conjunction with our key supplier Thales. A broad range of topics was covered including fatigue, personal resilience, site safety, awareness of defibrillators and system safety. Office-based staff participated alongside site-based colleagues, which helped to reinforce the sense that safety should be of concern to everyone, no matter where they are based and what tools they use to do their work.

Operations and customers

We continue to improve and invest in infrastructure across the transport network



The Interim Commissioner with the Mayor and Secretary of State for Transport

Elizabeth line

On 6 November, we introduced a Sunday service on the Elizabeth line and launched direct journeys across the line, enabling customers travelling from Reading, Heathrow and Shenfield to travel directly into central London without the need to change trains. The frequency of services in the central section between Paddington and Whitechapel has increased from 12 trains per hour to up to 22 trains per hour in peak times and 16 trains per hour during off-peak times, significantly reducing journey times. Further increases in frequency will be introduced in May 2023. To date, more than 70 million journeys have been made across the new Elizabeth line, with around 600,000 people using the line each day.

The Elizabeth line continues to be one of the top four performing rail services in the country. Before through running, the overall Elizabeth line Public Performance Measure during Period 7 (from 18 September to 15 October) was at 94.1 per cent, increasing from Period 6 as the performance recovered from some significant issues on surface sections of the line, including major incidents with damage to Overhead Line Electrification on the western section of the route. Network Rail has an extensive programme of works and interventions designed to increase the resilience of infrastructure between Paddington and Reading, but in the short term this remains a vulnerability for through running.

The next stage of our Elizabeth line campaign promotes the improvements

that we have made this autumn, and the realisation of many of the project's key benefits for Londoners.

Our marketing campaign promoted through running into the central section and increased frequency, as well as the opening of Bond Street, the end of reduced operation hours and Sunday closures, and the completion of step-free works at the two remaining stations. It also informed Londoners of the latest improvements. The campaign was targeted at people in specific geographical areas of the railway that will benefit the most, and this works includes door drops and targeted advertising to key regions of London, Berkshire and Essex.

We re-ran TV and radio adverts, as well as promoting a short film featuring the orchestra that performed the Blue Danube Waltz, as featured in the advert. We will also use dynamic digital posters and online advertising which will feature key journeys for relevant stations, with the ability to update these after launch as new travel patterns emerge. We also partnered with Time Out and Metro to create editorial and promotional content, celebrating the opportunities the improvements offer.

On 21 October, London Transport Museum hosted a Friday Late event in honour of the line, celebrating its past, present and future in the city. Talks by experts explored the historical origins of the line, its construction and operation and how the museum has documented this journey in its collection for future generations. The event was a great success, with tickets selling out.

Keeping London moving

October has been a challenging month in terms of protests. The environmental activist group Just Stop Oil carried out a number of campaigns which impacted our network and affected our ability to provide services to enabling people to travel around the capital.

A number of affiliate groups joined the protests, including Animal Rebellion and Extinction Rebellion. Through our Network Management Control Centre, we worked closely with our policing partners, monitoring and managing the impact caused by the protests. We were subsequently granted an injunction.

During this time, we also managed a busy events calendar including the London Marathon, Diwali celebrations, Royal Parks Half Marathon, autumn Rugby Internationals, Lord Mayor's Show, Remembrance Sunday and the start of Winter Wonderland in Hyde Park. The success of these events is testament to the amazing behind-the-scenes logistical planning and management by our colleagues across the entire network.

We continue to see significant levels of industrial action across the national transport network. This includes strike action by employees of the Train Operating Companies and Network Rail, which can have considerable impacts on our services. Our network management teams have been working closely with colleagues across the industry to minimise the impact of industrial action on our network, through the sharing of information and joint planning exercises.

Within our organisation, we have seen industrial action across a number of modes and services, including London Underground, Woolwich Ferry, London Overground and buses. We continue to consult and negotiate with our recognised trade unions to seek mutually agreeable outcomes to disputes, using the services of independent advisors ACAS where appropriate. For our contracted services, we encourage operators to work with trade unions to resolve their disputes. To help minimise the impact on our customers, we have comprehensive network management and resilience plans in place to manage and mitigate the impact of industrial action on our network, ensuring we are able to operate the maximum safe level of service during any periods of industrial action.

To ensure we can support customers during days of industrial action, our TfL Ambassadors work across our network to provide travel advice and information to those who need to travel.

As we move into the winter months, our robust London Underground and Surface weather plans ensure all areas within our operations are prepared to mitigate the impact of adverse weather by including colleagues from across the organisation. Our Control Centres play a crucial part in ensuring that all stakeholders are involved and keep to plans, providing our customers and colleagues with a safe and reliable transport network.

In this time, we have managed the successful upgrade of the Buses Integrated Communication Control System into the control centre. This gives the Network Management Control Centre an updated and more resilient set of connected systems which provide key call handling from the iBus system, helping us manage our bus services in real-time.

Finally, work has started with key London partners on the Energy Resilience project. As part of this, we have launched an internal programme of work to refresh our current capabilities in the event of potential power disruptions, with the aim of putting together a plan to outline key impacts and mitigations across the business. Planning is also under way to take part in Exercise Mighty Oak, a national exercise testing the plans in place for a national power outage. This will include a London cell focusing on our interactions with regional partners.

Improving bus infrastructure

We operate one of Europe's largest bus fleets, bus stops, and shelters which are the gateway to London's transport network, with more than 35,000 pieces of infrastructure across Greater London. Keeping Europe's largest bus network working well and enticing customers is no easy feat and involves a huge amount of work, from timetables to weekly cleaning, shelter replacements, graffiti removal and bus route updates. We have just put out to tender the next five years of contract activity for this work, with the aim of providing a greener, safer and more customer-focused experience.

Bus services changes

On 24 September, route 241, which previously ran between Stratford City and Prince Regent bus stations, was extended southwards to the Royal Wharf development area, through Connaught Bridge and North Woolwich Road.

This extension provides a new, direct link connecting to Elizabeth line services at Custom House and other rail services at Stratford and Plaistow. The route's new terminus at the development is a short walk from Royal Wharf pier.

On 23 November, we announced that the Mayor has provided additional funding averaging around £25m per year to enable us to reassess our Central London Bus consultation proposals. This is in addition to a £500m City Hall financing facility which is still required for us to maintain a balanced budget. As a result, we will not be going ahead with the vast majority of the proposed changes. We will still be proceeding with four of the 16 'neighbourhood' schemes, 22 per cent of the previously proposed reduction in mileage. All are in areas with numerous alternative public transport options and there will be enough capacity on buses to meet usage following the changes. Passengers will also still be able to make the same journeys, but with some requiring additional interchanges, in which case they will benefit from the Mayor's Hopper Fare. We have published our consultation report and revised equality impact assessments. The changes themselves will occur over the course of 2023.

We, along with Network Rail, MTRREL and Murphy's, are Interested Persons and have provided information to the Assistant Coroner on roles in relation to the management of the station, refurbishment works in place at the time of the incident and other issues related to the incident, and will attend the inquests to give evidence. The inquests began on 14 November and are continuing.

Bank station

We are working to boost capacity at Bank station by 40 per cent. This includes creating a new Northern line tunnel, platform and circulation spaces, a new entrance on Cannon Street, the introduction of step-free access to the Northern and Waterloo & City lines, additional interchange between the DLR platforms and between the Central and Northern lines.

The new interchange routes between the Northern line, Central line and DLR have now been successfully brought into use. These interchanges include six new escalators and two new 100-metre moving walkways which significantly improve journey times for our customers by up to nine minutes between the lines.

The final phase of the project will provide a large, new street-level entrance on Cannon Street. This will include six further escalators between street level and the Northern line platform level, step-free access to the Northern line for the first time and improved step-free access to the DLR via new lifts. Works are progressing

on this final phase, with the continued installation of the wall cladding and the floor and ceiling finishes. Works on the gateline are due to begin shortly, followed by the testing and commissioning of all systems and services as we prepare to bring the main entrance into passenger use by end of December.

Works have started to demolish the remaining basement levels of the original building in preparation for works to begin on the over-site development above and around the new entrance, as well as the restarting highways and various urban realm works.

Alongside the construction work, we have run a communications campaign to raise awareness of the improvements and build excitement around the completion of the project.

Elephant & Castle station

A new station entrance and Northern line ticket hall will support the creation of 7,500 new homes and 10,000 new jobs in the area, significantly increasing station capacity to meet both existing and new demand for Tube services. The developer, Delancey, is creating a new structure for the station as part of its scheme, which includes us fitting out a new ticket hall, subject to funding. People will enjoy step-free access to the Northern line for the first time at the station, together with future-proofing an interchange to a potential Bakerloo line extension. We are also constructing new passenger tunnels connecting the new ticket hall to the existing Northern line platforms.



We are working to boost capacity at Bank station by 40 per cent

The project team is currently pushing ahead with the procurement arrangements for the new tunnels, with the invitation to tender set for May next year. A tender for essential pre-tunnelling ancillary works was issued in October, with the contract set to be awarded in February next year.

Additionally, we are progressing the procurement of a package of work to

determine best options for the eventual fit-out, known as stage 2. Invitations to tender were issued in October and the contract is set to be awarded in January. This all aligns with the approved procurement strategy.

Construction of the station box by the developer continues at pace, with station box piling well under way and making good progress.

DLR rolling stock replacement programme

Our rolling stock programme will deliver 43 newly designed trains, to replace the oldest trains on the DLR, improve customer experience and expand capacity across the network to support housing and employment growth in east London. The programme includes an expanded depot at Beckton to stable and service the new fleet, traction power capacity upgrades, signalling changes to the automatic train operation system and enhanced customer information systems.

At Beckton Depot, work on the northern sidings and sub-station continues. Critical possession works were carried out on the substation in October to remove assets and ready the depot for the installation of new assets. Work is ongoing on the northern sidings, with possession works to prepare for the commissioning of the northern sidings underway.

Tender evaluations for the new maintenance facility building, and additional Southern sidings is complete. We expect to award the contract later this year.

The manufacture of the new rolling stock in Spain is continuing to plan, with four trains completed and being checked on the test track before delivery of the first two trains to Beckton early next year. We anticipate having completed the manufacture of 12 trains by the end of this financial year.

Testing of the new signalling software for the new trains has started on the DLR network, and this testing will continue into the early part of next year.

We are still awaiting confirmation from the Government to purchase 11 additional trains which, funded through the Housing Infrastructure Fund, would provide additional capacity, and unlock further housing benefits in the Royal Docks and Isle of Dogs areas.

Piccadilly line upgrade

Phase one of our upgrade of the Piccadilly line will provide 94 new generation, high capacity, walk-through, air-conditioned trains and supporting infrastructure. These will replace some of the oldest trains on our network and will enable a peak frequency increase from 24 to 27 trains per hour. In November, Siemens completed the manufacture of the first-in-type key motor car shell for the first new Piccadilly line train. This follows the successful assembly of the first intermediate motor cars in June, which keeps us on target for the first train to be fully formed and ready to start testing from summer 2023.

In November, work completed on the delivery of the DC cabling required to connect the new sidings at South Harrow with the substation at Sudbury Hill. In total, the team has now delivered and installed 8.2km of DC cabling and 1.4km of AC cabling. This supports our key milestone to bring all 12 sidings at South Harrow into use in February 2023. Alongside our delivery partners, we have also successfully commissioned legacy signalling modifications into service at Holborn Underground station.

Enabling works have started at Northfields and Cockfosters depots to prepare for the start of major upgrades to provide maintenance facilities for the new trains. Extensive clearance of vegetation has been carried out at Cockfosters to enable construction of a new wheel lathe facility which forms the first stage of the depots' upgrades programme.

Four Line Modernisation programme

Work on our programme continues, enabling the introduction of a new timetable on 11 September, which has brought a journey time improvement of around five per cent on average on the Circle and District lines between Monument, Fulham Broadway, Barons Court and Paddington. As an example, this means a journey between Barons Court and Monument will be reduced by more than a minute. This adds to the journey time improvements already introduced on the north side of the Circle line through a timetable change in September last year. Since commissioning Signal Migration Area 5 in March, the underlying system performance has been good and a further revenue software uplift was successfully rolled out in November to address a safety issue that had been identified. This enables the temporary mitigation measures to be removed.

We are planning to introduce Signal Migration Areas 6 and 7, at the eastern end of the District line, early next year, completing the roll out of Communications-Based Train Control on the Hammersmith & City line and connect the first depot to the network.

Old Street

The scheme will bring safety improvements for cyclists and pedestrians by providing new and improved crossings, fully segregated cycle lanes and a new public space with an accessible main entrance to Old Street Underground station and the subsurface shopping arcade.

Construction has continued with the highway works on the four approach arms to the junction, including the infilling of Subway 3 on the southwestern side of the junction. Building work for the superstructure and external glazing for the new main station entrance has continued. Works to the existing clerestory roof structure have also continued, with installation of the external steelwork. Construction of the new passenger and goods lifts has continued with installation of the new lift cars.

Refurbishment of the subsurface concourse area has continued, with installation of new mechanical, electrical and communications equipment and installation of new shop fronts for the retail units. The power supply to begin testing, commissioning and handover of the new assets is scheduled for early December. The scheme is a complex engineering project and buried services have been encountered in locations not seen on record drawings, so parts of the scheme have had to be redesigned, slowing down progress. As the site is located in the middle of the Old Street Roundabout and the junction and underground station have to remain operational at all times, this has had an impact on logistics and progress of the works. As the work is being undertaken in small sections, this has caused an

impact on productivity and progress, while Morgan Sindall have seen productivity issues from their supply chain which has impacted progress on its construction schedule. There have also been changes to the Morgan Sindall project team leadership and we are working with the new team to improve the safety culture and site productivity through collaborative planning workshops which have helped us identify opportunities to improve the forecast completion date. Both teams are now working in a more collaborative way and construction is expected to be complete in the summer.

Silvertown Tunnel

Good progress continues to be made on both sides of the river in Greenwich and Silvertown, with completion of the excavation for the tunnel boring machine rotation chamber and the continuation of piling for the permanent portal structures in Greenwich. Initial lane closures are also in place on the A102 to enable the works and we are keeping our customers informed of potential disruption to journeys, while taking steps to minimise this as far as possible.

Following the fire which broke out on the tunnel conveyor belt system in September, repairs have been successfully carried out and tunnelling is now once again under way. We continue to review lessons from this incident, working closely with Riverlinx, the London Fire Brigade and our health and safety teams. Good progress has now been made with tunnelling, with the tunnel boring machine having travelled more than 200 metres since it launched in September

and now under the riverbed. It will take several months to reach Greenwich.

The tunnel boring machine will then be rotated to continue to bore the northbound tunnel from Greenwich to Silvertown.

We continue to progress further traffic and environmental modelling work to ensure the scheme delivers its defined benefits, including through implementing road-user charging and new cross-river bus services. We have now launched our consultation on proposals for the bus routes that will initially run through the tunnel from its opening in 2025.

In August we were delighted to welcome the family of Jill Viner, London's first woman bus driver, who cut the ribbon to announce that the tunnel boring machine, named Jill in her honour, was ready for testing and commissioning.

Spoil from the tunnels will be transported by a conveyor from the boring machine to barges, a process which will remove the need for this work to be done by thousands of lorries on our roads instead.

Rotherhithe Tunnel refurbishment

We have completed the concept design, and preparation of tender documents for the detailed design and build procurement stages of the Rotherhithe Tunnel refurbishment project. However, to keep the necessary cross river travel options open while works take place at Blackwall Tunnel, we now expect that the full refurbishment work will not take place until after the Silvertown Tunnel opens in 2025.

A series of short-term capital interventions is being put in place to ensure the tunnel remains safe and operable until the main refurbishment project can be progressed. We have appointed a contractor for these short-term capital interventions and an options study to determine the best approach is due to be completed by May 2023.

Potential DLR extension to Thamesmead

We continue to work with partners to assess the case for a DLR extension to Beckton Riverside and Thamesmead, alongside bus improvements, to support growth and new homes in these two large brownfield development opportunities. Together, these development areas have the potential to accommodate around 25,000 new homes for London. Design work and modelling for this stage is well progressed, with the Government's Homes England agency working alongside us to assess the viability of the housing plans, which will allow the overall case for the programme to be assessed in the business case.

High Speed 2

High Speed 2 (HS2) is a new high-speed railway connecting London to the West Midlands and the North of England. The new railway has several interfaces and implications for our networks, and our work involves assuring the design and delivery of new assets, infrastructure, and operational facilities at Euston and Old Oak Common, as well as protecting operational networks and services.

On 6 October, a key HS2 milestone was delivered at West Ruislip Portal when the first tunnel boring machine, was launched.

HS2 Ltd is undertaking a feasibility assessment of the recommendations in the Oakervee report commissioned by the DfT, with outcomes of the report due to be shared by early next year.

Initial stakeholder engagement has started for the series of works on the Euston Road which will start next spring. Impactful lane closures are anticipated for the next seven years as HS2 Ltd completes the utilities diversions, and to enable construction of the permanent works for the new upgrades at Euston Square and Euston Underground stations. We are working closely with HS2 Ltd on a travel demand management campaign for road users who will be affected.

We continue to work with The Euston Partnership to ensure our requirements are met for the future bus station, taxi rank, cycle parking and the London Underground station at Euston.

At Old Oak Common, we continue to work with HS2 Ltd in the design development of the new surface area between modes, as well as working collaboratively with HS2 Ltd and its supply chain to meet its programme milestones and minimise impacts to our assets. Early planning is under way to accommodate future Network Rail possessions and line closures on the Great Western route which will affect Elizabeth line services over Christmas 2023 and subsequent years.

Step-free access consultation

Ensuring step-free access across the transport network is key to provide equal access to easy, safe and reliable transport for all Londoners, including many older and disabled people, as well as parents and carers. While step-free access is especially important for these customers, it can make travelling easier for everyone. Since 2016, a total of 23 Tube stations have been made step free, bringing the total to 92, around one third of our network.

We are developing a strategy for the next phase of step-free access which will prioritise future developments in light of the consultation and future funding. Three third-party-funded schemes are in progress which will provide additional step-free access at Paddington (on the Bakerloo line), King's Cross (at Euston Road South Entrance) and Knightsbridge stations.

We carried out a consultation from November 2021 to February 2022 and received more than 5,500 responses to help us understand the issues our customers faced and shape the future approach for step-free Tube stations. We have been carefully considering the feedback received and published our report on 16 November.

Accessibility bridging device

We launched a trial of a new bridging device as part of our ongoing work to make London's transport network more accessible and inclusive. The trial is taking place at eight Jubilee line stations until February 2023, including London Bridge, Canary Wharf and Green Park.

The specially commissioned device has been designed to provide additional support, comfort and reassurance to customers at step-free stations where there is a small gap between the platform and train. If the trial is successful, we will consider extending the device across London Underground and the wider Underground network.

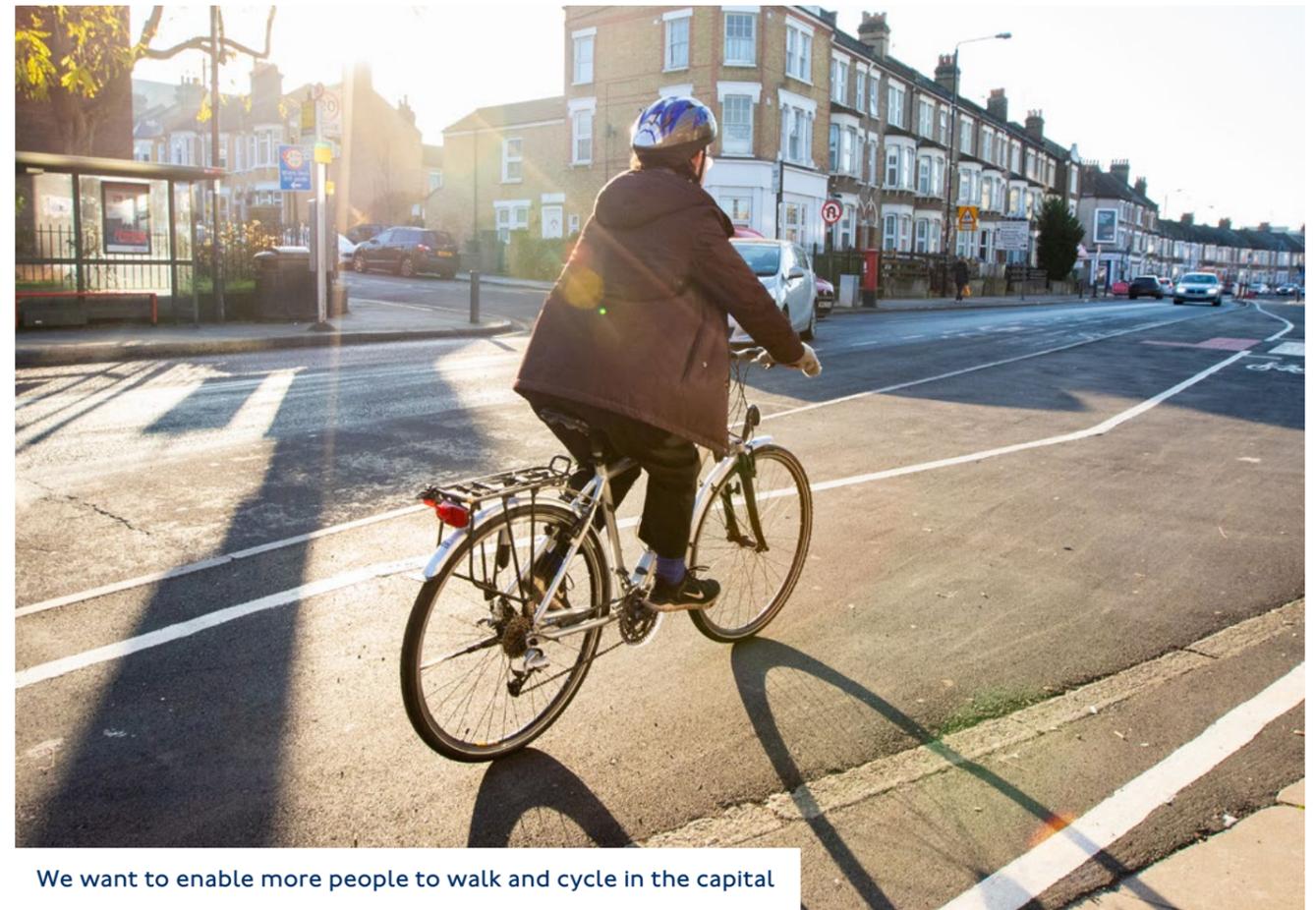
Cycleways

On 27 October, we published our consultation report outlining the next steps for a new Cycleway between Greenwich and Woolwich. The consultation, which took place before the pandemic, showed that 77 per cent of people responding believed the planned changes would result in more people cycling, while 70 per cent said the same about walking. Enabling more people to walk and cycle is vital to building a stronger and more sustainable transport network for everyone in the capital.

The first section of the route was built using temporary materials in response to the pandemic. This included a trial of cycling improvements between Greenwich and New Charlton, along with new bus lanes on the A206 between Anchor and Hope Lane and Woolwich Ferry Roundabout.

The proposals for the second section of the route include:

- A two-way segregated cycle way along the A206 from Anchor and Hope Lane to Woolwich Ferry roundabout
- Junction improvements to reduce the risk of motor vehicles turning across the path of cyclists



We want to enable more people to walk and cycle in the capital

- Improved pedestrian crossings, converting these from staggered to straight across
- New signalised pedestrian crossings over the A206
- Widening footways at selected locations to make it easier to walk

We are working with the Royal Borough of Greenwich to decide on how the changes are made as part of making the first section

of the route permanent at the end of an 18-month trial period. We will continue to work closely with local communities on designs for the second section of the route, with construction expected to begin in spring 2024, subject to funding. Once complete, the route will connect into Cycleway 4 to the west and extend through to Woolwich town centre to the east, creating a continuous route from Woolwich into central London.

Cycleway 4 London Bridge to Greenwich

Snagging work continues along Evelyn Street from Bestwood Street to Deptford Church Street following the completion of construction work on 13 September. A route walk took place with members of the London Borough of Lewisham to inspect the snagging works on 24 November. The Royal Borough of Greenwich's works to Creek Road Bridge are scheduled to take place in early 2023.

Cycleway 9 East Kensington Olympia to Brentford

Snagging works on Hammersmith Gyrotory and Chiswick High Road from Chiswick Lane to Goldhawk Road are nearing completion following the opening of the schemes on 30 June and 8 July respectively. A walk along the route to inspect the snagging works took place on 25 October. Construction began on the next phase of works on Chiswick High Road between Chiswick Lane and Heathfield Terrace on 13 October. These works are being delivered by the London Borough of Hounslow.

Cycleway 23 Lea Bridge to Dalston

The detailed design for Lea Bridge Roundabout is progressing and construction is planned for early 2023. Our proposals will provide a protected route for cyclists between Lea Bridge Road and Powell Road, tying into the recently delivered protected eastbound section through Millfields Park and existing connections onwards to Waltham Forest. From Powell Road, there are existing Cycleway 23 connections westbound to Cycleway 1.

Cycleway 37 Mile End to Westferry Lane

Detailed design for the permanent scheme at Mile End Road junction is progressing and construction is planned for early 2023. Detailed design for the temporary-to-permanent scheme on Burdett Road is also progressing and construction is planned to follow the work to Mile End Road junction in late 2023.

Cycleway 50 Finsbury Park to Tottenham Hale

Detailed design for section of our roads from Caledonian Road to Finsbury Park is progressing and construction is planned for early next year.

Cycle training for adults and children

Following a pause in funding for adult's and children's cycle training in the previous financial year, this has been reinstated in 2022/23, with a total of £2.7m allocated to the London boroughs to deliver cycle training this year. Funding was given greater importance in boroughs with the greatest potential for interest, particularly among traditionally under-represented groups and where there is ongoing investment in making streets safer for cycling.

The funding will train an estimated 30,000 children to Bikeability Level 2 and around 12,000 adults.

Customer campaigns

Public transport recovery

Our pandemic recovery campaign to encourage Londoners to use public transport more often continues. We are using outdoor posters and online activity to promote public transport on an ongoing basis.

To complement the campaign, we have also launched a media partnership with Time Out and Metro, two trusted and well-known London media outlets. We want to inspire Londoners to find new, interesting and exciting reasons to get out and explore, and use public transport to get there. Each month, we will highlight great things to do in London and how to use our public transport network to travel there. Our partners at Time Out and Metro will create bespoke content that will be distributed across a range of digital and printed channels, including social media, digital editorial features, email and print.

We are also promoting exclusive offers in conjunction with our partners around London, encouraging people to make the most of the city. In September and October, we continued to promote a deal with Merlin Entertainments offering our customers a 30 per cent discount at five key attractions when showing they travelled there using public transport. This offer runs until 23 December.

Reassurance

To support our recovery, we continue to reassure our customers that we are working hard to help everyone travel safely and with confidence by highlighting our ongoing cleaning measures, ventilation on modes and the availability of free hand sanitiser across the network. Alongside this, we are reminding customers that they can find quieter times to travel using our TfL Go app and that customers are welcome to continue to use face coverings if they help people travel with greater confidence.

Customer experience

4G on the Underground

All four UK mobile network operators, (EE, Virgin, Vodafone and O2) have signed up to the 4G mobile network on the Underground and are working with BAI communications to get their equipment installed onto the system at key locations across the city. The delivery of the underlying infrastructure is being delivered at pace, with more than 300 engineers working six nights a week installing the cabling and equipment needed to transmit the mobile signals.

The first locations along sections of the Northern and Central lines are due to go live in December. Further stations and tunnels will go live early in the new year and further significant additions will be added throughout next year.

Connect contract

The Connect contract delivers three key services to the Underground: operational support and maintenance of the Connect System, including the London Underground TETRA and Airwave radio; delivery of project works; and a series of upgrade projects which will collectively keep the TETRA radio element of the Connect System at supportable levels through to the mid-2030s. An option to initiate a three-year extension to the contract from November 2023 has been approved by the Finance Committee, delivering a further £9m in savings and allowing us to keep the services supported, deliver additional asset upgrades (for example the refresh of the transmission systems) and provide time to retender the services once the extension comes to an end in November 2026.

Contact Centre operations

Our Contact Centres continue to provide customers with on the go travel information, help and support where needed. Customers have benefited from significantly reduced queue times on calls and quicker response times to email correspondence when compared to recent years, due to a renewed focus on ways of working with our suppliers and stakeholders. Service levels have also been positive, despite the challenges of the seasonal increase in demand through the months of August and November due to an increase in applications for our Zip Oyster card concessions ahead of students returning to school.

During the months of October and November, around 6,500 contactless payment card enquiries were successfully processed through our new automated case handling mechanism. This new system enables our customers to submit an online form when they have failed to correctly tap in using their contactless card, and can resolve the request using the information provided by the customer. Once resolved, the customer's journey is recalculated at the correct rate, the difference returned to the payment card and an automated email is sent to the customer with the outcome. Since the system's launch in April, up to 60,000 such cases have been resolved, enabling our colleagues to focus on other areas of customer support. We also saw a record 2,000 cases logged on our StreetCare portal, which enables people to report problems on the road network and provides us with greater insight into where regular faults may occur.

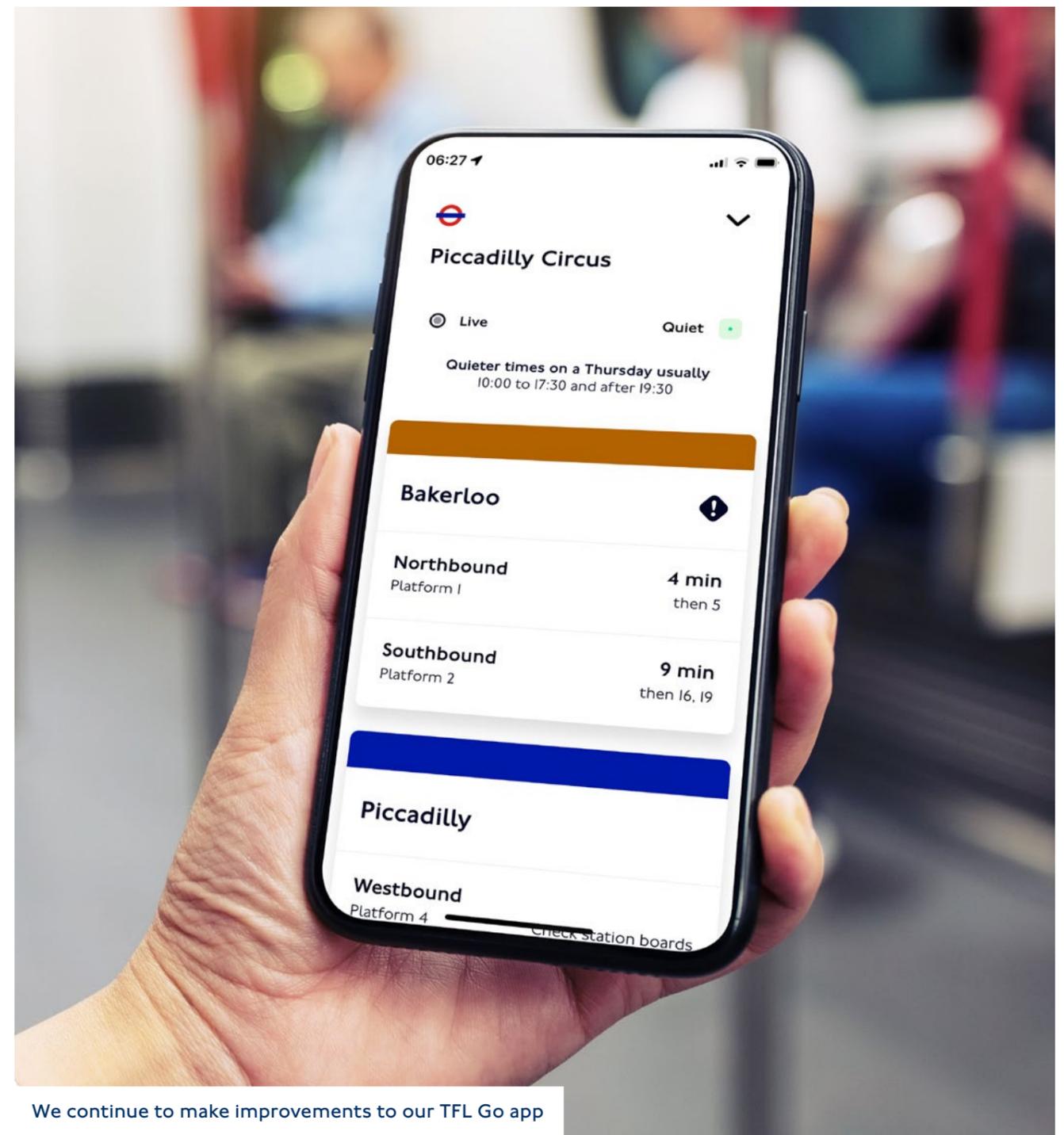
Our customer service agents will also be on hand to provide travel advice and support to those traveling around the capital during the festive period.

TfL Go app

The TfL Go app has now been downloaded 2.5 million times across iOS and Android devices and recently won a BIMA award, one of the longest-standing and most prestigious digital and tech awards in the UK. We will soon launch an enhanced live Tube map that shows the precise location of disruption and line closures. The next major release will include integrate payment and account information in early 2023, and customers will be able to top-up their Oyster card, purchase Travelcards and view their journey history. We continue to promote TfL Go through all our customer information products and a marketing campaign, and always encourage customers to download and use the app to check before they travel and to plan their journeys.

Photocard application improvements

In 2021, our customer service supplier experienced a number of issues resulting in customers having a poor experience with their applications for a new photocard product. The most significant issues were linked to the poor implementation of a new customer portal, which impacted customers' ability to self-serve, and difficulties caused by lack of resource following the pandemic which meant that we were unable to handle the seasonal increase in demand with the start of the new academic term, where call volumes can increase by more than 500 per cent.



We continue to make improvements to our TfL Go app

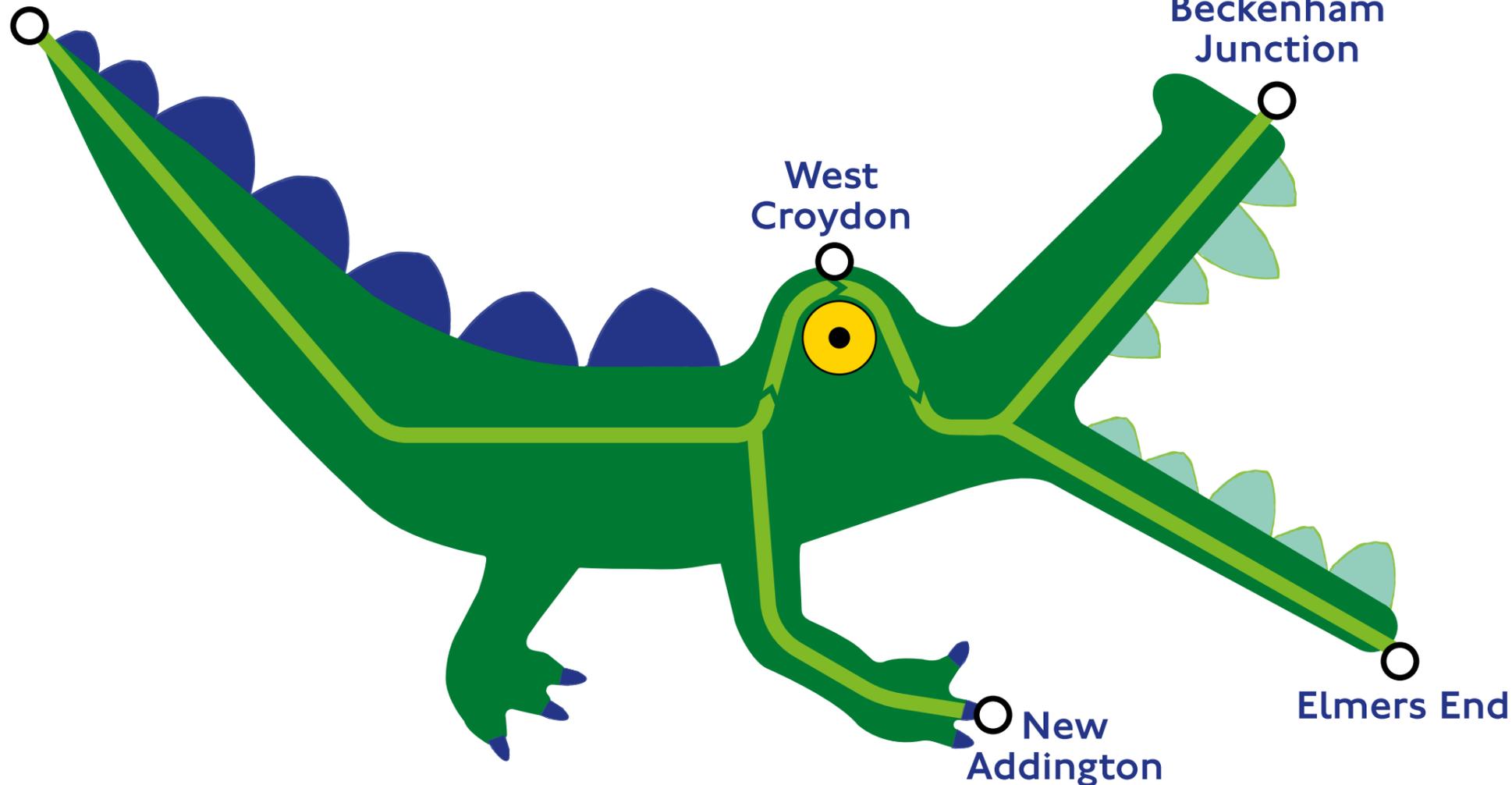
We worked with the supplier to improve resourcing to help address the significant decrease in call centre staff in 2021. This year, there has been a better customer experience and we have issued a total of 380,673 new photocards up to 29 October.

Competition winners recognised on our network

For National Poetry Day on 7 October, we worked with the Museum of London and BBC to display the winner of the museum's poetry competition. The winning poem, titled 'A slideshow of London', was written by 15-year-old Zaynab from Tower Hamlets. For the competition, students were asked to write poems inspired by their journeys on buses, and entries were judged by the poets Raymond Antrobus and Cecilia Knapp. The winning poem is displayed at bus stops in east and central London, along the route that inspired the author.

In October, London Trams announced the winner of its mascot competition. Children from across Croydon were invited to design a mascot based on what they love about trams. The competition received more than seventy entries, and the winner was a young artist called Mariah whose design 'Roger the Crocodile' was based on the shape of the tram map.

Wimbledon



We engage with young customers through school programmes

Our people

We engage with our people to provide support and improve our organisation



We support the fundraising work of the Royal British Legion

Poppy Day

We once again supported the Royal British Legion's annual Poppy Appeal which raises money to provide life-long support to the armed forces community.

As part of this work, customers using our services will be able to spot specially designed poppy roundels at 20 Tube, London Overground and bus stations across the network to mark this remembrance period. Memorable, large-scale vinyl stickers with poppy designs featured on all Underground, London Overground, DLR and tram vehicles, plus Elizabeth line trains for the first time. Flags with poppy designs were also flying at our piers and giant poppy designs were wrapped around selected London buses.

On London Poppy Day on 3 November, a special station announcement recorded by actor, singer and presenter Shane Richie was played across many London Underground and Overground services to encourage people to donate.

The same day, around 2,000 volunteers, including members of the armed forces from the Royal Navy, British Army and Royal Air Force, were out in force across our Underground network and the Elizabeth line, making it the biggest street collection of its kind in the UK. London Poppy Day offers the public the unique opportunity to interact with service personnel and donate to help the Royal British Legion continue its vital work. The charity's work includes providing physical and mental health

recovery and wellbeing services, financial and employment advice, and campaigning to improve the treatment of serving and ex-serving personnel. Many of our staff are veterans themselves, and whose service helped give them valuable skills which have enabled them to do their current jobs.

On 11 and 13 November, all London stations honoured the minute silence at 11:00 to honour the sacrifices of the armed forces community past and present. On Remembrance Sunday on 13 November, members of the London Transport Old Comrades Association participated in the National Service of Remembrance and the Royal British Legion's annual March past the Cenotaph.

Valuing our people

Our TfL Programme

The Our TfL Programme has been established to ensure that we are set up to deliver on our vision to be a strong, green heartbeat for London, while also supporting our values of being caring, open and adaptable.

The programme has a dual purpose: to enable the delivery of the Our TfL Operating Model and bring costs down on our journey towards financial sustainability. The programme is led by Fiona Brunskill, Chief People Officer, and has five core workstreams:

- Cross-TfL Operating Model – this is the fundamental way in which we operate as an organisation

- Customer and Strategy – setting direction and support, and delivering for our customers, colleagues and city
- Capital – supplying sustainable and efficient services for all our customers, working to build and drive whole-life asset outcomes
- Operations – to plan, operate and maintain a safe, integrated and sustainable transport network which delivers great value for London
- Corporate Services – providing expert advice and consistent support to our colleagues across the business while holding the organisation to account on safety, finance, compliance, people and legal matters

Viewpoint

Our annual employee survey, Viewpoint, ran from the 26 September until 21 October, giving all our colleagues the opportunity to tell us what it's like to work here and what they feel strongly about, giving us the insight into how we can make things better in the future.

The response rate this year was 57 per cent, with more than 15,000 colleagues giving us their views. This is higher than the response rate of 54 per cent recorded in 2021.

The next steps are to share the results with our employees, Trade Unions and the Board, with an informal meeting to be scheduled in early January, and a full update coming back to the Board in February next year.

Employer Supported Policing Award

On the 14 October, our colleagues took home the runner up award for their work on the Employer Supported Policing scheme at the Home Office's Lord Ferrers Awards 2022. Their work had been shortlisted from more than 150 entries.

The award ceremony was held at the prestigious Lancaster House in London, celebrating businesses supporting Employer Supported Policing and the vital role volunteers play in advocating policing and community safety across the UK.

In October 2021, we signed up to the scheme, enabling colleagues paid time off to apply to be trained and serve as a special constable or volunteer police officer, in the MPS, BTP or City of London Police.

This is just one of the ways in which we help support our colleagues and it is a great honour to be recognised for our participation in the scheme and receive an award for the incredible work our colleagues are doing, supporting our policing partners in keeping our streets and transport network safe.

Diversity and inclusion Count Me In

Count Me In is our main campaign to increase the number of colleagues declaring their protected characteristics and started in November. Good data enables us to deliver schemes that demonstrate to our colleagues and potential applicants that we are committed to equality and support a diverse workforce.

The importance of sharing this personal information and the protection of data we have put in place around doing so will be communicated from senior managers down to individual teams. There will be articles published on our Platform intranet pages, along with our On the move publication. Complementing this will be a poster campaign across our estate.

We are also building an app for operational colleagues to enter their details directly, without the need to go via their line manager or our HR services phonenumber. All operational colleagues will be sent a direct link enabling them to share their details, removing any possible barriers to them sharing their details with us while also explaining the importance of doing so.

Black History Month

Throughout October, our RACE Staff Network Group hosted a series of events to celebrate Black History Month, enabling people from across our organisation to recognise the achievements and contributions that Black people make to our country, today as well as in the past.

The wide range of events included lunch and learn sessions, guest speakers, music events, book clubs and more. Sessions also reflected on the past, including learning about the historical legacy of colonialism and slavery, along with a visit to the Windrush Generation national monument at Waterloo station which marks the 75th Anniversary of the arrival Windrush generation to the UK.

World Menopause Day

World Menopause Day is held every year on the 18 October, and was established by the International Menopause Society to raise awareness of the menopause and to provide options to improve health and wellbeing for women in midlife and beyond.

To celebrate this day, the Women's Staff Network Group hosted a series of events held on the digital Menopause Hub on Platform. The majority of events included a presentation on a specific aspect of the menopause, and the hub has become a space for colleagues to engage in conversations and share personal experiences and solutions of their own menopause journey.

The events were an open invitations to all our colleagues to participate or just observe and learn whether they were directly affected by the menopause or wanted to better support family, friends or colleagues.

Award for London Transport Museum

The London Transport Museum's Hidden London tours were recently named Best Hidden Gem in the World at Tiqets' Remarkable Venue Awards 2022. Congratulations to the team on this well-deserved win.



We recognise the work of colleagues from across the organisation

You Matter Awards 2022

On 16 November, we hosted our first-ever award ceremony covering the work of colleagues from across the organisation, the You Matter Awards at City Hall. The ceremony recognised and highlighted the contributions and achievements of our people in the past year. We invited everyone to submit nominations for specific categories aimed to recognise those who have steered us closer to achieving our Vision by following one of our roadmaps: Colleague, Customer, Finance, Green or our Foundation.

We wanted this year's awards to be peer driven, so we set up a working group with people from across the business, who were either specialists in specific topics or members of 'people groups' in their areas. They drafted the shortlist for each category, and different directors decided on the winners for categories aligned to their areas.

We received more than 300 nominations, so this year's competition is particularly strong which makes this year's awards even more special. I want to pass on my special congratulations to Paul Van Gelder, winner of the People's Choice Award.

Employer Recognition Scheme – Gold revalidation award

We have been successful in the revalidation of our Gold Employer Recognition Scheme award by the National Employer Recognition Board on behalf of the Ministry of Defence. This award will run for a further five years and is in recognition of our commitment to support colleagues involved in the Armed Forces.

This recognition is in part down to the work we do with our reservist and ex-forces special interest group, which offers CV writing and interview guidance to our ex-forces. This group also hosts an annual industry day event which is attended by partners in our supply chain, providing further support and guidance to our ex-forces members as they take the next step in their careers. This is in addition to the support we offer through the Mayor's Remembrance Service, attending the cenotaph on Remembrance Day and engagements with outside agencies such as Career Transition Partnership, The Poppy Factory, Veterans Adi and SSAFA.

AJ Architecture Awards 2022

On 23 November, we were awarded the Architects Journal Architecture Award for Infrastructure and Transport. This award recognises the fantastic work of our Northern Line Extension team alongside our partner Grimshaw Architects on the Northern Line Extension. Judges were particularly impressed by the spatial and material quality of the two new Underground stations at Battersea Power Station and Nine Elms, as beacons and anchoring points in still-evolving urban landscapes. The station entrance canopy at Battersea Power Station was singled out for special praise, while the head houses had a quiet, functional dignity that belied the complexity of their engineering.

European Risk Management Awards 2022

On 22 November, the TfL and MTR Elizabeth Line risk management team took home the Outstanding Contribution to Risk Management award for the fantastic work they have done on insuring the Crossrail project throughout the lifetime of its construction and ever-changing requirements. The Crossrail Elizabeth Line project on London's transport network was Europe's largest infrastructure project at the height of its construction. From end to end, the Elizabeth line stretches more than 100km, serving 41 stations. The team have set a new best-practice standard in risk management for complex underground works and willingly shared their knowledge for use on future major infrastructure projects.

Shared HR and Payroll service

As part of the GLA Group Collaboration initiative and in support of the future vision for our Business Services Function, from November we will be providing a shared HR and Payroll service to around 1,500 staff employed at the GLA and the Old Oak and Park Royal Development Corporation. This new service will run on our existing HR system landscape (SAP, Taleo and eZone) which has been developed to support several new requirements as well as extending the use of our well-established best practice HR processes.

2022 Highway Award winners

At the 2022 Highways Awards UK, our Dig-Once Approach, a joint entry with the GLA, won the Highway Partnership Award within the Road and Streetworks Sector.

The judges were overwhelmed by our unique strategic partnership in delivering economic efficiencies for the industry while critically reducing disruption for our customers across the capital.

Our Coordination, Assessment and Permitting Team make collaboration a critical path when assessing more than 40,000 works proposals on the Transport for London Road Network.

From executive support, to on site operations, we are proving that collaboration really holds the key to reducing disruption for our customers and residents, as well as better serving the economy and the environment.

We are the Highway Authority for only five per cent of London's road network but are taking a strategic approach with our GLA partners and, while our customers should not be concerned with who the Highway Authority is when travelling, our collaboration blueprint is now able to influence and drive a consistent approach to collaboration across 100 per cent of London's network.

Health Surveillance

Taking care of the health of our colleagues is a top priority for us. We remain committed to protecting our people from potential health risks and have controls in place to prevent harm. Earlier this year, we reviewed and updated our approach to health surveillance following a visit by the Health and Safety Executive to one of our depots. We put a new Health Surveillance Action Plan in place to ensure that all our



Taking care of the health of our colleagues remains a priority us

colleagues who work with certain chemicals or dusts and fumes have the right health checks so that we can be confident that we are protecting our colleagues' health. In June, the executive confirmed that it was satisfied with our new, more robust approach.

Since then, we have continued to roll-out health surveillance where required. Most recently, visits have included the Ealing Common and Upminster depots where respiratory surveillance has been conducted for those exposed to Chromium.

Other areas of the business are contacting our Occupational Health team more

frequently with potential exposures to hazardous substances, and we are working closely with them to decide what, if any, health surveillance is required.

Well@TfL

Our mobile health bus continues to provide the opportunity for employees to have wellbeing checks on site. Having recently been at Northumberland Park, there are plans to move to Liverpool Street before the new year. The bus is also available for periodic medical examinations which prevent the need for staff having to attend Buckingham Palace Road for their medical appointments, thereby saving the business valued time and money.

Finance

We are controlling our costs and generating growth in our journey towards financial sustainability

Financial performance 2023 Business Plan

This is our first Business Plan since 2019 and plots the way forward for us after two and a half years of exceptional challenges. The pressures of the pandemic and the financial crisis that it created put London and us under greater pressure than at any point in the past two decades.

The good news is that London is emerging from the pandemic and we now have funding arrangements in place with the Government and the GLA to give us certainty into 2024. This means that we can continue our vital work of keeping London moving and supporting new jobs, homes, opportunities, and economic growth right across the city and the UK.

We have worked hard to rebuild people's confidence in travel. Around 80 per cent of our customers are travelling regularly again, with some days exceeding pre-pandemic levels. However, we need to further grow our passenger numbers and revenue to help us achieve our primary goal of breaking-even on our operations by 2023/24, so that we will only require funding support for our investment programmes.

While good progress is being made with our savings plans, having delivered £400m of the £730m recurring savings target set in 2019, the pressures of managing inflation and the terms of the most recent funding agreement mean that further efficiencies are needed.

Therefore, in this Business Plan, the savings target is increasing to a total of £1bn recurring savings, meaning a further £600m per year needs to be delivered by 2025/26. This will be delivered through enhanced working practices, driving improvements where possible for colleagues to make our organisation a great place to work, and an approach to continuous savings, including efficiencies within our supply chain..

This combination of improving and diversifying income as well as a continuing improvement in our cost efficiency underpins our ability to plan effectively, deliver efficiently and offer certainty for our colleagues, customers and supply chain. It also means that we can continue to invest with confidence. This Business Plan ensures that we continue to protect our critical assets and restores a level of expenditure to improve our network, reduce reliance on cars and improve air quality.

We will achieve this by investing in safe and active travel, supporting environmental projects and delivering our committed investment – including new Piccadilly line trains, DLR rolling stock and more zero-emission buses – and further modernising the District, Hammersmith & City and Metropolitan lines. We will also further develop the Old Street area and station, and work towards the full integration of services across the Elizabeth line by May 2023.

Despite the progress and our positive plans for the future, this Business Plan has been developed at a time of great economic and political uncertainty. We do not underestimate the challenges that lie ahead with the volatility of inflation, interest rates, energy prices and the labour market. We continue to work closely with the Government to fulfil the strict conditions attached to the funding agreements, and there is further work to do to secure a longer-term capital funding settlement with the Government beyond March 2024.

We are therefore managing our finances to maintain cash reserves at a prudent level and are retaining an affordable level of debt to fund our investment. We are also grateful to the GLA for the facility of up to £500m of funding that we can call on if required, which provides additional certainty and confidence in the balanced budget position that supports this Business Plan.

All of this is part of our drive to deliver the Mayor's Transport Strategy, making London a better place with healthier, greener streets, a better public transport experience and a transport network that supports new homes and jobs. I also remain focused on continuing the work towards our Vision Zero plan and am committed to progressing our green agenda to ensure this remains central to our continued recovery.

Year-to-date financial performance

Our latest financial report covers the period to end of 15 October 2022. In the year to date, we remain on track to deliver our Budget that sets us on the path to financial sustainability and meet the following funding conditions:

- Total income is within 1 per cent of Budget: journeys continue to recover, with latest journeys at 82 per cent of pre-pandemic levels. Journeys and income are slightly lower than Budget, due to industrial action across the national rail network and within London Underground, and lower ticket sales
- Our core operating costs remain within 1 per cent of Budget: we have seen the risks identified in our Quarter 1 forecast – the impact of rising inflation and increasing Road User Charging bad debt – crystallise over recent periods. These pressures have been offset through lower pension deficit payments as well as other tailwinds that will support us in delivering the remaining savings that are required to close the funding gap for this year
- Capital enhancement is within 2 per cent of Budget: this is due to slippage on third-party funded projects, largely because of factors outside our control. We are forecasting to deliver very close to the capital envelope set by the funding settlement over the full year



We are trialling creative technologies in our advertising

- Capital renewals are eight per cent lower than Budget: with strong delivery of London Underground renewals, but have seen some slippage across a number of projects largely as a result of resource constraints as well as saving through efficiency. We are actively managing our renewals portfolio and are challenging ourselves to deliver the higher level of renewals of £635m set by the funding settlement

We are, however, facing several external headwinds and risks to achieving financial sustainability especially into next year, but we are working to mitigate these, including:

- Economic uncertainty: economic growth remains poor, with the UK economy in a recession from the latter half of 2022 and forecast to last just over a year according to the Office for Budget Responsibility. This may result in decreased passenger demand, traffic volumes and lower commercial revenues as UK unemployment is expected to rise to a peak of 4.9 per cent in the third quarter of 2024
- Inflationary pressures across our cost base and rising energy costs make it more expensive to provide our services. Our current estimate is that higher inflation since setting our Budget in March will drive at least £300m of extra cost into our operating expenditure for 2023/24. We are actively looking at what efficiencies we can make to maintain our level of service to our customers in light of this challenge

There is industrial action across several of our services. We are working closely with our concessionaires and continue to do all we can to ensure sufficient staff are available to provide the appropriate levels of service across all our transport modes, and to minimise the levels of industrial action experienced by our customers.

- Savings targets are stretching, with a target of £230m additional savings by the end of 2023/24 following the new Government funding agreement
- The funding settlement provides protection on the uncertainty of passenger demand until March 2024. It also provides some protection on inflation, but the level of this for 2023/24 is uncertain. We plan to mitigate the remaining risks through the active management of our remaining contingency and the GLA financing facility

Protecting our revenue

On 24 November, our Revenue Control Inspectors started using a new revenue inspection device to replace current handheld devices to check Oyster and contactless cards. The new devices are lighter than their predecessor, have better ergonomics and offer an improved screen display. Through technology developments since the last device was introduced in 2015, we have now moved on to an Android software platform in conjunction with a portable contactless payment terminal which means that the device is no longer bespoke, reducing unit costs by around 75 per cent.

Advertisement enhancements and immersive experiences

On 20 October, Netflix launched a domination of the Waterloo traveller, with accompanying sound to promote the launch of the film *Enola Holmes 2*. This immersive experience used the station public address system to really bring the advertising to life. This is the latest in a series of these sound trials across the network, with the sound providing advertisers with another creative option on our advertising estate. This premium offering also helps to raise additional revenue from our advertising assets.

On 24 October, Bond Street station on the Elizabeth line opened and with it so did the latest enhancements to our rail advertising estate. More Ultra HD digital advertising was made available including two large video walls as well as the longest digital escalator ribbon on our network. To celebrate these new elements, two advertising launch partners were secured to take a share of the advertising across all assets at Bond Street for the first two weeks following the station's opening, with the brands Sephora and Michael Kors taking this unique opportunity. These digital resources will be another useful addition in the recovery and enhancement of revenue from our advertising estate.

New homes and TTL Property

We remain on track to start work on around 2,500 new homes on our land this financial year, having started on more than 1,700 units to date. Our dedicated property company, TTL Properties Limited (TTLP) continues to progress housing schemes with high levels of affordable housing and recent milestones listed below.

Hounslow West

We have submitted planning application proposals for the redevelopment of the Hounslow West station car park, with the scheme set to deliver 348 affordable homes. The designs will also deliver a new customer passageway to platforms, while ensuring that the station's Grade II-listed ticket hall is preserved and kept at the centre of the proposals.

Provision has also been made to enable step-free access improvements to be made to the station in the future. We also undertook another round of public engagement, including two events in the station. The scheme will be determined at the December Planning Committee.

Barkingside

A planning application has been submitted for 98 affordable homes at Barkingside station in the London Borough of Redbridge. As well as the delivery of much-needed affordable homes to the borough, the proposals will deliver a range of improvements for the local community and enhance the public space outside of Barkingside Tube station.



Our property work includes the building of affordable homes

About us

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' and helping to create a safer, 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 by walking, cycling or using public transport by 2041. To make this a reality, we prioritise sustainability, health and the quality of people's experience in everything we do.

We run most of London's public transport services, including the London Underground, London Buses, the DLR, London Overground, Elizabeth line, London Trams, London River Services, London Dial-a-Ride, Victoria Coach Station, Santander Cycles and the IFS Cloud Cable Car. The experience, reliability and accessibility of these services is fundamental to Londoners' quality of life.

We manage the city's red route strategic roads and, through collaboration with the London boroughs, we are helping to 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, improve air quality, revitalise town centres, boost businesses and connect communities. As part of this, our expanded Ultra Low Emission Zone and fleets of increasingly environmentally friendly and zero-emission buses are helping to tackle London's toxic air.

During the pandemic, we took a huge range of measures to ensure people were safe while travelling. This included extensive cleaning regimes across the public transport network and working with London's boroughs to introduce the Streetspace for London programme, which provided wider pavements and cycle lanes for people to walk and cycle safely and maintain social distancing. London's recovery is vital to the UK's recovery as life returns to normal. We want to ensure London avoids a car-led recovery and we continue to reassure people the capital and our transport network is safe and ready for them.

We have constructed many of London's most significant infrastructure projects in recent years, using transport to unlock much needed economic growth. This includes major projects like the extension of the Northern line to Battersea Power Station and Nine Elms in south London, as well as our work at Barking Riverside and the Bank station upgrade.

Working with the Government, we opened the Elizabeth line in time for Queen Elizabeth II's Jubilee. This transformational new railway adds 10 per cent to central London's rail capacity and supports the delivery of high-density, mixed-use developments, which are planned around active and sustainable travel to ensure 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 using information, 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 who 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. By working together, we can create a better city as London's recovery from the pandemic continues.

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Board

Date: 7 December 2022

Item: Draft TfL 2023 Business Plan

This paper will be considered in public.

As provided for under section 100B(4)(b) of the Local Government Act 1972, the Chair is of the opinion that this item should be considered as a late item. The reason for urgency is that Members need to consider the Budget submission and the Capital Strategy and not all information was available at the time the Board papers were published.

1 Summary

- 1.1 This paper considers TfL's 2023 Business Plan, which sets out TfL's plans for the four years from 2022/23 to 2025/26. This is the first detailed medium-term plan we have published since 2019 and underpins TfL's draft Budget submission to the GLA. This plan is built on the funding arrangements in place with the Government and the Greater London Authority. It ensures we support London's recovery from the pandemic and gives us a clear path to financial sustainability.
- 1.2 The Business Plan document is appended to this paper (Appendix 2) along with a summary presentation (Appendix 1, which is to follow).
- 1.3 The Business Plan includes an updated forecast for 2022/23 and a forward look from 2023/24 to 2025/26. Given the material difference between the funding assumptions in the original Budget for 2022/23 and the actual Government funding settlement agreed on 30 August, this forecast will replace the Budget and will serve as a new reporting baseline for the remainder of the 2022/23 financial year.
- 1.4 As a result of updating the reporting baseline for the remainder of this financial year, a small number of updates to the TfL Scorecard are also required.
- 1.5 In addition to the Business Plan, the GLA Budget submission includes a Capital Strategy, setting out an aspirational vision of TfL's future investment for 20 years, and the London Climate Budget, setting out TfL's operational carbon emissions to 2030. Both submissions are appended to this paper. The full document outlining TfL's draft submission to the GLA has been published on our website at <https://tfl.gov.uk/corporate/publications-and-reports/the-mayor-s-budget>

2 Recommendations

2.1 The Board is asked to note the paper and:

- (a) approve the TfL 2023 Business Plan**
- (b) authorise the Chief Finance Officer to make any minor presentational amendments to the TfL 2023 Business Plan, before it is published as final version on the TfL website**
- (c) approve the 2022/23 forecast included in the TfL Business Plan as the Revised Budget for 2022/23 and being our reporting baseline for the remainder of this year**
- (d) approve the changes to the TfL Scorecard as a result of changing the reporting baseline from the original Budget to this submission**
- (e) note the Capital Strategy and London Climate Budget submissions that form part of the GLA Budget submission.**

3 TfL 2023 Business Plan

- 3.1** The 2023 Business Plan is the first detailed medium-term plan we have published since 2019. The recent years of revenue and funding uncertainty due to the pandemic have meant that we were unable to set an integrated medium-term plan. Having secured a funding settlement with Government from 30 August 2022 to 31 March 2024 and having put in place financing arrangements with the Greater London Authority, we have a more secure future in the short term, a clear path to achieve financial sustainability by the end of 2023/24 and the ability to progress towards outcomes that make our city greener, safer and more successful.
- 3.2** This Business Plan gives us the means to continue to invest in improving public transport, protecting our critical assets and restoring investment to improve London's streets and air quality. Among many other significant improvements, this plan will see us push forward with replacing the fleets on the Piccadilly line and the DLR, reduce the carbon emissions from our buildings, invest in green infrastructure and implement Phase Two of TfL's Direct Vision Standard to make roads safer.
- 3.3** This Business Plan demonstrates our plans to build on and find new sources of income to improve our resilience for the future and to help us achieve our initial financial goal, which is to break-even on our operations by 2023/24. This will mean we only require Government funding support for our investment programme. The Business Plan builds on this break-even position to target a small, but growing operating surplus from 2024/25 onwards to fund investment. This will require making continuous improvement in our cost efficiency and progressing our savings plans.

- 3.4 The Business Plan includes an updated forecast for the 2022/23 financial year, as an update to the Budget approved by the Board on 23 March 2022. This update reflects the changes to our Budget required by the funding agreement with government that the Board approved on 30 August 2022. We intend to use this updated forecast as our reporting baseline for the rest of this financial year.
- 3.5 Several measures on the 2022/23 TfL Scorecard are linked to the Budget and therefore require Board approval for change control. This covers the financial metrics which are directly aligned to the Budget. The majority of other targets across the scorecard will not change. We also propose to update the passenger journeys target to align to the latest forecast (and therefore the income forecast in the Revised Budget).
- 3.6 The Business Plan forms the core of our submission into the GLA Budget process. The GLA Budget submission also includes a Capital Strategy, which looks further into the future to set out an aspirational investment programme aligned to the ambitions of the Mayor's Transport Strategy by 2041. This is summarised in the Business Plan presentation, with the full submission included in Appendix 3.
- 3.7 The London Climate Budget is a new element of the GLA Budget process this year and sets out our forecast operational carbon emissions to 2030. This is also summarised in the Business Plan presentation, with the full submission included in Appendix 4.

4 Next Steps

- 4.1 We continue to monitor the external headwinds and risks so we can mitigate them and will build any material changes into the 2023/24 Budget which is due to be published in March 2023.
- 4.2 We continue to provide periodic financial reporting to DfT and its advisers and update them on our progress on the requirements of the funding settlement.
- 4.3 In addition to delivering the requirements of the current funding settlement, we will also work with Government to secure a longer-term agreement beyond the end of the current settlement which expires in March 2024.

List of appendices to this report:

1. TfL 2023 Business Plan – presentation – to follow
2. TfL 2023 Business Plan – document
3. Capital Strategy submission
4. London Climate Budget submission

List of Background Papers:

None

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Appendix 2

2023 Business Plan

2022/23 to 2025/26
DRAFT

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MAYOR OF LONDON



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This Business Plan includes an updated forecast for 2022/23 and a forward look from 2023/24 to 2025/26. The updated forecast for 2022/23 aligns this Business Plan with our funding agreement with the Government, and will be used as our reporting baseline for the rest of this financial year.



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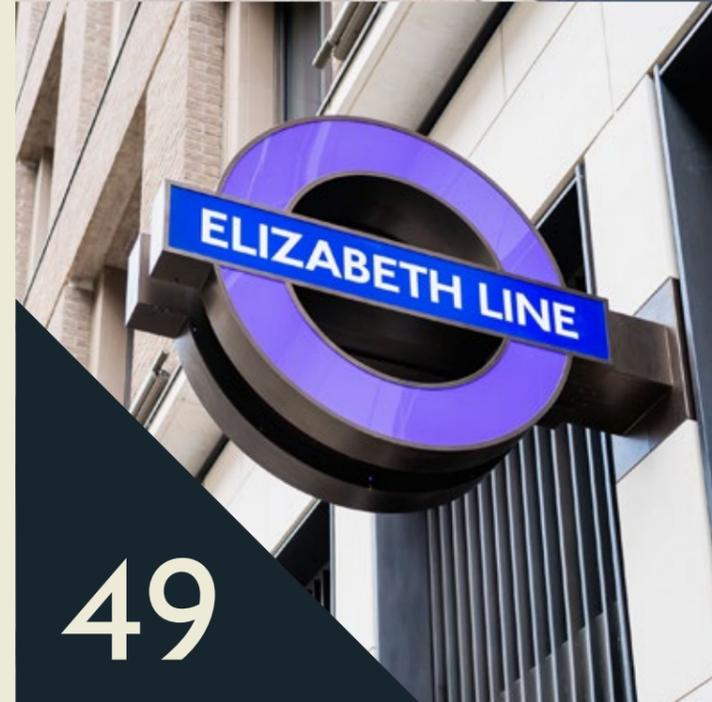
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Mayor's foreword

This Business Plan invests in active travel and buses, tackles air pollution, and helps to create a safer, greener, fairer city

London's transport shapes the lives of millions. It opens doors to life-changing opportunities for young people. It enables keyworkers to do their jobs. It enriches lives culturally and socially.

The past two years were the most gruelling in Transport for London's (TfL) history. Difficult decisions were taken during the pandemic but as passenger numbers increase, we are ensuring TfL is in the best possible position to support our city's recovery.

Finances will remain tight as the country struggles amid strong economic headwinds. Millions of Londoners are worrying about how they will afford to put food on the table and heat their homes. At all times, I am mindful of balancing TfL's financial difficulties with the cost of living crisis.

Following tough negotiations with the Government, we agreed a settlement until March 2024. However, the agreement was far from ideal and left a significant funding gap. That is why I established up to £500m funding that TfL can call on, if needed, to balance its budget. Building on this hard-fought deal, and through Greater London Authority support, this Business Plan unlocks new investment that will make a vital contribution to London's future. I am also pleased that we can now provide funding to save key bus services in central London.

We are supporting growth following the completion of the Elizabeth line. TfL will invest £8.1bn in London's road and rail network, including new rolling stock for Piccadilly and DLR lines.

The air we breathe is a matter of life and death so tackling air pollution in London is essential. The expansion of our world-leading Ultra Low Emission Zone London-wide, supported by a £110m scrappage scheme, will further reduce air pollution, carbon emissions and congestion.

At the heart of my Transport Strategy is Vision Zero, my plan to eliminate deaths and serious injuries on London's transport network by 2041. To improve safety for all road users we have lowered speed limits and increased enforcement. This plan contains funding for Direct Vision Standard Phase Two, to raise standards from 2024. These safety improvements will make walking and cycling in London more attractive.

Since 2016, we have added more than 250km to London's cycle network and now have more than 500 school streets. I am delighted that funding for safe and active travel schemes, including borough-led programmes, will be an average of £150m a year until 2026. This funding will expand our cycle network and increase the number of safer junctions, school streets and cycle parking facilities.

Extreme summer temperatures sparked fires that destroyed homes and crippled infrastructure, giving a horrifying glimpse of what awaits if we fail to act now. To tackle the climate emergency, I have set the ambition for London to reach net zero by 2030. TfL's investment is supporting Londoners to reduce car use and helping our city to cut carbon emissions. TfL will also continue to show climate leadership through decarbonising its buildings and helping prepare London for the impacts of climate change. This plan underlines my commitment that TfL buses will be zero emission by 2034 and maintains the possibility of delivering this as early as 2030 with the right support from Government.

I am under no illusion of the scale of the challenges ahead of us, but I remain optimistic about our ability to meet them. This Business Plan will support real progress towards our goal of a better London for everyone – a city that is safer, greener, fairer and more prosperous for all communities.

SIGNATURE

Sadiq Khan
Mayor of London



Commissioner's foreword

We have continued to deliver for London, despite the challenges, and there is now a new optimism for the future

This Business Plan plots the way forward for us after two and a half years of exceptional challenges. It shows how we will work to achieve our vision of being the green heartbeat of London, and how we will continue on the path to financial sustainability while delivering real and vital improvements for London.

The pressures of the pandemic and the financial crisis that it created put London and TfL under greater pressure than at any point in the past two decades. The good news is that London is emerging from the pandemic, and we now have funding arrangements in place with the Government and the Greater London Authority to give us certainty into 2024. This means that we can look to the future, focused again on how we can support our city and make it even better, greener, safer and more successful.

Since taking up the Commissioner role from my predecessor Andy Byford, I have set out four priorities that will guide us towards realising our vision. Firstly, we must win our customers back. We have worked hard to rebuild confidence in travel, and around 80 per cent of our customers are now travelling regularly again with some days exceeding pre-pandemic levels. But we need to further grow our passenger numbers and revenue. This means making our services even more attractive – ensuring they are safe and reliable, that trains, buses and stations are welcoming, and that we are doing everything possible to improve accessibility.

At the same time we will focus on our staff – working to energise our colleagues around our vision, making this a simpler and even more effective organisation, a more diverse and inclusive organisation, and one that shows its staff every day that they are valued and celebrated.

These things will enable us to rebuild our finances, and this plan shows us breaking even on our operating account in 2023/4. Like every other major transport authority around the world, we will need ongoing Government support for capital investment, and we are already discussing our shared priorities with the Government. We are making the case that, beyond 2024, we should be working together to support jobs, homes, carbon reduction and economic growth through capital investment in transport. For example, we need to ensure that the factory in Goole in Yorkshire, which will be building the new Piccadilly line trains, can continue operation, building the new trains to replace the ageing fleets on the Bakerloo and Central lines.

It is only through steady investment that we will continue to grow our passenger numbers, and it is only through drawing people to public transport and out of their cars that we can achieve the fourth – and perhaps most important – priority of protecting and improving our environment and helping to tackle the climate crisis.

This plan gives us the means to continue to invest in improving public transport –

pushing forward with replacing the fleets on the Piccadilly line and the DLR among other significant improvements. It keeps open the pathway to a fully zero-emission bus fleet by 2030, provides funding for a programme of decarbonisation of our buildings and new investment in green infrastructure and biodiversity. It includes substantial funding of £150m a year for safe and active travel and, working with our borough partners, we will introduce more 20mph zones to boost road safety and new significant improvements to the bus network, particularly in outer London.

We have shown what transport investment can do. The truly transformational Elizabeth line has added 10 per cent to central London's rail capacity and is already proving hugely popular, with nearly 70 million journeys made on the railway by December 2022. Along the line, new homes and workplaces continue to spring up. The Northern Line Extension to Battersea Power Station and the London Overground extension to Barking Riverside similarly support new connections and huge new opportunities. Soon we will complete our upgrade of Bank station, vastly improving journeys and the customer experience through the heart of the city.

We must continue this work so that our capital city, and our country, can thrive. And we must continue this work –

so that we can tackle climate change, cut pollution and make our city a better place for everyone.

SIGNATURE

Andy Lord
Transport Commissioner



Our customers

London’s transport system is key to our recovery. We are delighted to see Londoners and visitors returning to the network in ever-greater numbers

Around 80 per cent of the customers that we served before the pandemic are now travelling on our network again. We continue our work to welcome them back to the network, providing assurance that it is safe, accessible, clean and well-managed.

Despite the pandemic, we continue to add to London’s transport network. The Northern Line Extension delivered two new stations in September 2021, Nine Elms and Battersea Power Station, and in its first year of opening, the extension has seen more than five million journeys made. Meanwhile, we have nearly completed the

upgrade of Bank station. These exciting developments were dwarfed by the Elizabeth line when it opened on 24 May 2022, a major project that has added 10 per cent to central London’s rail capacity and has created new journey options for people from London and the South East.

At the same time, active travel plays a vital role in the city’s recovery – and in its future. Within this Business Plan, we will continue to invest £150m per year in our Healthy Streets programme, working with boroughs to enable more people to walk, cycle and use the bus, as part of our aim for 80 per

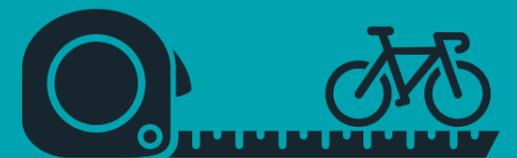
cent of trips in London to be by sustainable modes. We are creating an environment where cycling and walking are safe and pleasant transport options for everyone.

Active travel is also a key part of our efforts to tackle London’s toxic air. In September 2021, the Mayor announced that all our new buses will be zero-emission and accelerated our target of a 100 per cent zero-emission fleet from 2037 to 2034. This could be sooner with the right Government funding and this plan keeps the pathway open for 2030. In October 2021, we expanded the ULEZ out to the North and South Circular roads and on 29 August 2023, the ULEZ will expand London-wide. We are also investigating a distance-based scheme for the second half of the decade. We also remain committed to Vision Zero, the Mayor’s plan to eliminate deaths and serious injuries from our roads by 2041.

All this costs money. Following a number of short-term funding support packages, we secured a vital longer-term financial agreement with the Government on 30 August 2022, which means we can get on with the business of supporting London and its visitors. However, a genuine long-term capital funding settlement is needed if we are to tackle rising traffic levels and pollution, and reach the Mayor’s 2030 net-zero carbon goals. This will enable us to plan for a brighter future for our great city.

We are creating an environment where cycling and walking are safe and pleasant transport options for everyone

10%
additional rail capacity in London from the Elizabeth line



123.8km
new or upgraded Cycleways since 2020, in partnership with the boroughs



2034
is the latest date that we will have a zero-emission bus fleet

London's strong green heartbeat

Our Sustainability Report and Corporate Environment Plan set out our ambitions to support London's green and inclusive recovery

We have adopted a new way of thinking about our city as a network of green neighbourhoods and local businesses, all connected by environmentally sustainable ways to get around. With the right capital investment, we can accelerate the Mayor's and our ambitious plans from 2041 to become a net zero-carbon city by 2030.

Extreme weather events, including heatwaves, flooding and severe storms, show that climate change is already impacting London. Within this plan, we have allocated up to £2m additional funding per year to improve our understanding of the impacts of climate change and to develop and deliver plans to adapt to it. This is in addition to the £4m Green and Healthy Streets Fund provided by the Mayor to deliver sustainable drainage on both our roads and the borough.

Decarbonising our operations

As well as switching our bus fleet to zero-emission, decarbonising our buildings is key to achieving our ambition of net-zero operations by 2030. We have been investigating our buildings' carbon-emissions baseline, identifying key challenges and developing a strategy to reduce our carbon footprint.

We estimate that with an £108m investment, we could reduce our carbon emissions by 34 per cent and energy costs by 21 per cent, with a payback period of just nine years, and we have allocated £39m in this Business Plan over the next four years to begin delivering this. We will also seek

to make use of the Mayor's Green Bond to help further accelerate the decarbonisation of our estate.

We have secured grant funding of around £80,000 to develop heat decarbonisation plans at eight priority sites. We plan to source 100 per cent of our electricity from renewable sources by 2030, using power purchase agreements that will drive construction of new wind or solar farms.

Building capacity and capability

We already have sustainability at the core of everything we do and we want to ensure we become known as one of the best organisations to work for, and with, to deliver positive change. Our accredited TfL Carbon Literacy Course gives our colleagues a grounding in the climate emergency and climate science, an awareness of London's ambition and the Mayor's Transport Strategy actions, and focuses on what colleagues can do to reduce carbon through their work. We will expand the training programme in 2023/24, including a focus on senior managers and roles with high influence over emissions.

In September 2023, we will have the first intake of our new Sustainability Graduate and Apprenticeship scheme to help develop a strong pipeline of new talent.

Green infrastructure and biodiversity

We want to protect, connect and enhance our green infrastructure and the habitats

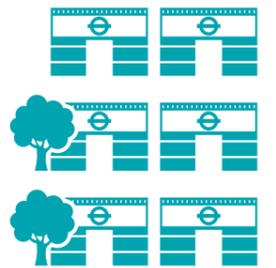
on our estate to deliver a net gain in biodiversity. We have developed our first organisation-wide natural capital account and it indicates that nature across our network provides at least £328m of benefit to London and the wider society in present value terms. This will support the design and investment decisions to maximise the benefits from our green assets.

We have changed the way we manage our roadside verges to encourage biodiversity, mowing less often, where it is safe and practical to do so, to promote growth of wild flowers. More than 100,000 square metres of verge is managed in this way, with more planned. We are exceeding the Mayor's Transport Strategy commitment of increasing the number of trees on our road network by one per cent each year.

Glyphosates are a commonly used weed killer, but can cause harm to humans and nature. We intend to eliminate our use of them as soon we can, where operationally and financially possible, and no later than 2024. We will work with the market to find suitable alternatives where they do not currently exist for our operations.

We continue to work with partners to deliver schemes that utilise waste heat from the Underground and connect new local solar farms directly to our energy network. We have set aside £600,000 to support and accelerate this development work.

2,000



acres of our 6,000-acre estate is covered in green infrastructure, with one fifth of our estate covered in tree canopies

1.5



terawatt hours of electricity that we use each year, making us London's biggest consumer, will be fully powered by renewables by 2030

100%

of the cars and vans in our fleets will switch to zero emission by 2030



Our colleagues

We have a fantastic opportunity to become the strong, green heartbeat for London. Our people are the key to making that vision a reality

We are here to keep London moving forward safely, sustainably and inclusively, supporting London's recovery from the pandemic. We need an operating model that is ready for the challenges we face today and those we will face in the future.

40%

of our Apprenticeship starts in 2022 were women, doubling from 20% in 2018



Our vision

Our vision is to be a strong, green heartbeat for London. It helps keep us focused on the vital role we have to play in delivering a sustainable, green future for our city. Thousands of our colleagues were involved in shaping our Vision and Values. We asked where they want to see us go and what we need to do to get there, ensuring we heard from different voices across the organisation that represent the great diversity of the city we serve. The actions, projects and initiatives that we will deliver to achieve our vision are organised under the themes of Colleagues, Customers, Finance and Green, and we have ambitious, time-bound targets to measure our progress.

We are a people-led organisation, with a community of 28,000 colleagues – together with our many thousand partner organisations including contractors, trade unions and third parties – at the heart of our success. All our colleagues contribute to our purpose to move London forward safely, inclusively, and sustainably. A healthy heartbeat comes from our people feeling supported to be their best at work. We want to ensure their day-to-day experience of working here is a positive one and that we have an employment offering that enables people to grow, while achieving a good work-life balance. That means building a workplace where everyone feels safe, valued and able to improve and develop, whatever their role and wherever they are in their careers.

We are working to create a more equal and inclusive organisation and city, but we recognise that we still have more to do to ensure London's streets and public transport are equitable and accessible for all.

A diverse team

Diversity and inclusion are at the heart of how we operate. We actively engage with all of London's communities and work to ensure that the diverse voices of our stakeholders – including disabled Londoners, older Londoners and young Londoners – are at the heart of our decision making. The Inclusive Transport Forum, TfL Youth Panel and Independent Disability Advisory Group all help us listen to, and act upon, the concerns of our customers, and our diverse Employee Network Groups celebrate both our differences and what unites us.

Our award-winning apprenticeship programme supports people of all ages, helping them to learn new skills while in employment. In September 2022, we created another 143 apprenticeship roles with a further 25 to start in January 2023. The number of Black, Asian and ethnic minority people hired on our graduate schemes has increased from 27 per cent in 2018 to 57 per cent in 2022.

Our objectives will help us improve London's transport network for all and drive forward our vision for a more inclusive, diverse, equal organisation for our colleagues. We also run the Stuart Ross Internship programme, which is designed to help more people from Black, Asian and minority ethnic backgrounds to work in the public relations, public affairs and marketing sectors.





Our leadership team

As with the whole of the country, our staff have navigated and come through the uncertainty of a global pandemic. Our workforce has also been adapting to changes in our leadership team. We are thankful to our former Transport Commissioner Andy Byford for steering us through our funding negotiations with the Government, ensuring we were able to open the Elizabeth line and for championing our new Vision and Values organisational objectives. With Interim Transport Commissioner Andy Lord now taking up the helm, our organisation is in good shape to continue supporting London's economic recovery.

The Commissioner is supported by our Chief Finance Officer, Rachel McLean with Patrick Doig resuming his role as Group Finance Director and the statutory Chief Finance Office. Glynn Barton is interim Chief Operating Officer and Stuart Harvey is Chief Capital Officer. Fiona Brunskill is our interim Chief People Officer with Tricia Wright becoming the Chief Officer for Pensions Review. Our Chief Safety, Health and Environment Officer is Lilli Matson, Alex Williams is our Chief Customer and Strategy Officer, Howard Carter is our General Counsel and Matt Brown is our Director of Communications and Corporate Affairs.

Attracting and retaining colleagues

We cannot deliver for London and Londoners without attracting and retaining the talent we need to deliver our Business Plan. This challenge has been heightened by the pandemic, financial constraints and the fact we are competing for talent in the employment market.

Our work will focus on ensuring we have the skills needed to deliver for London now, and in the future. Strategic workforce planning will help us to map out what is required by aligning our resourcing and business strategies. This includes aligning our graduate and apprentice programmes to meet future skills needs.

Our approach to reward will support the attraction and retention of key skills and consider how we adopt a more segmented approach to reward, focusing on rewarding talent with skills critical to our future success and structuring our pay and reward offer accordingly.

We are developing our performance review frameworks to be employee led. Matching the aspirations of our people with the future skills and capability we will need is how we provide career paths and retain key talent.



Our finances

Our Chief Finance Officer sets out our plans for how we are securing our financial future

From the day-to-day service provided by our colleagues to the delivery of major new projects, we are focused on rebuilding our passenger income and reducing our reliance on central Government funding for our operations. The improvement in passenger demand, which increased from around 25 per cent of pre-pandemic levels at the start of 2021/22 to around 80 per cent by the end of October 2022, is the financial foundation for this Business Plan.

We also need to build on existing, and find new sources of, income to improve our resilience for the future and to help us achieve our primary goal, which is to break-even on our operations by 2023/24, so that we will only require funding support for our investment programme.

While we are making good progress with our savings plans, having delivered £400m of the £730m recurring savings target set in 2019, the pressures of managing inflation and the requirements of the most recent funding agreement mean that further efficiencies are needed. Therefore, the savings target in this Business Plan is increasing to £1bn recurring savings, meaning a further £600m per year needs to be delivered by 2025/26. This will be delivered by improving working practices, driving improvements for colleagues to make TfL a great place to work, and an approach to continuous savings, including supply chain efficiencies, targeting around two per cent savings per year after inflation.

This combination of improving and diversifying income and continuous improvement in our cost efficiency underpins our ability to plan effectively, deliver efficiently, and offer certainty for our colleagues, customers, and our supply chain. It also means that we can continue to invest with confidence. This Business Plan ensures that we continue to protect our critical assets and restores a level of expenditure to improve our network, reduce reliance on cars and improve air quality. We will achieve that by investing in safe and active travel, supporting environmental projects, and delivering our committed investment – including new Piccadilly line trains, DLR rolling stock, and more zero-emission buses, and further modernising the District, Hammersmith & City and Metropolitan lines. We will also further develop the Old Street area and station, and work towards the full integration of services across the Elizabeth line by May 2023.

Last year we set up our commercial property company, TTL Properties Limited, to achieve the commitment in the Mayor's Transport Strategy to deliver 20,000 new homes, of which 50 per cent will be affordable, over the next 10 years, and generate a dividend that can be invested back into the transport network

Despite the progress and our positive plans for the future, this Business Plan has been developed at a time of great economic

and political uncertainty. We do not underestimate the challenges ahead with the volatility on inflation, interest rates, energy prices and the labour market. We continue to work closely with Government to fulfil the strict conditions attached to the funding agreements, and there is further work to do to secure a longer-term capital funding settlement with Government beyond March 2024.

We are therefore managing our finances to maintain cash reserves at a prudent level and are maintaining an affordable level of debt to fund our investment. We are also grateful to the Greater London Authority for the facility of up to £500m that we can call on, which provides additional certainty and confidence in the balanced budget position that supports this Business Plan.

We are moving positively towards our goal of operational financial sustainability, and we are committed to a sustainable financial future for our customers, colleagues, and partners.

SIGNATURE

Rachel McLean
Chief Finance Officer



Key reporting themes

Our work is underpinned by the Mayoral priorities to ensure everything we do is safe, secure and inclusive

As a publicly funded organisation, it is important that we are transparent about our finances, our investment priorities and the work we are planning to do to help shape our city.

Safety, sustainability and our environmental impact are a key thread throughout everything we do. In 2021, we launched our Sustainability Report and our Corporate Environment Plan, which outline our work to ensure we are a sustainable, safe and inclusive organisation.

Our projects and priorities are shaped by the ambitions of the Mayor’s Transport Strategy, which acknowledges the key role transport plays in shaping London and driving its global competitiveness. It also emphasises the way that effective and well-planned transport projects and improvements can play a vital part in improving the health, opportunities and quality of life of those who live and work in our city.

The central aim of the Mayor’s Transport Strategy is to create a place that is not only home to more people but is a better space for them to live, work and visit. This means a safer, healthier, cleaner, greener, more inclusive and better-connected city. This was particularly highlighted during

the pandemic, which underlined the importance of continuing to make progress on all elements of the strategy.

Key themes and outcomes

All our work, from our daily running to our investment programmes, follows the key themes as set out in the Mayor’s Transport Strategy. These are Healthy Streets and healthy people, a good public transport experience and new homes and jobs.

These key themes are fundamental in our investment decisions and we use them to outline how we will improve transport and deliver the efficient and sustainable services that London needs. There are a number of outcomes that we are working towards, including improving the facilities for our colleagues to bring them up to the standard they deserve. We are also working to reduce our carbon footprint, which includes using Power Purchasing Agreements to secure fully renewable energy supply for our direct operations, including London Underground.



Healthy Streets and healthy people

We aim to improve the experience of being in the places where people live, work, spend time and travel. We will reduce traffic dominance and encourage people to walk, cycle and use public transport.

 **Safe, Active, Efficient and Green**

A good public transport experience

We will ensure public transport is an increasingly attractive alternative to the car, through whole-journey planning to help integrate public transport in our schemes and projects.

 **Accessible, Quality and Connected**

New homes and jobs

Transport is vital for supporting the new homes and jobs London needs. This includes creating communities where amenities are within walking and cycling distance.

 **Sustainable and Unlocking**

Progress towards our goals

In this Business Plan, we have prioritised investment where we most urgently need to make progress against the outcomes of the Mayor’s Transport Strategy.

To support medium-term planning, we have translated the 2041 dates to where we need to be by 2030 to be on trajectory to deliver the strategy.

The annual update on the Mayor’s Transport Strategy will be presented to the Board in spring 2023 and will show updated forecasts for how far our Business Plan will progress us towards these 2030 ambitions.

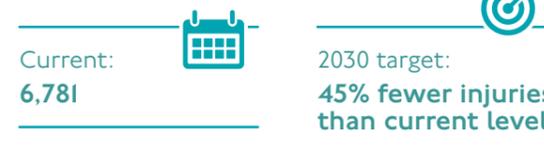
It should be noted that the pandemic affected our progress, between 2020 and 2022.

Safe

Percentage of people killed or seriously injured on London’s roads



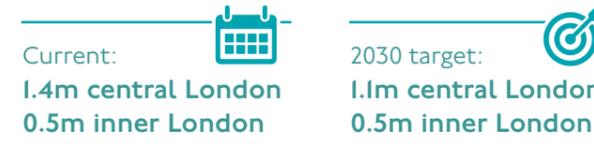
Number of people injured on our services



Our target is to eliminate all deaths and serious injuries from London’s transport networks. We are targeting investment to make London’s roads safer by lowering speed limits, strengthening the Direct Vision Standard and making junctions safer, as well as investing in our Bus Safety Programme, which includes speed limiting technology and autonomous braking systems.

Efficient

Number of car trips crossing cordons in central, inner and outer London



This is measured by the number of car trips crossing cordons in central, inner and outer London. We continue to invest to prevent a car-led recovery, focusing on walking, cycling and bus priority projects.

Mode share

Percentage of trips by sustainable mode share (public transport, walking or cycling)



We expect sustainable mode share to increase as more people come back to public transport after the pandemic. The plan supports this recovery with the delivery of planned rail improvements, more bus priority and more investment in walking and cycling. However, further transformational programmes beyond this Business Plan would be required to reduce car usage enough to reach 80 per cent mode share by 2041.

Active

Percentage of Londoners doing 20 minutes of active travel a day



This is measured by the proportion of Londoners doing 20 minutes of active travel a day. Our continued investment in safe and active travel will help bridge the gap, but with further investment required.



Green

Average roadside nitrogen dioxide concentration in London ($\mu\text{g}/\text{m}^3$)



We have significantly improved air quality in central and inner London through the ULEZ, which covers up to the North and South Circular roads. This plan will enable us to expand this London-wide in August 2023.

Carbon dioxide emissions from London's transport network (metric tonnes)



We measure carbon dioxide emissions from our network. We are prioritising investment on decarbonisation, including keeping the pathway open to a fully zero-emission bus fleet by 2030 and procuring green energy for the Tube.

Connected

Percentage of Londoners living within 400 metres of a bus stop



Substantial cuts to the bus network have been avoided following additional funding from the Mayor. This plan avoids the significant reductions of up to 18 per cent previously planned.

Accessible

Additional journey time by step-free routes (minutes)



We have made significant progress, with the whole Elizabeth line, around a third of Tube, half of London Overground stations, and all DLR, bus and tram stops are now step-free. This plan will complete committed schemes and seek to leverage third-party funding for further projects.

Quality

Average bus speeds (mph)



We will deliver an additional 25km of Bus Priority schemes by 2025 to improve journey times and reliability. When the Silvertown Tunnel is completed in 2025, it will improve cross-river and surrounding journey times.

New homes and jobs

Proportion of people living in public transport accessible level 4 or higher (per cent)



This is measured by the proportion of people living in public transport accessible level 4 or higher which means having good, very good or excellent access to public transport. We will work with the Greater London Authority, boroughs and developers to ensure public transport and active travel provision can reduce car usage. This includes leveraging developer contributions and pursuing third-party funded network extensions, such as a DLR extension to Thamesmead.



Securing our future

We are rebuilding our finances so we can achieve operational financial sustainability by 2023/24 and ensure we continue to support London's recovery from the pandemic



Building our resilience

This is our strategy for rebuilding our finances, improving efficiency and helping to secure our futures

This strategy, which is driven from our Vision and Values, sets out how we will ensure London continues to be strong as we support the recovery from the pandemic and future growth. We have outlined a number of objectives, with specific targets to measure our success.



Actively grow passenger demand, while creating new sources of revenue to reduce our reliance on fares income

- Increase passenger demand to 86 per cent for Tube and rail (excluding the Elizabeth line) and 91 per cent for buses of pre-pandemic levels by 2025/26
- Grow new revenue sources of at least £500m by 2023
- Increase non-fares revenue as a proportion of total income



Create and grow an operating surplus based on our own sources of income

- Reach operating financial sustainability by 2023/24
- Grow an operating surplus from 2024/25 onwards to fund investment



Maintain cash reserves to make payments and protect against shocks

- Maintain average cash balances of 60 days operating expenses, which is around £1.2bn
- Maintain Greater London Authority Financing Facility of £500m for additional protection against shocks and risks



Continue to deliver recurring cost savings to remain affordable for customers and taxpayers

- Continue to reduce like-for-like operating costs in real terms
- Deliver a further £600m of recurring operating cost savings by 2025/26



Fully fund our capital programme with a long-term Government settlement and an affordable level of debt

- Achieve a long-term funding settlement with Government
- Maintain an affordable level of debt based on a range of prudential indicators

Conditions of our funding agreement

Our funding from Government comes with a series of conditions that we must meet

We have worked closely with the Government to fulfil the strict conditions that were attached to the short-term agreements and we will continue to work with them to ensure that the conditions of the long-term agreement are met.



Finance and modernisation

We need to identify operating cost savings to support our financial sustainability. Some of these have been enabled by the increased certainty provided by the funding agreement, but others remain under development. We are expected to continue to follow public sector pay guidance.



Capital programme

We are delivering our committed projects, with additional scope for capital renewals and active travel that have been enabled by the funding agreement. We will continue to provide funding to boroughs for investment in their streets as well as continuing to deliver our Capital Efficiency Plan.



Governance and reporting

We are regularly reporting progress against the funding agreement and its commitments.



Service level review

We will largely maintain the overall volume of service operated on our networks, while ensuring our services match the changing needs of our customers.



New revenue sources

We are working with the Mayor to identify options to generate between £500m and £1bn of additional net revenue per year. We also expect to follow the fares policy of the national rail network.



Pensions

We had to consider options for our pensions scheme following the independent review by Sir Brendan Barber. On 27 September 2022, we submitted our response to the independent review to the Department for Transport (DfT). On 14 October 2022, we submitted a paper to the DfT that outlined potential options, including an option to make no changes to the scheme.



Driverless trains

We are supporting the Department for Transport to assess the case for driverless trains.



Crossrail and Crossrail 2

We are committed to funding and completing the Elizabeth line and we are working with the Department for Transport to safeguard the route for Crossrail 2.



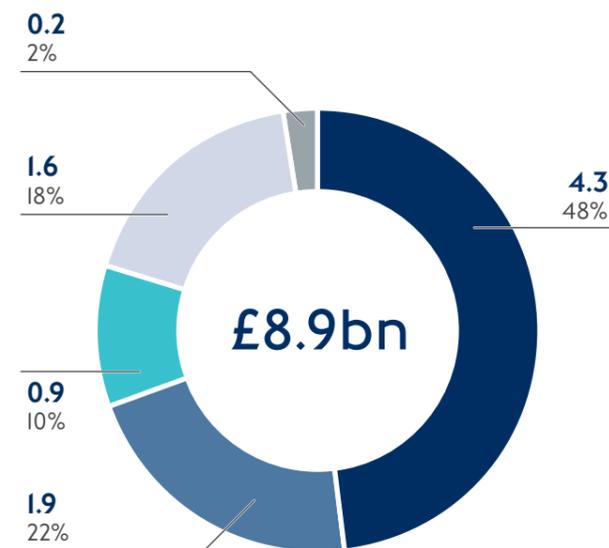
Hammersmith Bridge

The stabilisation works for the bridge are being led by the London Borough of Hammersmith & Fulham following the release of funding from us and the Department for Transport. We are working closely with them to ensure the bridge can reopen safely.

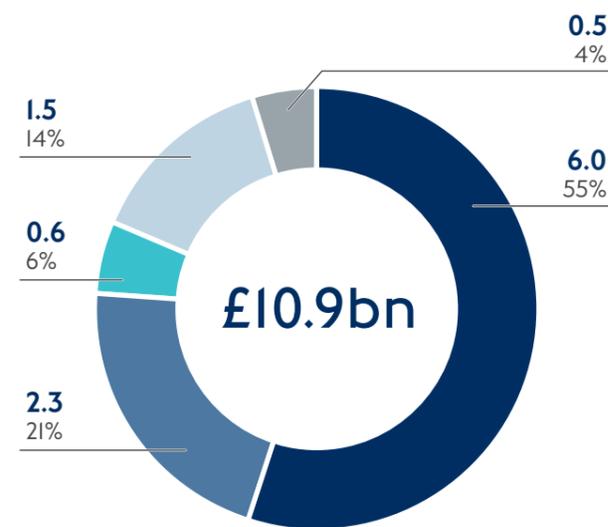
Funding sources

We have a range of sources for our funding, to cover both our income and our costs

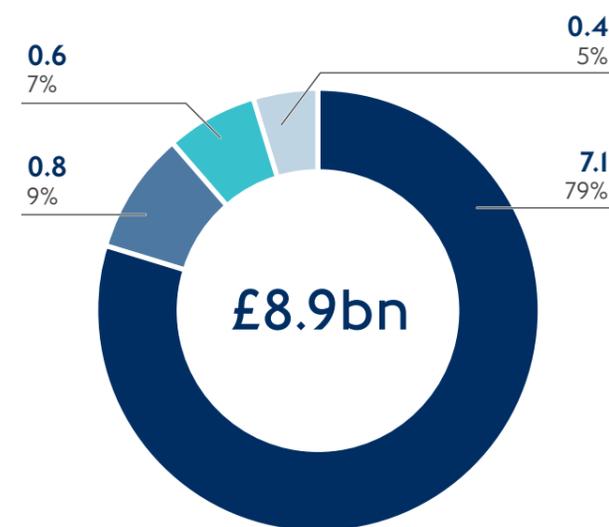
Income forecast 2022/23 (£bn)



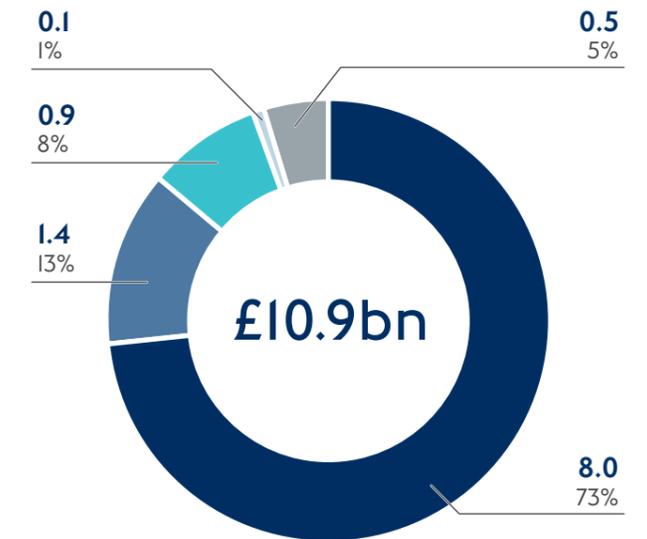
Income plan 2025/26 (£bn)



Costs forecast 2022/23 (£bn)



Costs plan 2025/26 (£bn)



- Passenger income
- GLA grants
- Government support
- Other income
- Cash reserves

- Passenger income
- GLA grants
- Government support
- Other income
- Borrowing

- Operating costs
- New capital investment
- Capital renewals
- Net interest costs

- Operating costs
- New capital investment
- Capital renewals
- Cash reserves movements
- Net interest costs

Forecasting and trends

There have been a number of challenges to our forecasting in recent years, including the pandemic and financial uncertainties

The pandemic in 2020 gave us a huge forecasting challenge. Almost overnight, demand for our services fell dramatically as Londoners took heed of Government restrictions to minimise the spread of coronavirus and there was huge uncertainty over how the pandemic would evolve. Our forecasts have proven to be very accurate. Our demand forecasts have always been underpinned by independent data and statistics, and informed by our analysis of the effect of real events and our own expertise, but the unprecedented uncertainty caused by the pandemic required us to adapt our approach to forecasting.

Since 2020, we have used a scenario-based approach to demand forecasting as we continue to deal with the aftermath of the pandemic. Our scenarios are still underpinned by a range of external forecasts relating to the economy and population, but now also include a range of projections for the less reliable factors, such as COVID-19 infection rates and the commuting frequency of office workers.

As the capital emerges from the pandemic, we are now facing a cost-of-living crisis, with double-digit inflation and significant increases to both the cost of energy and interest rates. This will have a significant impact on household finances for our customers. These pressures have not been seen for decades and add further uncertainty to our forecasts, as the effect of these economic trends will

have an uneven impact, with low-income households, renters and those paying large mortgages more likely to make cutbacks that will have an effect on the frequency in which they travel.

All forecasts are subject to a level of inaccuracy, especially looking further into the future. However, the uncertainty around the pandemic recovery, climate change, household finances, the UK's trading relationships post-Brexit, the war in Ukraine and the macro-economic climate, make it more difficult than usual to forecast beyond the next two years. On 17 November 2022, the Office for Budget Responsibility forecast that inflation would be at around seven per cent in 2023 and that the UK economy would tip into recession lasting just over a year from the third quarter of 2022, with a peak-to-trough fall in gross domestic product of two per cent. Unemployment is also expected to rise from 3.5 per cent to a

peak of 4.9 per cent in the third quarter of 2024. We will need to assess the impact of this new forecast on our Business Plan.

Our other operating income, which includes the Congestion Charge and ULEZ, is influenced by factors such as compliance levels and the number of exempt vehicles, and our commercial income is directly affected by market conditions. As well as external factors, such as inflation, our cost base is dependent on our cost reduction programmes. These plans are not without risk, and we will continue to assess the financial impact as plans progress to understand how they affect our targets.

Monitoring and assessing external and internal threat and opportunity indicators are key to our planning and reporting process, enabling us to respond to early warning signs and take actions to keep us on track.

As the capital emerges from the pandemic, we are now facing a cost-of-living crisis, with double-digit inflation and significant increases to both the cost of energy and interest rates

Forecasting factors

There are unprecedented factors that have an impact on our costs, and our supply chains, forecasting reliability. These include:



Coronavirus pandemic



Cost of living crisis



Post-Brexit uncertainty



Macro-economic uncertainty



International political landscape

Funding our capital programme

We have a range of capital funding sources, but long-term Government funding is still required

We have a range of funding sources for capital investment, including the retained business rates provided by the Mayor and contributions from developers and the London boroughs. Like transport authorities around the world, we rely on funding from national Government to deliver major capital projects.

The Government funding settlement, which was agreed on 30 August 2022, provides around £800m for new capital enhancements until 31 March 2024. However, around £600m of this funding replaces the contribution we had previously assumed from a sale and buyback of rolling stock.

To make long-term investments, particularly on rolling stock and signalling programmes, we need long-term certainty on Government funding. The Government has consistently recognised in our funding settlements that we are not expected to fund major capital enhancements from our own operating incomes, as is consistent with other transport authorities. We look forward to discussions with Government in the near future to confirm this future capital funding.

Borrowing can play a role in the financing of capital projects, as it enables us to make vital improvements sooner by spreading the costs over time. Investing in our transport infrastructure involves high upfront costs. Borrowing enables us to make vital improvements sooner by spreading the costs over time.

The borrowing raised towards the end of this Business Plan will help finance our investment programme, including rolling stock and signalling replacements, new homes and growth, as well as air quality and decarbonisation.

We regularly review the amounts we can borrow, ensuring they are prudent, affordable and sustainable. The borrowing set out in this plan has been assessed against rigorous affordability criteria and we have not assumed any incremental borrowing until after we have reached financial sustainability.

Around £600m of incremental borrowing is anticipated in both 2024/25 and 2025/26, taking our outstanding borrowing to £14.0bn by the end of 2025/26, which is subject to a further assessment of affordability at this time. We also plan to refinance the borrowing due to mature throughout the period of this plan.

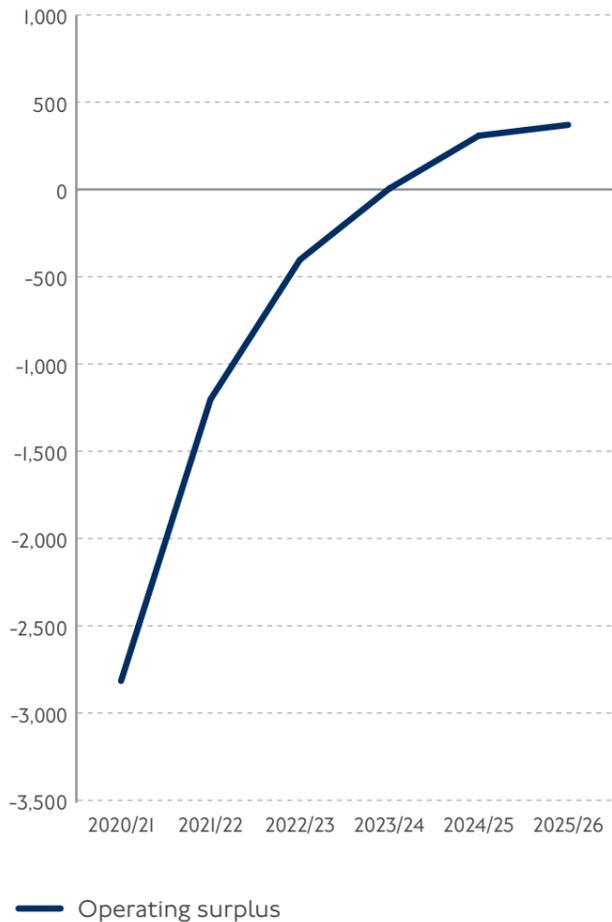
To make long-term investments, particularly on rolling stock and signalling programmes, we need long-term certainty on Government funding

Income statement

Income statement (£m)

TfL Group	2021/22 actual	2022/23 forecast	2023/24 plan	2024/25 plan	2025/26 plan
Passenger income	3,154	4,306	5,158	5,572	5,983
Other operating income	1,178	1,474	1,668	1,700	1,482
Business rates retention	1,844	1,819	1,867	1,985	2,025
Other revenue grants	1,789	1,024	274	242	245
Revenue	7,965	8,623	8,967	9,499	9,735
Operating costs	(6,462)	(7,109)	(7,822)	(7,969)	(8,000)
Operating surplus before interest and renewals	1,503	1,514	1,145	1,530	1,735
Capital renewals	(551)	(635)	(725)	(775)	(850)
Operating surplus before interest	952	879	420	755	885
Net interest costs	(439)	(417)	(415)	(448)	(515)
Operating surplus	513	462	5	307	370
Operating (deficit)/surplus (excluding Extraordinary Revenue Grant)	(1,203)	(403)	5	307	370

Operating surplus, excluding Extraordinary Revenue Grant from Government (£m)



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This plan sets out how we will achieve our goal of being operationally financially sustainable by 2023/24, without revenue support from the Government. We will achieve this by continuing to grow our revenue while continuing to deliver recurring operating cost savings. This means our revenue will cover operating, renewals and net interest costs and create a growing operating surplus from 2024/25 onwards to help fund new capital investment.

During the period of the funding settlement to March 2024, our passenger income is set to the Department for Transport’s revenue scenario and includes its planning assumption for an annual national fare increase of four per cent in March 2023 and March 2024.

For 2024/25 and 2025/26, we have maintained the planning assumption of an annual fare increase of the retail price index plus one per cent, consistent with our last Business Plan in 2019. The actual level of fares are set by the Mayor on an annual basis. The passenger demand assumption is steady growth in line with current trends to 86 per cent of pre-pandemic demand for Tube and rail modes (excluding the Elizabeth line), and 91 per cent for buses by December 2025.

Other operating income increases over the plan, based on the London-wide ULEZ scheme being implemented in 2023/24. We are also seeking to grow our non-fares revenue through commercial media and partnership activity.

We have included a further revenue target to generate £140m per year from 2025/26, by actively growing customer demand above the current trend, reducing fare evasion and increasing other income sources.

In 2021/22, we received £1.84bn through retained business rates and expect to receive slightly less in 2022/23. The level of funding going forward is in line with the Greater London Authority’s baseline scenario set out in the Mayor’s Budget Guidance and rises in line with inflation.

Other revenue grants in 2021/22 and 2022/23 include the Extraordinary Revenue Grant from Government that has supported our operations during the pandemic. The values from 2023/24 include the Mayor’s council tax precept proposal to increase band D Greater London Authority council tax in 2023/24 by £20 and again in 2024/25, subject to the GLA Group budget setting process incorporating the Mayor’s proposed increase in the council tax referendum principles for future years for the Greater London Authority.

Operating costs increase over the plan with the introduction of new services, including the Elizabeth line and London-wide ULEZ and the high level of inflation. However, in this plan we are forecasting to save a further £600m by 2025/26 across our overall operations and maintenance activities, taking the total recurring saving to £1bn per year. This action means that like-for-like costs are reducing in real terms.

This plan sets out how we will achieve our goal of being operationally financially sustainable by 2023/24

Capital expenditure

Our capital programme is in line with the funding settlement envelope agreed with Government over the two-year period for 2022/23 and 2023/24. This delivers our committed projects, with additional scope for capital renewals and active travel that have been enabled by the funding agreement. We will continue to provide funding to boroughs for investment in their streets, although this is accounted for as operating expenditure. The total investment in safe and active travel, across both operating and capital expenditure, is an average of £150m per year across this Business Plan.

Having constrained our investment in capital renewals to between £400m and £600m per year for the last five years, against an estimated steady state requirement of around £1bn per year, this Business Plan sets out a renewals investment plan that builds up to a sustained level of around £850m. We will invest to improve our asset data, monitoring and analytical tools to help us target our investments and ensure we achieve best value for money.

Capital expenditure (£m)

Project	2022/23 forecast	2023/24 plan	2024/25 plan	2025/26 plan	Total
Major rolling stock and signalling replacement	465	776	936	940	3,117
Safe and active travel	77	108	75	75	335
New homes and growth (excluding TTLP)	15	71	101	98	285
Technology	75	108	60	41	284
Air quality, environment and decarbonisation	68	143	52	14	277
Service performance and safety	47	42	70	42	201
Other	85	44	57	140	326
Total enhancements	832	1,292	1,351	1,350	4,825
Crossrail	247	48	-	-	295
Renewals	635	725	775	850	2,985
Total	1,714	2,065	2,126	2,200	8,105

The total investment in safe and active travel, across both operating and capital expenditure, is an average of £150m per year across this Business Plan

We plan to spend an average of £1.35bn per year of new capital investment. Over this Business Plan, we will invest in:

Rolling stock and signalling replacements

This includes new Bakerloo and Piccadilly line trains, and DLR trains, replacement trams and new signalling on the Bakerloo and Piccadilly lines, subject to long-term certainty on Government funding.

Safe and active travel

This includes new cycleways, safer junctions, completing the Old Street scheme, as well as starting larger projects such as works on Lambeth Bridge junction.

Sustainable housing and accessibility

This area includes schemes supported by our funding to help unlock sustainable housing and accessibility projects, and Housing Infrastructure Fund schemes on the London Overground in east London and the DLR.

Technology

This includes externally funded projects, together with investment to safeguard our revenue payments, deliver deployable enforcement cameras and improve cyber security, as well as investing in customers through our TfL Go app.

Air quality, environment and decarbonisation

This includes the upfront investment in the London-wide ULEZ and funding for decarbonising our operational buildings and offices, as well as continued investment in reducing emissions from our bus fleets.

Service performance and safety

This includes work to deliver the Silvertown Tunnel, our Vision Zero action plan, our Bus action plan and Bus Safety Standard, and externally funded Royal Docks improvement works.

Other areas

This includes improvements to our income-generating estate, work to upgrade Elephant & Castle station, and provide funding to help end inappropriate behaviour and violence against women and girls on public transport.

Funding our capital programme

Delivering a sustainable and growing operating surplus is critical to supporting the funding of our capital programme. However, as the Government have recognised, it is not possible for us to fund major capital enhancements, such as replacing life-expired rolling stock and signalling, from our operating revenue.

In 2023/24, as we reach operating financial sustainability, all the Government funding we receive from the current funding settlement will be ring-fenced for our capital programme.

This Business Plan sets out the requirement for ongoing Government capital funding for rolling stock and signalling programmes. We need certainty on this long-term funding to place orders with the supply chain and start to deliver these major programmes. We look forward to our discussions with Government in the near future to confirm this future capital funding.

Capital expenditure funding analysis (£m)

TfL Group	2021/22 actual	2022/23 forecast	2023/24 plan	2024/25 plan	2025/26 plan
Operating surplus	513	462	5	307	370
Capital enhancements	(463)	(367)	(516)	(415)	(410)
Ring-fenced funding for capital enhancements	247	120	438	147	117
Net borrowing	–	–	125	370	495
Surplus after enhancements	297	215	52	409	572
Major rolling stock and signalling replacement	(355)	(465)	(776)	(936)	(940)
Government funding for rolling stock and signalling replacement	–	–	565	475	583
(Deficit)/surplus after rolling stock and signalling replacement	(58)	(250)	(159)	(52)	215

As we return to financial sustainability, and deliver an operating surplus without emergency Government funding, we can use borrowing to finance capital projects from future operating surpluses, enabling us to make vital improvements sooner by spreading the costs over time.

We regularly review the amounts we can borrow, ensuring they are prudent, affordable and sustainable. The borrowing set out in this plan has been assessed against rigorous affordability criteria and we have not assumed any incremental borrowing until after we have reached financial sustainability.

Around £1.2bn of incremental borrowing is anticipated in the plan, taking our outstanding borrowing to £14bn by the end of 2025/26, but this will be subject to a further assessment of affordability before any borrowing is taken. The initial tranche of borrowing in 2023/24 is to fund the implementation of the London-wide ULEZ and is likely to be financed through the Greater London Authority Green Bond programme. This will be repaid through the revenues generated from the scheme.

We also plan to refinance the borrowing due to mature throughout the period of this plan, although the plan does see the repayments starting for the Crossrail loan from Government.

Managing our cash reserves

To support our financial resilience, we must maintain cash reserves to make payments and protect against shocks.

During the current funding settlement, our funding conditions require us to maintain our average cash reserves at no more than £1.2bn. After the end of the funding settlement, we will return to our Treasury Policy of maintaining a minimum cash reserve equivalent to 60 days of operating expenses. This is currently around £1.2bn but will grow as we introduce new services such as the Elizabeth line and London-wide ULEZ, and will be at around £1.4bn in 2025/26. This is a prudent cash position that enables us to respond to unexpected shocks, such as a recession.

Our cash reserves also increase in 2023/24 as the cashflow profile of our large rolling stock contracts does not match the profile of that the capital expenditure that is recognised. This creates a positive working capital movement, which then unwinds in 2025/26 and later years.

Cash flow statement (£m)

TfL Group	2021/22 actual	2022/23 forecast	2023/24 plan	2024/25 plan	2025/26 plan
Net cash generated by operating activities	1,503	1,514	1,145	1,530	1,735
Less TTL Properties Limited, London Transport Insurance (Guernsey) Limited and London Transport Museum	(22)	(40)	(25)	(44)	(49)
Net cash generated by TfL operating activities	1,481	1,474	1,120	1,486	1,686
Cash flows from investing activities					
Capital renewals	(551)	(635)	(725)	(775)	(850)
New capital investment	(818)	(832)	(1,292)	(1,351)	(1,350)
Ring-fenced capital funding	247	120	1,003	622	700
Working capital movements	(253)	240	351	112	(174)
Net cash utilised by investing activities	(1,375)	(1,107)	(663)	(1,392)	(1,674)
Free cash flow	106	367	457	94	12
Cash flows from financing activities					
Net interest paid	(439)	(417)	(415)	(448)	(515)
Debt repayment	–	(35)	(35)	(70)	(105)
New TfL borrowing	–	35	160	440	600
Net cash generated from financing activities	(439)	(417)	(290)	(78)	(20)
Net (decrease)/increase in cash	(333)	(50)	167	16	(8)

Cash (£m)

TfL	2021/22 actual	2022/23 forecast	2023/24 forecast	2024/25 plan	2025/26 plan
TfL cash balances	1,287	1,236	1,403	1,418	1,410

Growing our income

It is more crucial than ever that we grow a stream of non-fares revenue

Aside from our fares revenue, we have income streams from a wide range of sources. These include areas like business rates retention and income from the Mayor’s precept on council tax, which are forecast to generate £1,819m and £114m respectively in 2022/23. We also receive income from Mayor’s Community Infrastructure levy, which is entirely committed to funding our Crossrail works, which is forecast to bring in £160m in 2022/23.

and engaged population of millions. Over the past few years, we have significantly upgraded our digital advertising infrastructure, including installing even more exciting advertising assets on the Elizabeth line.

Our use of data, coupled with our partners’ innovative use of technology, gives brands and their agencies planning tools and access to our estate, which is further

helping the strong recovery across our advertising revenues.

We are showcasing new and ground-breaking ways of working with brands. This includes innovative brand activations on the Underground, creative collaborations using our globally recognised symbols, and managing the filming of Hollywood blockbusters across the network.

Green pipeline

We are working to develop a green project pipeline of environment projects, including co-creating projects with other organisations and authorities in London. Our ambition is to develop as many opportunities as possible to investment grade so that we can unlock private investment, grants partnerships and revenue generating energy projects as soon as they are available to support London’s transition to sustainability.

Other areas include taxi and private hire license fees, providing £38m in 2022/23 and administration fees from people obtaining concessionary tickets, which will generate £21m in 2022/23.

Commercial Media and Partnerships

Our Commercial Media and Partnership activity seeks to grow sustainable non-fares revenue while enhancing our customers experience and our brand.

Even though the last few years have been volatile, we continued to drive commercial media revenues and build successful commercial partnerships. We have maintained our ability to attract brands and deliver creative executions that have made national, and even global, headlines.

Our advertising estate is one of the largest in the UK out-of-home market, reaching a diverse



100%

of the revenues we receive are reinvested back into the network to help keep London moving



Our property portfolio

We are one of the largest landholders in London and play a key role in delivering the housing our city needs. We want to make the best use of our land and property, helping provide thousands of new homes at a variety of tenures and price points across London to support our city.

There is also a pressing need to decarbonise London, with an increased demand for environmentally sustainable spaces that enable and encourage the use of sustainable transport. Working with the Mayor and the Government, we agreed to set up a self-financing property company, currently called TTL Properties Limited. This property company, launched in April 2022, is a wholly owned subsidiary, which has access to commercial funding. This means we can confidently commit to long-term investments, including our build-to-rent projects at Arnos Grove, Montford Place and Nine Elms as well as investment in our existing assets.

We have more than 2,000 commercial units on our estate, including around 800 commercial railway arches, offering space for retail, industrial and office use. We

20,000 

homes targeted to be delivered over the next 10 years



1,750

homes currently under construction

2,500

homes planned to start construction by the end of 2022/23



are proud to be a powerhouse for small business, and 93 per cent of our tenants are small- and medium-sized businesses.

Our investment is targeted in assets at key gateway locations like Whitechapel and Victoria. Working with local communities we are also investing into our existing assets, such as our 5l railway arches at Kilburn, which we are consulting with local communities on how to get them back into use and inject new life to the area.

Our savings programme

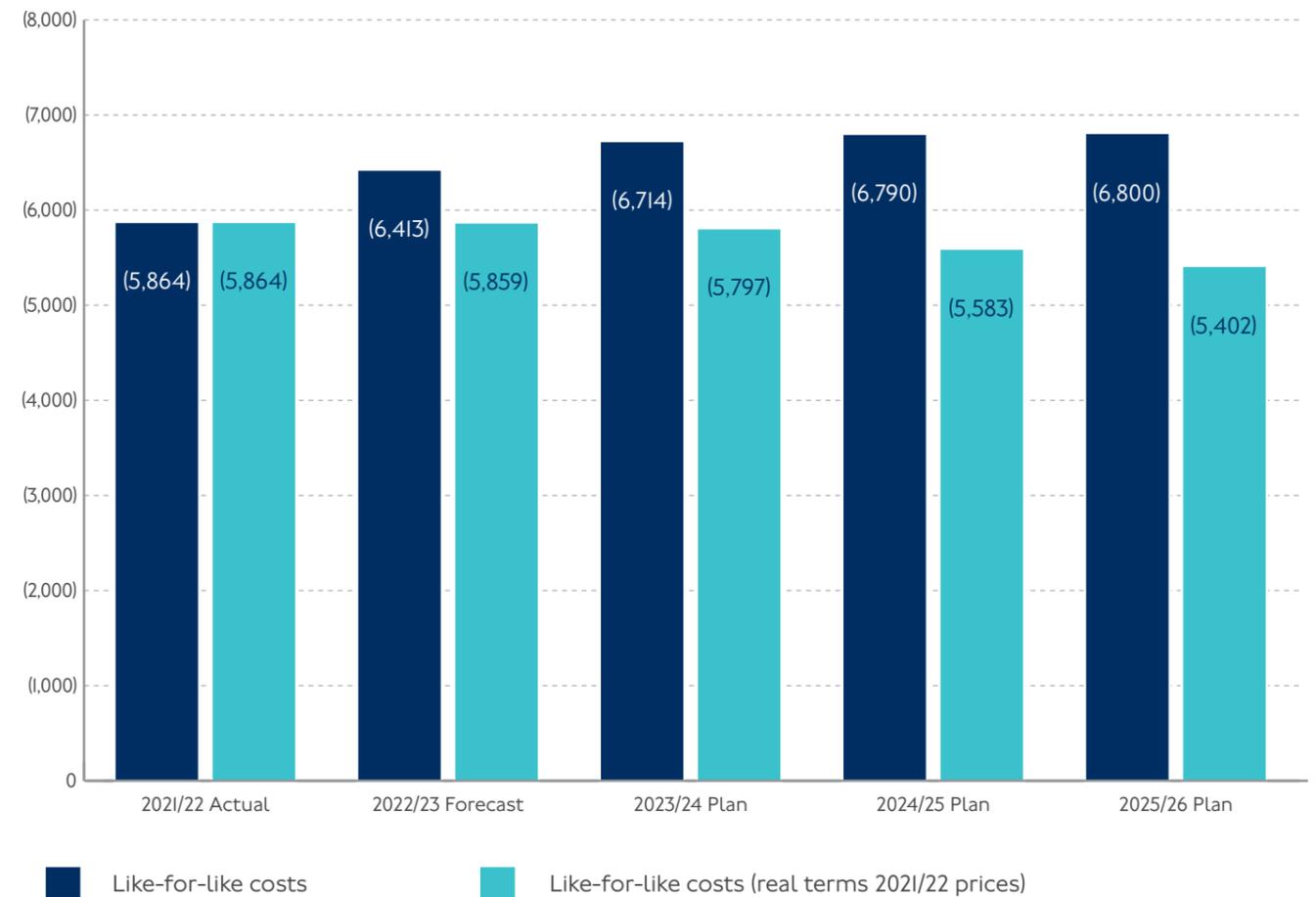
The initial phase of our £730m change programme started in 2019/20 and delivered annualised recurring savings of almost £400m, at £398m by the end of 2021/22. These savings have largely offset the impact of inflation over this time, such that on a like-for-like basis, after adjusting for new services, restructuring and other one-off costs, our operating costs have not only remained flat since 2019/20, but have come down by £400m in real terms. This was driven by our existing change programme and our firm cost control during the coronavirus pandemic.

While good progress is being made with our savings plans, having delivered £400m of the £730m recurring savings target set in 2019, the pressures of managing inflation and the requirements of the most recent funding agreement mean that further efficiencies are needed. Therefore, in this Business Plan, the savings target

is increasing to a total of £1bn recurring savings, meaning a further £600m per year needs to be delivered by 2025/26. This will be delivered through a improving working practices, driving improvements where possible for colleagues to make TfL a great place to work, and an approach to continuous savings, including efficiencies within our supply chain.

We will optimise our procurement and commercial approach to deliver savings across our third party expenditure, including our operational concessions, other key operating and maintenance contracts and our head office accommodation. We will also maintain tight controls on recruitment and overtime.

Like-for-like cost chart (£m)



In the short term, our like-for-like costs will rise as we are not able to fully offset the impact of high inflation. However, with our savings programme, we expect like-for-like costs in nominal terms to fall by more than £450m, or eight per cent, compared to 2021/22.

Working with our supply chain

We have developed positive and collaborative relationships with our suppliers

Despite the financial uncertainty we have faced, we have targeted investments to maintain and adapt our assets and to accelerate key schemes. When our revenue plummeted, we needed to offer reassurance to our supply chain while simultaneously negotiating a long-term funding agreement with the Government. Maintaining such relationships became ever more important as we support economic growth not just in London but for regions across the UK.

With the much-needed pivot to a green agenda, London is already supporting a vibrant and burgeoning green economy. We want to help grow this further by providing sustainable transport options, which will attract new green businesses to the city and support the creation of new green jobs throughout the UK. This new agenda is helping to foster confidence in us from our suppliers and stakeholders, and we continue to drive efficiencies through our contracting process.

Our supply chain is vital to helping us improve services, including modernising the Tube and delivering our Bus action plan. Furthermore, the GLA Group Responsible Procurement Policy and supporting Implementation Plan for 2022-24, along with our Corporate Environment

Plan, help us to forge an understanding and cooperative way forward with our supply chain. They set out our approach to delivering social value, driving economic development and demonstrating environmental sustainability in our projects and procurement activity. They also help tackle the climate emergency, as well as balancing a host of wider environmental, social, and economic issues.

For the first time in London's history, some of the capital's biggest organisations have committed to working together through the London Anchors Institutions' Network. We are a founding signatory of the network's charter and strive to use our purchasing power to maximise opportunities for London's smaller businesses following the pandemic. Through the network, we are also helping young people to flourish and access support and opportunities, and accelerating the delivery of a cleaner, greener London.

No one can predict the international political landscape and the Russian war in Ukraine is testament to this. We do not source any of our gas supply from Russia or Belarus, and we monitor our direct suppliers and our supply chain to ensure that we do not knowingly trade with businesses from Russia or Belarus.

We work with suppliers from across the UK to support our operations. These are just a few of them



Prioritising investments to meet our strategic outcomes

There are a number of investment priorities we will seek as we work towards financial sustainability

This Business Plan is our first long-term financial plan to be published in three years. In contrast to the deterioration in services and pausing of major programmes that was threatened by a managed decline scenario if we did not achieve agreement with Government in August, this plan puts us on a pathway towards financial sustainability, where we can reinvest in our renewals and enhancements programmes.

Nonetheless, in the medium term, our finances remain constrained as we become independent of financial support from central Government for our operating budget. Beyond existing contractual commitments and safety-critical activities, further investment will remain limited. To best prioritise our limited resources, we have assessed investment options against our strategic outcomes and long-term commitments. These include those in the Mayor's Transport Strategy and our asset management objectives, as well as other corporate plans.

We have identified the outcomes we most urgently need to prioritise to meet our long-term ambitions. This Business Plan prioritises our investment in our road safety programme to meet our Vision Zero goal of having no deaths or serious injuries on London's road network by 2041.

Our Business Plan also increases investment in our asset renewals programme. This will help us improve service quality and reliability, as well as deliver against a wider set of outcomes such as decarbonisation, Vision Zero for safety and climate-change adaptation.

Investment in additional rail capacity has been deprioritised to align with our latest demand forecasts, which show we will have excess public transport capacity in the medium term. The exception is for programmes that are fully funded by third-parties, for example where additional public transport capacity is required to unlock new housing.

As we become financially sustainable, it is more important than ever that we seek to leverage opportunities to increase our revenue and decrease our operational expenditure. Our Business Plan prioritises projects that will be financially viable within three to five years, thereby supporting our plans to become financially sustainable. This includes energy efficiency projects, which will reduce our expenditure and contribute to meeting our environmental goals.



Healthy Streets and healthy people

Together with London's boroughs, we are creating streets that are accessible, safe, green and inclusive. This includes funding of £69m a year for the boroughs and externally funded projects, together with investment to safeguard our revenue payments



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Safe streets

As part of our Safe Systems approach we will continue to invest in safe and healthy streets. We will continue work to lower speed limits on our roads and progress the next stage of our Direct Vision Standard, as well as continuing to make our buses safer through our Bus Safety programme

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Zero

people killed or seriously injured on our roads and our services by 2041



Lower speed limits

Lowering the speed of vehicles in London is key to reducing both the likelihood of a collision and the severity of the outcome. By working with London's boroughs, nearly half of London's roads now have a 20mph speed limit, as do more than 100km of our roads.

We will continue to lower speed limits across London to reduce road danger, with plans to introduce a 20mph speed limit on a further 28km of roads in the boroughs of Camden, Hackney, Haringey, Islington and Tower Hamlets by early 2023.

100km

of our roads have a 20mph speed limit



50%

of London's roads have a 20mph speed limit on them



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Old Street Roundabout

Working closely with Islington and Hackney Councils, we are transforming Old Street. Two new station entrances have been designed to enhance the location. We are completely remodelling the retail arcade and installing two lifts to connect the surface to the retail arcade, all of which will improve the experience for our customers.

This is a busy section of the inner ring road, so our investment will

make the highway safer and more inviting for people to walk and cycle, and more pleasant to walk into and around the station, and change between trains and buses. We have removed the roundabout to create a two-way junction, and there will be new segregated cycle lanes throughout and a large new public space with seating, picnic tables, trees and shrubs for people to enjoy this iconic part of London.

Making more junctions safer

Our Safer Junctions programme targets locations where the greatest numbers of people have been killed or injured while walking, cycling or riding motorcycles and we have already redesigned 43 junctions as part of it. We will start construction of safer junction schemes at Holloway Road/Drayton Park and Battersea Bridge, subject to consultation, as well as working on pedestrian and cycling improvements at Lambert Bridge North and South, and Manor Circus. We will also work with the London Borough of Camden on improvements at Holborn, including Holborn Gyratory





191,000

Direct Vision Standard permits issued so far



4,000

heavy goods vehicles rated as five-star

Direct Vision Standard

Our Direct Vision Standard requires all heavy goods vehicles weighing more than 12 tonnes to hold a safety permit, based on the star rating from zero (lowest) to five (highest), corresponding to the amount the driver can see directly from the cab windows. The majority of vehicles, around 112,000, are rated zero-star and must have a range of safe systems fitted to obtain a permit. This helps to improve protection for people walking, cycling or riding e-scooters or motorcycles.

The second phase of the Direct Vision Standard, which is under development, will tighten the standard in 2024 to further improve the safety of vulnerable road users.



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Improving safety of buses

We continue to make our buses safer through our Bus Safety Standard, with 849 buses, which is around nine per cent, already meeting the standard safety measures. Up to 2,600 buses are expected to meet the standard by the end of the Business Plan period, assuming fleet renewal contracts happen as planned. Improvements delivered so far include fitting more than 3,000 buses with Intelligent Speed Assistance Technology, which limits the speed of the buses.

Other safety measures include camera monitoring systems that help to reduce blind spots, with 655 buses fitted, and an Acoustic Vehicle Alerting System for quiet-running buses, with 709 buses fitted so far.

849

buses in our fleet already meet our Bus Safety Standard



680

buses have camera monitoring systems installed



Active streets

Following our latest funding agreement, we have been able to resume spending on our Healthy Streets programme. Within this Business Plan, we will continue to invest £150m per year in our Healthy Streets programme, working with boroughs to enable more people to walk, cycle and use the bus, as part of our aim for 80 per cent of trips in London to be by sustainable modes

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Priority traffic signalling

Our Healthy Streets signals programme is helping to prioritise sustainable modes at traffic signals on ours and borough roads. By making changes to signals at key junctions, we have saved 12,592 hours every day for people walking, cycling and using the bus. This includes saving almost 8,800 hours every day for bus passengers and reducing pedestrian wait time at 53 sites identified by community stakeholders.

Following a successful trial, we will continue to develop new pedestrian priority signals from 2023. These will show a continuous green person to pedestrians until a vehicle is detected approaching the crossing. The signal then changes to red for pedestrians, enabling the vehicle to cross the junction before returning to a green for pedestrians.

Data from the trial suggests that the pedestrian priority signals reduced journey times for people walking and made it easier and safer for them to cross. The average location involved in the trial displayed a green pedestrian signal for an extra 56 minutes a day. Compliance with traffic signals by people walking increased by 13 per cent, reducing the risk of a collision with a vehicle.



13%

more compliance with traffic signals for people walking during our trials

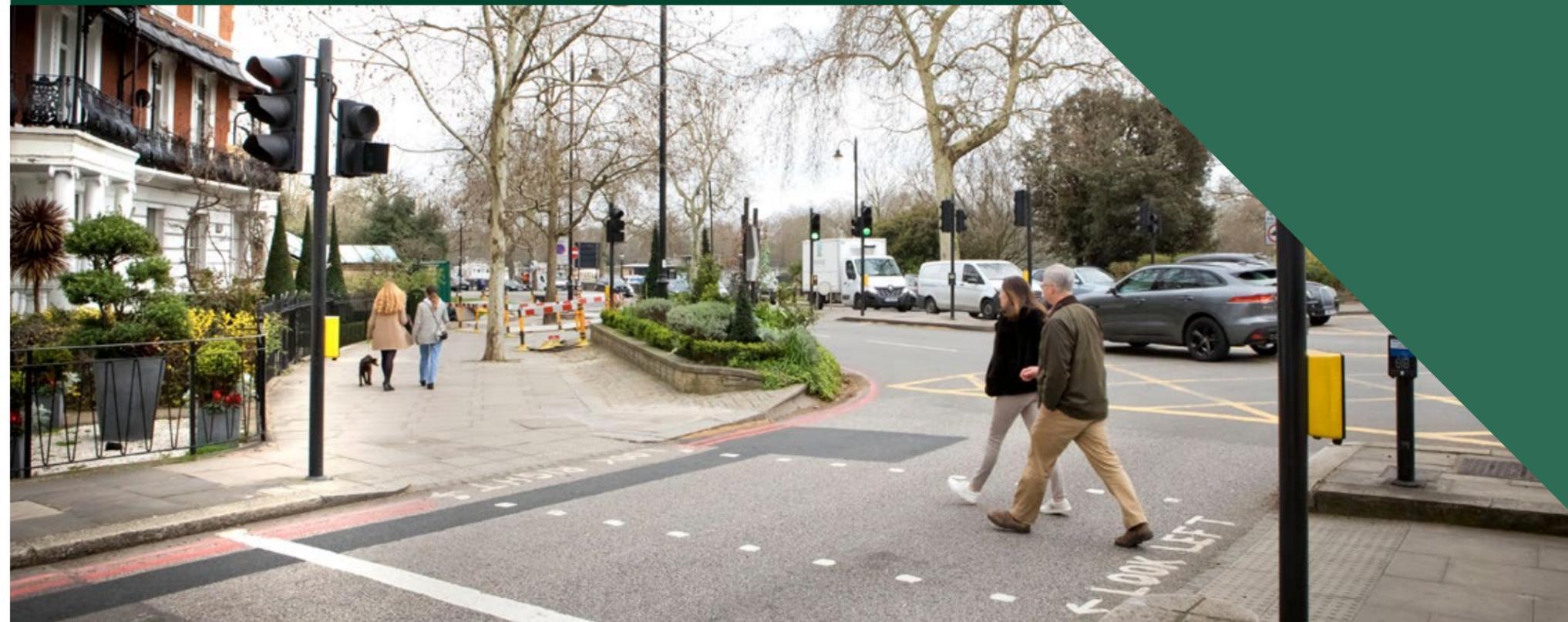
56

minutes extra for green pedestrian signals on average during our priority signals trials



70%

of Londoners doing 20 minutes of active travel a day by 2041



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Encouraging more people to cycle

Our cycling investment has led to the highest, safest and most inclusive levels of cycling on record. Significant expansion of the cycle network means that 22 per cent of Londoners now live within 400 metres of our Cycleways network. This means we are making good progress against one of the two key targets in our Cycling action plan – to increase the proportion of Londoners living within 400 metres of the London-wide cycle network to 28 per cent by 2024.

Over the next two years, as well as completing existing schemes, we will begin construction on up to 14km of additional cycleways and progress with design work for a further 16km of cycleways.



11.8million

hires made on our Santander Cycles scheme in 2021/22

5,000

parking spaces delivered in the past two years



Introducing School Streets

More than 500 School Streets, which are roads that are closed to traffic during school drop-off and collection times, have been introduced by the London boroughs since the start of the pandemic. Of these, 372 have been funded with support from the Greater London Authority and us. Including those delivered before the pandemic, this brings us to more than 500 School Streets.

The focus on schools means that we have already exceeded one of the two key targets in our Walking action plan – to increase the proportion of trips to primary schools made on foot to 57 per cent by 2024. Our latest estimates suggest that 58 per cent of primary school children are walking as their main mode of transport (2017-2019). We have now set a new stretch target of 60 per cent of primary school children walking to school by 2026.



58%

of primary school children walk as their main way of getting around



Efficient travel

We want London's streets to be more efficient and have less traffic on them. This includes delivering an extra 25km of bus priority schemes to improve reliability and bus journey times, as well as opening the Silvertown Tunnel in 2025 and continuing feasibility work on future road user charging schemes

 **3million**

fewer daily car trips by 2041, equivalent to around 30 per cent

Reducing traffic on our streets

The only long-term, sustainable way to make our streets efficient is by reducing the amount of motorised traffic in London. This means taking action in a range of areas including prioritising walking, cycling and buses, encouraging efficient ways of moving and managing freight, and exploring ways of managing demand for road space.

Sustainable modes such as walking, cycling and buses take up significantly less space than cars, making them the most efficient ways to move people on London's streets. By prioritising space for sustainable modes, we can make the most efficient use of London's limited road space.

10-15%

reduction in overall traffic levels between 2015 and 2041 is the ambition of the Mayor's Transport Strategy



Efficient freight traffic and deliveries

As London grows, so will the demand for freight, servicing and deliveries. Accommodating this efficiently means finding new and innovative ways to move freight in London. Our aim is to reduce morning peak freight transport in central London by 10 per cent by 2026. Initiatives to support efficient ways of moving freight in 2021/22 included continuing to support the use of the Thames and London's waterways in major construction projects.

We have been working with Network Rail to produce a Rail Freight Strategy for London, setting out how we will work with partners to move freight from road to rail. We also continue to roll out 'click and collect' lockers on our premises to consolidate deliveries and reduce emissions.

300,000

tonnes of excavated material moved by barge as part of the Northern Line Extension, removing around 20,000 lorry journeys





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Silvertown Tunnel

We continue work on the new 1.4km twin-bore road tunnel under the Thames, which will link Silvertown to the Greenwich Peninsula in east London. Together with road user charging at the Blackwall and Silvertown Tunnels, the scheme will effectively eliminate chronic congestion, poor reliability and a lack of resilience at the Blackwall Tunnel. This will support an overall improvement in air quality in the area, alongside measures such as the expanded Ultra Low Emission Zone. The new tunnel, which we plan to open in 2025, will also enable better public transport links, including more cross-river journeys by new zero-emission buses. A comprehensive programme of air quality and traffic monitoring and modelling is under way to inform setting the initial user charges, planning the new bus

services and ensuring the scheme delivers its planned benefits once open. Our plans also include improvements for walking and cycling, and the areas near the tunnel entrances as part of major regeneration of both sides of the river.

Working with our contractor, Riverlinx, major construction works continue with the tunnel boring machine expected to complete the main tunnel drives in 2023. Engagement with the local community will also continue and we are committed to ensuring we minimise the impacts of the scheme on local residents and businesses, including by using the river to transport materials wherever possible to remove thousands of lorry movements from the roads.

Road user charges

Creating efficient streets will require measures to manage demand. We have now started to explore how a new kind of integrated road-user charging system could be implemented to improve safety, air quality, address climate change and reduce congestion. This could also support health and wellbeing for Londoners by creating a greener, more sustainable city for active travel.



8,800

hours saved for bus passengers by prioritising buses at traffic signals

Bus priority programme

We are working closely with the boroughs to progress schemes that prioritise buses on London's streets. We will deliver an extra 25km of bus lanes by 2025 to improve reliability and bus journey time across London, which will help make buses an attractive option for people.

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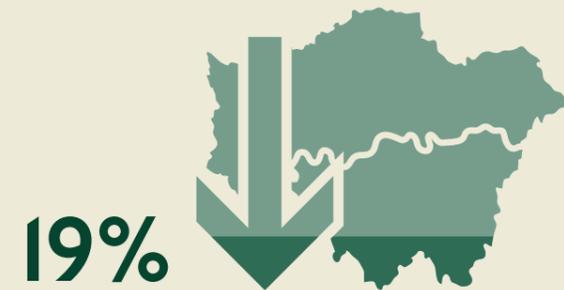
Green travel

We want London's streets to be cleaner and greener. In August 2023, we will extend the Ultra Low Emission Zone London-wide. We are also committed to decarbonising our operations and deliver a zero-emission bus fleet, as well as upgrading our support fleet to become zero-emission

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reduction in the number of Londoners living in areas exceeding legal limits for nitrogen dioxide between 2016 and 2019



reduction in particulate matter 2.5 across London since 2016



trees on our roads, a two per cent increase in comparison with last year



of wildflower verges along our road network

60-70%

reduction in average nitrogen dioxide concentration in central, inner and outer London by 2041



Innovative bus charging technology

With demand for electric charging increasing, we are working with the boroughs and the private sector to increase the supply of charging points to support the shift to electric vehicles. We are also working with bus manufacturers and operators to develop a vibrant and competitive zero-emission market, alongside our work with stakeholders to ensure infrastructure is available to enable the transition. In September 2022, we introduced pantograph technology at Bexleyheath bus garage to provide fast, high-power top-ups for buses.

The pantograph, which is an arm-like structure, attaches itself to the bus roof to deliver a quick, high-power

charge to buses. Each top-up takes less than 10 minutes, enabling buses to travel further each day. The short top-up time and longer distance each bus can cover means fewer buses are needed to provide the same high level of service, allowing resources to be reinvested into other areas of the network. With the varying length and requirements of London's bus routes, the introduction of this new technology ensures that infrastructure is in place to further support our zero-emission ambitions.

From 2023, we will extend this work with pantographs conveniently located at each end of route 358 between Crystal Place and Orpington.



Ultra Low Emission Zone extension

In October 2021, we expanded the Ultra Low Emission Zone (ULEZ) from central London up to, but not including, the North and South Circular roads, making it the largest zone of its kind in Europe. Research published in a report of the first six months of the expanded zone, published in July 2022, showed that the ULEZ has already been hugely successful in central and inner London, helping to reduce roadside pollution levels by 44 per cent in central London and 20 per cent in inner London.

We need to go further. In January, the Mayor published an independent report to develop pathways toward his target of London reaching net-zero carbon by 2030. As well as the urgent need to reduce carbon emissions and address climate change, we still need to reduce toxic air pollution and cut congestion.

Following a 10 week consultation between May and July 2022, the Mayor announced a London-wide expansion of the ULEZ in August 2023, which will be supported by a scrappage fund to help low income and disabled Londoners, charities, micro-businesses and sole traders to scrap or retrofit their non-compliant vehicles.

Expanding the ULEZ London-wide will save 27,000 tonnes of carbon dioxide in outer London, nearly double that which the central London ULEZ achieved in its first year of operation.

44%

lower nitrogen dioxide emissions in central London as a result of the Ultra Low Emission Zone



94%

of vehicles seen driving in the zone meet the ULEZ standards, up from 39 per cent in 2017



Sustainable drainage

We are working to support the Mayor's Transport Strategy target of 50,000 additional square metres draining through Sustainable Drainage System every year on London's roads.

We have agreed a funding grant worth more than £0.6m from Thames Water to deliver multiple sustainable drainage projects on our roads by 2025 to help reduce the risk of surface water flooding. There are four major projects

planned that will receive run-off from more than 23,000 square metres of catchment. All future road renewal projects will consider sustainable drainage systems that could help support biodiversity.

This is in addition to up to £2m per year that we have allocated in our Business Plan for climate change adaptation measures, including sustainable drainage.

Working towards a zero-emission bus fleet in London

London has led the way in the electrification of buses in the UK, with more than 850 zero-emission buses already on the road across the capital.

In September 2021, the Mayor announced that all new buses in our fleet will be zero emission and accelerated our plan of delivering a 100 per cent zero-emissions bus fleet from 2037 to 2034.

Making London's bus fleet – the largest in Europe – zero-emission will give British bus manufacturers the confidence in

large order requests and enable them to significantly ramp up production. This will enable local authorities to progress towards zero-emission targets that would not be possible otherwise. In this way the acceleration of London's shift to zero-emission is bringing down costs and enhancing products for the entire country.

With additional Government funding, we could make the bus fleet zero-emission by 2030, which would save five million tonnes of carbon.

50%

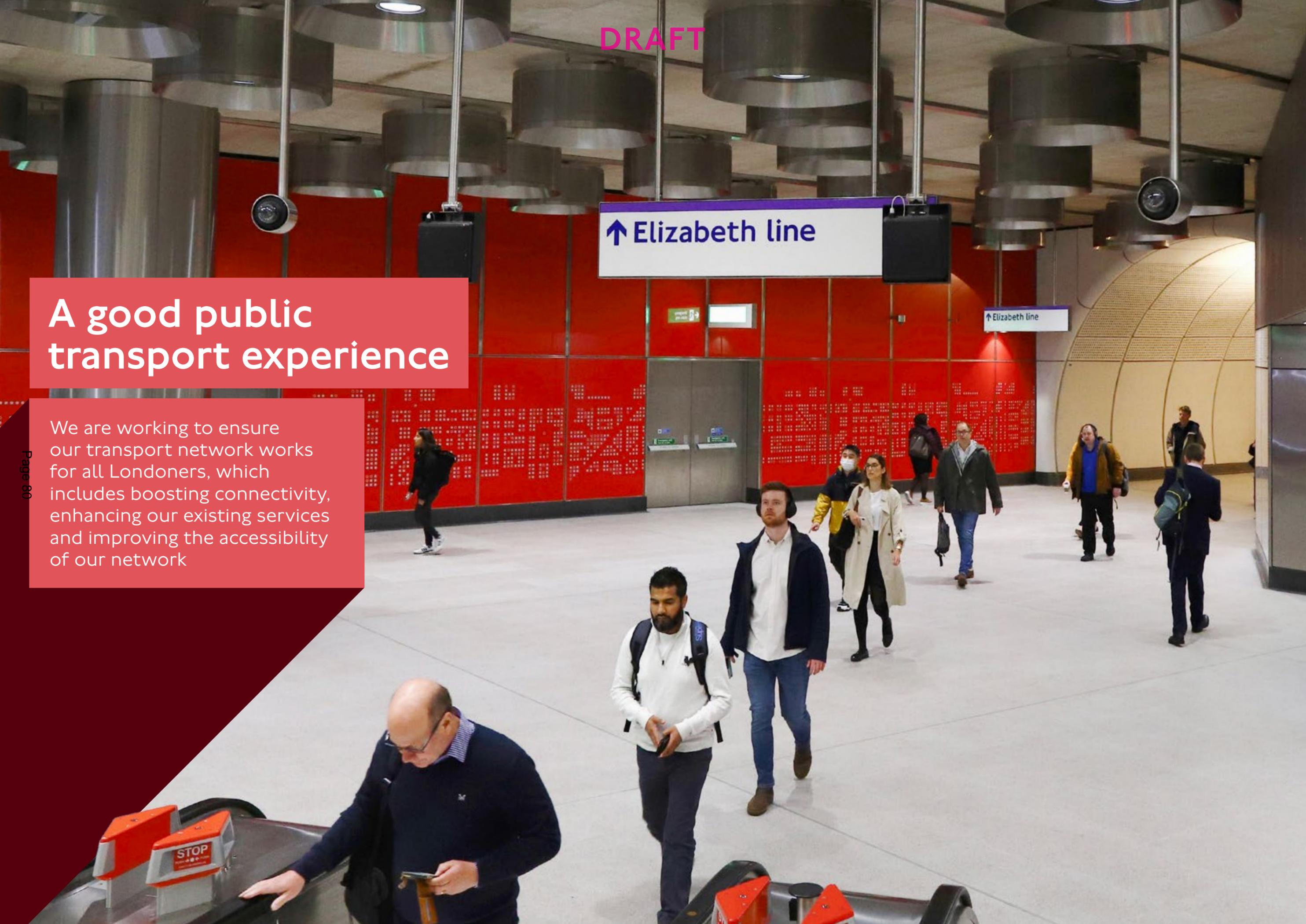
of new bus orders in the UK come from London



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A good public transport experience

We are working to ensure our transport network works for all Londoners, which includes boosting connectivity, enhancing our existing services and improving the accessibility of our network



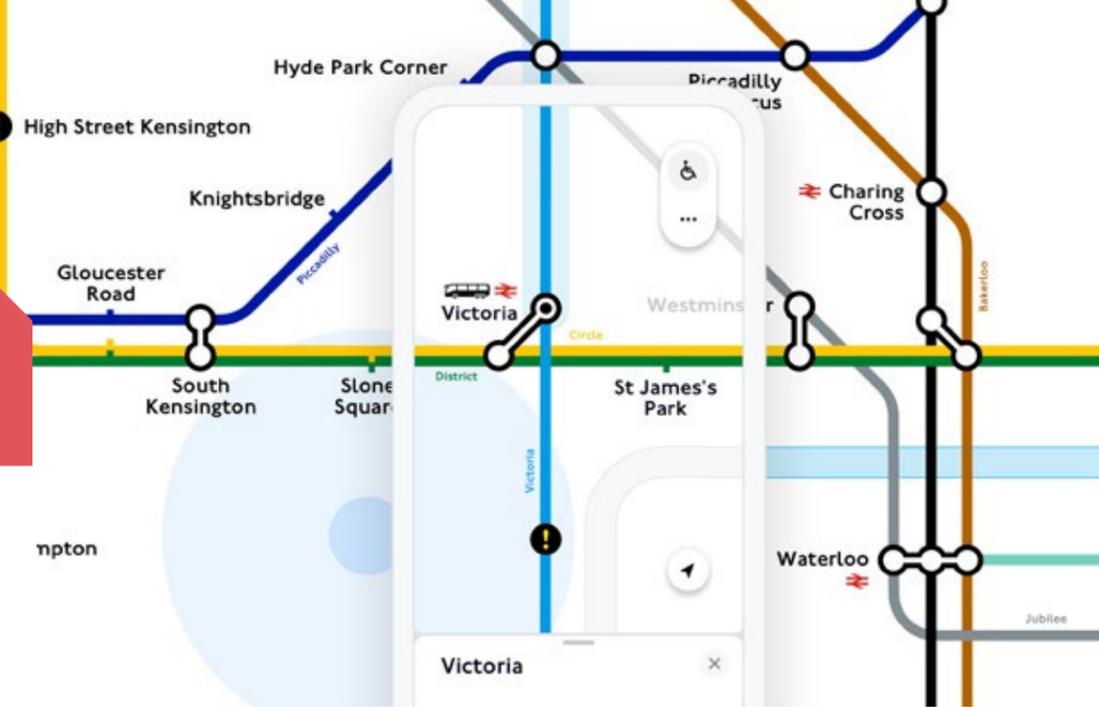
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Accessible travel

Public transport will be safe, affordable and accessible to all. This includes continuing our work to extend the number of step-free stations. We have submitted bids for Levelling Up funding at Colindale and Leyton stations. We will also start a new programme to improve safety for women and girls, including policy reviews, service improvements, technology solutions, communication and engagement, and culture and training

50%

reduction in additional journey time by step-free routes by 2041

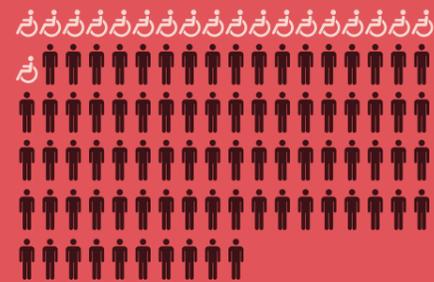


Reducing crowding at our Tube stations

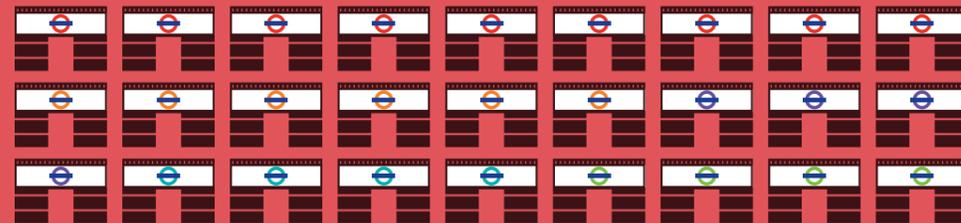
During 2021/22, we added functionality to our TfL Go app with real-time information on how busy Underground stations are, further reassuring customers as they return to the network. For the first time, we are also showing detailed accessibility information for stations and platforms, including live step-free access status based on lift availability.

19%

of London's population have a disability



Step-free access



92

step-free stations on the London Underground, which is 33% of stations

41

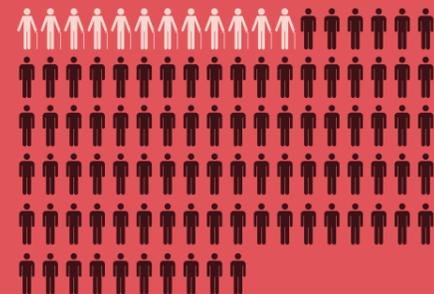
step-free stations on the Elizabeth line, which is the entire line

62

step-free stations on the London Overground, which is 55%

12%

of Londoners are aged over 65



45

step-free DLR stations, which is the entire line

38

tram stops are step-free, which is 100%

100%
of our buses are step-free

Over the past year, we have made significant progress reducing the differential journey time for those that need step-free access, and now with the Elizabeth line, the difference in journey time will be reduced by 40 per cent. We have also submitted bids to the Government for Levelling Up funding to make Colindale and Leyton stations step-free. We will develop a pipeline for the next stage of accessibility programme, following the public consultation, and we will continue to seek opportunities for third-party funding to deliver more accessibility projects across the network.

Keeping our colleagues and customers safe

Over the past year, we have worked with transport police and community groups to launch a poster campaign across the network to highlight our zero-tolerance approach to hate crime and abuse.

We are also tackling violence against women and girls by rolling out sexual harassment training to our frontline

customer service staff and enforcement officers to help them respond to reports, support customers and each other, and challenge behaviours. Hundreds of staff have already completed the training. Sexual harassment will also form part of the new diversity and inclusion training being delivered to all 25,000 bus drivers from 2022/23.

Travel concessions

To help meet the conditions of our funding agreement, the Mayor announced in December 2021 that he had to consider some modifications to fares structures and ticketing to raise £60-80m per year. This will involve some hard decisions, but we must balance being fair with what is financially prudent.

In September 2022, we implemented two of the options. These were all-day peak Heathrow fares for journeys that start or end at Heathrow Airport or go through Zone 1 and increasing the charge for a new Oyster card from £5 to £7.

Other options still being considered are increasing the age eligibility for the 60+ photocard where the age of eligibility would increase bi-monthly, restricting the 60+ and Older Persons Freedom pass for use after 9am, and withdrawing from the Travelcard agreement with the Train Operating Companies.

The Mayor managed to save free or discounted travel for under 18-year-olds and those with a 60+ Oyster or Freedom Pass on London's Tubes, buses and trains.



Free travel for lowest paid transport workers

In September 2022, the Mayor asked us to extend free travel on the capital's public transport network for our lowest paid contract workers.

Around 5,000 transport workers who were not previously eligible for free travel and who are paid the London Living Wage will benefit from free travel. This will include cleaning, catering and security staff, with the cost covered by City Hall.

Colleagues that are directly employed by us already get free travel, and Oyster cards are also issued to bus drivers and operators of other TfL services as part of their benefit package.

It is proposed that the free travel will be introduced for eligible staff of our suppliers by April 2023. At a time when the cost of living is increasing, and Londoners on the lowest incomes are being hit the hardest, the Mayor is taking action to ease the pressure faced by the lowest paid transport workers.



Quality transport

We continually work to make public transport pleasant, efficient, reliable and improve the customer experience. We are investing in new DLR trains and will replace our Piccadilly line fleet while continuing to push for further capital investment for large-scale projects

 **5-15%**

improvement in average bus speeds, within safety and speed limits, by 2041

Further capital investment

We will continue to make the case to central Government for further capital investment for large-scale projects that are unaffordable from our operating revenue alone. This includes replacing the original trams in the fleet as they are becoming increasingly unreliable, replacing the 50-year old trains and upgrading the signalling on the Bakerloo line, and upgrading the Piccadilly line signalling, which would improve reliability and provide the capability to increase frequency beyond 27 trains per hour.



Upgrading our Piccadilly line services

We will continue to deliver the new generation of trains for the Piccadilly line to replace the existing 1970s fleet. The new air-conditioned trains will be highly reliable, more energy efficient and better designed to be more accessible, with improved customer information and security features. The trains will begin to replace the current fleet from 2025, making journeys faster, more frequent, and reliable through the heart of the capital. The frequency of trains in peak hours will rise from 24 to 27 trains per hour from 2027.



Branding boost for the London Cable Car

The London Cable Car launched a new two-year sponsorship deal with technology company IFS to ensure it continues to be one of London's top attractions. Soaring 90 metres above the Thames, the newly branded IFS Cloud Cable Car links The O2 and Greenwich Peninsula with City Hall and ExCeL London, as well as a number of hotels and restaurants on both

sides of the river. The deal also saw the terminals renamed as IFS Cloud Greenwich Peninsula and IFS Cloud Royal Docks when the rebranding was unveiled in October 2022.

We will continue to look for ways to maximise the value of this unique asset, including innovative partnership and promotional activities.

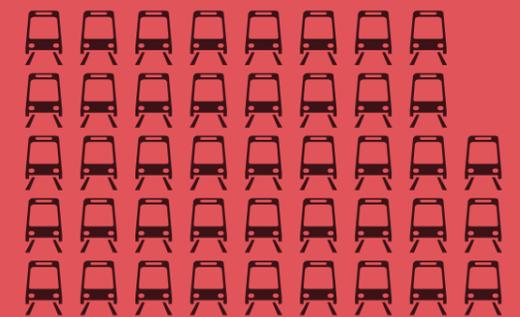
New DLR rolling stock

A new fleet of 43 trains is being manufactured to replace 33 older trains with up to 11 additional trains, funded by the Housing Infrastructure Fund to expand capacity. Each five-car train will be around 86 metres long, equivalent to three of the current fleet coupled together, to enhance capacity, journey time and the customer experience.

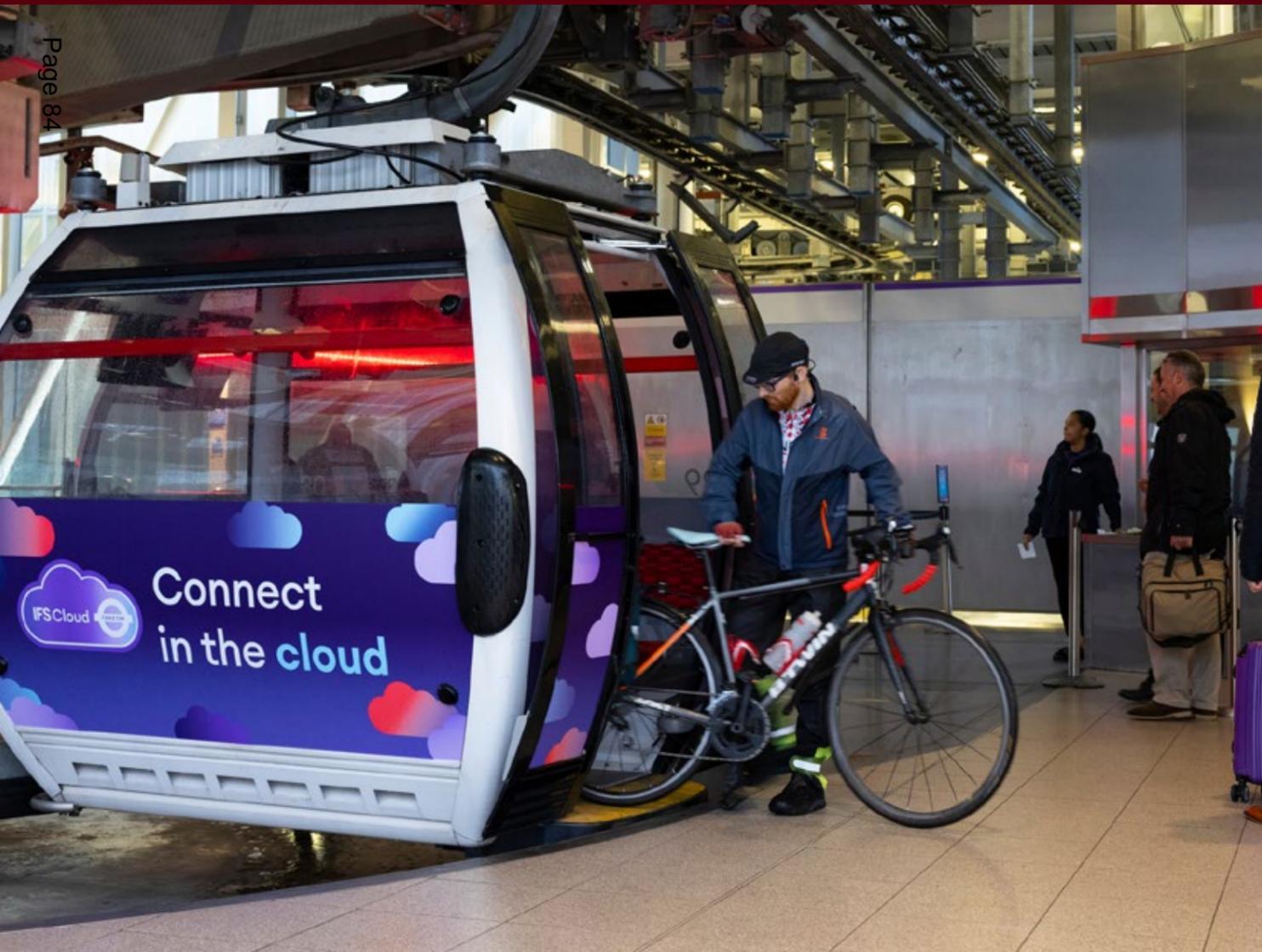
From 2024, we will deliver new trains onto the DLR to replace two-thirds of the existing fleet and provide 10 more trains to make the network more reliable, as well as expand capacity and support population and employment growth across the network. The new trains will provide more comfortable journeys to customers with walk-through carriages, real-time travel information, air conditioning and mobile device charging points.

43

new DLR trains being manufactured



86 metres long for each of the new five-car DLR trains



Improving security

We are a key player in the safety and security of London through the maintenance and operation of the transport network. We work to strengthen our defences by optimising the relationship between our physical, personnel, cyber, data privacy and counter-fraud security measures to protect customers and colleagues from hostile and deliberate actions that cause harm.

We are continually improving our security maturity to monitor our critical pathway progress. We have regular access to threat briefings, which inform our planning and decision making to ensure we have robust security defences.

We have ongoing security improvement programmes across the organisation and are delivering a security governance and culture programme, all of which will play a vital role in responding to security threats. We continue to refresh our understanding and risk management of corporate vulnerabilities, and take on board best practice learning where applicable.





Renewing our assets

It is essential that we renew our assets to ensure our network remains safe and operable. Renewals essentially enable the Mayor's Transport Strategy as they have a core role to play in the decarbonisation of our services and support climate change adaptation. We renew using energy efficient equipment and materials, like LED lights, building insulation or using materials that have a reduced carbon footprint. Our assets are resilient to future climate changes, like sustainable drainage for higher intensity rainfall or using materials that are durable under extreme temperature cycles.

Over this Business Plan, we will renew around 35km of Tube track, resurface around 550km of roads and around 20km² of road structures, and refurbish around 50 lifts and 30 escalators at our stations to maintain our step-free and accessible network. We will also renew or overhaul 700 vehicles in our Underground rolling stock.

The removal of our Government operating grant in 2017/18, followed by the pandemic, has had a severe impact on the investment available for renewals, with constrained renewals investment of between £400m and £600m per year for the last five years, against a need for £1bn per year. This has led to a decline in the state of our assets and a subsequent impact on service reliability.

This Business Plan sets out a renewals investment plan that builds up to a sustained level of around £850m per year. We must make best use of every pound we invest and will therefore also invest to improve our asset data, monitoring, and analytical tools. This will help us target our investments and ensure we achieve the best value for money.

Boosting mobile connectivity across our Tube network

Providing mobile connectivity to customers within the tunnels and on platforms across London will help people stay connected more easily. It will provide a long-term revenue stream for us and support economic growth across the city.

In July 2022, we announced that customers using all four major mobile operators are set to have access to BAI Communications' 4G and 5G-ready mobile network across the London Underground and Elizabeth line, including within tunnels.

We are excited that this project will give customers on these networks access to uninterrupted coverage while on the Tube and within the stations. When completed, the network will be the most advanced of any city in the world.

By the end of 2024, customers will be able to enjoy uninterrupted 4G mobile coverage in all ticket halls, platforms and tunnels. Furthermore, the networks will be able to provide mobile connectivity services, to enable emergency services teams throughout the London Underground environment to communicate.

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Connecting London

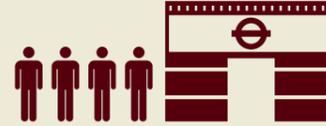
The public transport network must meet the needs of a growing London. This includes making targeted service level adjustments on the Tube and buses to meet demand. We will also continue feasibility work on the DLR extension to Thamesmead, Bakerloo Line Extension, West London Orbital and Crossrail 2. However, any network extensions depend on securing additional funding as the significant capital requirement is not affordable from our operating revenue alone

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40%

increase in capacity at Bank station when the upgrade work is finished



96%

of Londoners living within 400 metres of a bus stop by 2041

Boosting our services at Bank station

Our major upgrade of Bank station is improving the experience for customers as we support recovery and growth in the City.

The works involved a 17-week closure of the Northern line Bank branch in January 2022. Ahead of this, we ran a London-wide communications campaign to give customers the tools they needed to re-time, re-route or use alternative options for their journeys. We also provided a new bus route, number 733, from Oval to Moorgate, Finsbury Square, as well as extra Tube services. The closure enabled us to complete vital and complex work on the new Northern line tunnel. The station reopened on 16 May 2022, with customers now benefitting from a new concourse and railway tunnel.

Customers using Bank station now have another new interchange route designed to make journeys quicker and easier with the opening of two new 100-metre moving walkways and three new escalators between the Central and Northern lines. The opening of the new interchange came just 15 days after three new escalators were unveiled between the Northern line and DLR on 13 October, shaving up to nine minutes off journey times of those interchanging between these two lines. Around 40 per cent of customers using the station are changing between lines. There are more updates to come, including step-free access to the Northern line and a new entrance at Cannon Street.

These improvements to Bank station will address long-standing capacity issues and make journeys through the station quicker, easier, and more comfortable as well as significantly improving the customer experience.

Journey time boost on the Elizabeth line

We introduced through-running on the Elizabeth line on 6 November 2022, when the central tunnels were joined up to provide a direct route between Heathrow and Reading in the west and Shenfield in the east. Further improvements will be completed by May 2023. People landing at Heathrow Airport can travel straight through central London on a direct train to areas such as Farringdon and Canary Wharf in as little as 36 and 45 minutes respectively at weekends and 40 and 51 minutes respectively during the week.

Delivering on our Bus action plan

Our Bus action plan, published in March 2022, sets out our long-term vision for an even more attractive bus service, focusing on an inclusive customer experience, safety and security, journey times, connections, and decarbonisation and climate resilience. Key to the plan is our bus safety programme and work to deliver 25km of new bus lane by 2025, as well as a fully-zero-emission fleet by 2034 at the latest. We are also focused on improving the experience for customers, such as

those seen on route 63, which has ultra-modern electric buses and better customer information at bus stops.

We have been reviewing bus services to ensure they reflect current and projected use, while ensuring key links are maintained across the city. Bus service improvements include extending route 324 in Stanmore to better serve the Royal National Orthopaedic Hospital, and making changes to support the new Elizabeth line.

Outer London bus services

We are improving connectivity in outer London, where the majority of Londoners live but there are fewer public transport options. We will introduce the proposals consulted on in 2020 to improve services in Sutton and Croydon, which include two new routes and we are consulting on proposals for a new cross-river bus network as part of the opening of the Silvertown Tunnel in 2025.

New services and improvements, which will see more than a million further kilometres added to the bus network, are also planned to support growth areas in a number of other outer London locations, including Brent Cross, Haringey Heartlands, Harrow, Havering, Southall and Wanstead. A wider programme is under way to see where there are opportunities to increase frequencies on existing routes during off-peak times in outer London.



192

modern, air-conditioned, walk-through trains are already running across the Circle, District, Hammersmith & City and Metropolitan lines



32

trains per hours across the four lines in the central area when the upgrade is complete



Delivering our Four Lines Modernisation programme

The Circle, District, Hammersmith & City and Metropolitan lines are being modernised under a single combined and integrated project known as the Four Lines Modernisation. We have also made progress in replacing the unreliable, ageing signalling infrastructure with a new signalling and control system, enabling us to improve reliability and journey times on these lines.

In March 2022, we upgraded the highly complex junction at Earl's Court and completed the switch to new digital signalling across the entire Circle line. This means that the Metropolitan, District and the Hammersmith & City lines are operating under the new signalling in the central area. The area now operating under the new signalling contains 42 stations and four complex junctions. As a comparison, the entire Jubilee line has 27 stations.

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New homes and jobs

Planning new developments around walking and cycling for local trips, and public transport where walking and cycling is impractical, enables people to live active and healthy lives and enables the city to function efficiently as it recovers and grows



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Unlocking London

Transport investment will unlock the delivery of new homes and jobs. Wherever possible, we will work with developers to deliver on our outcomes including growth and accessibility, and leverage opportunities for third-party funding to help unlock new homes and jobs across London

 **36%**

of Greater London, rising to 56% for Opportunity Areas, population living in public transport accessibility level 4 or above, by 2041

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Elizabeth line services

Even before it opened, the Elizabeth line had supported the delivery of an additional 54,725 new homes along the route, as well as increased planning activity near many stations along the corridor. To improve links to the Elizabeth line stations in east and south-east London, where many customers will use buses to get to and from stations, changes were made to 14 bus routes. The changes took effect from May 2022 and included the new route 304 between Manor Park and Custom House stations.



54,725

new homes delivered within one kilometre of an Elizabeth line station between 2008 and 2021



20,000

students trained, against an initial target of 8,000

1,000

apprenticeships taken on during the project



Public transport

Connections on public transport are key to unlocking parts of London to provide viable places to build homes and create jobs, generate placemaking and other benefits. At the same time they provide new and accessible connections, improving the quality of the journey. The sustainability of developments is an essential part of reducing carbon emissions from transport.





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Improving the London Overground

We have secured significant third-party funding for the first phase of work to improve the London Overground line between Highbury & Islington and New Cross, West Croydon, Crystal Palace and Clapham Junction, through the Department for Levelling Up, Housing and Communities' Housing Infrastructure Fund.

The first phase will be delivered by 2025 and help unlock more than 7,000 new homes through a capacity upgrade at Canada Water bus station, a new station entrance and ticket hall with step-free access at Surrey Quays London Overground station, and power and signalling upgrades to enable future service improvements.



DLR extension to Thamesmead

Our Business Plan includes a contribution to feasibility funding for a potential DLR extension to Thamesmead to support the Thamesmead and Abbey Wood Opportunity Areas, as well as development at Beckton Riverside. This extension would require additional investment.



DLR Housing Infrastructure Fund

The Housing Infrastructure Fund will be used to buy 11 new trains, remodel Beckton Depot to accommodate the extra trains and support the delivery of a mixed-use development opportunity at Poplar Depot, including a link bridge over Aspen Way. The investment will result in more frequent services on both the Woolwich and Lewisham branches of the DLR.

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Northern Line Extension

This new extension, which saw new stations at Nine Elms and Battersea Power Station, provides access to the Vauxhall Nine Elms Battersea Opportunity Area and supports delivery of 20,000 new homes and 25,000 new jobs.

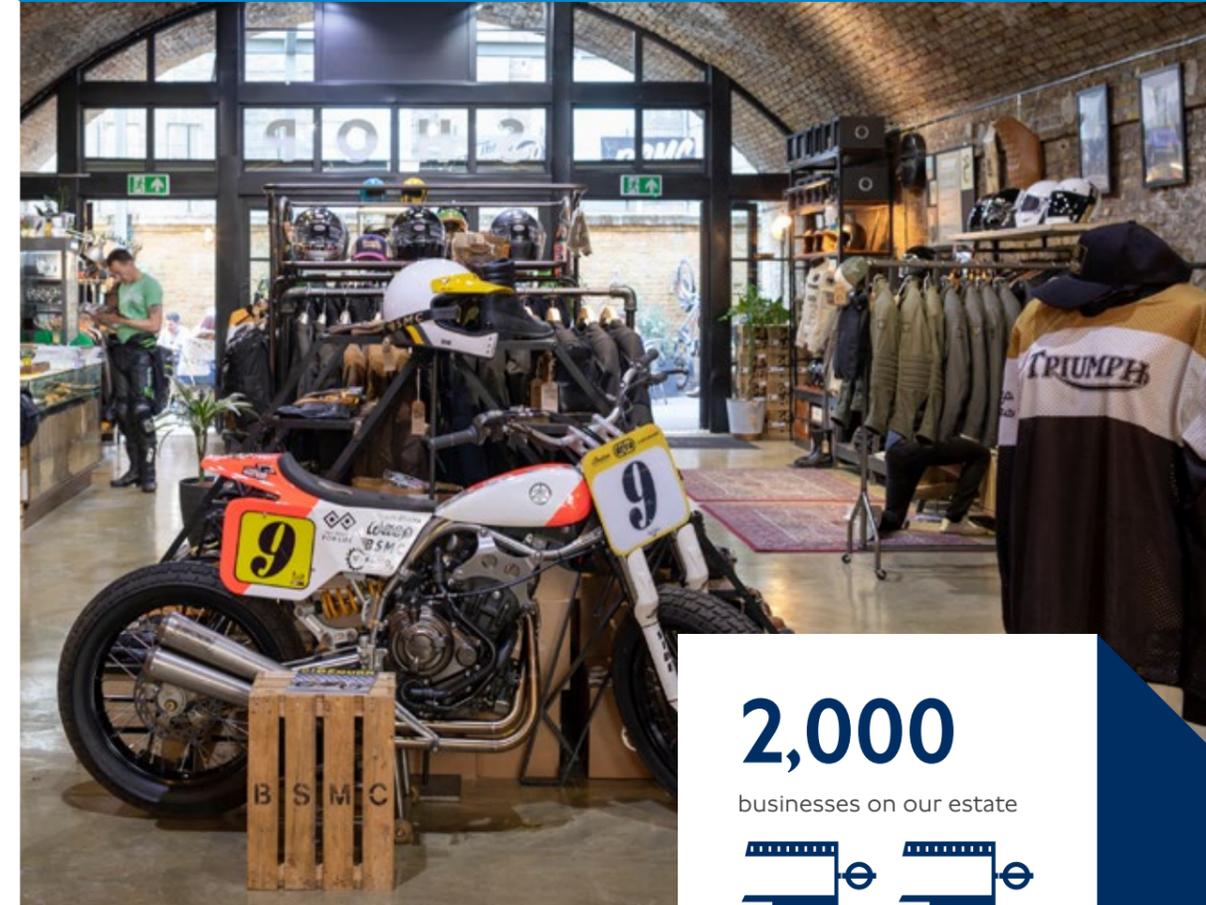


5million

passengers pass through the new Northern Line Extension stations each year



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2,000

businesses on our estate



2,500

new homes to start construction across 12 sites in 2022/23

1,750

homes under construction, with more than 250 already completed



Barking Riverside extension

We have supported the largest housing development in east London by extending the London Overground to Barking Riverside, with planning permission granted for 10,800 homes, along with new schools and community space. Without the London Overground station, the full potential of the site would not have been achieved.



Developing our property portfolio

Our commercial property company, TTL Properties Limited, will provide sustainable revenue to reinvest in public transport, while delivering thousands of new homes for the capital, many of which will be affordable.

As well as developing new homes, TTL Properties Limited will continue to invest in our business estate to ensure it continues to be a sustainable powerhouse for London's small- and medium-sized businesses.

Sustainable development

We are working to ensure active, efficient and sustainable travel will be the best option in new developments

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Green developments

We have ensured policies require transport land and assets to be safeguarded, and for car parking provision to be reduced in new developments. Every car-free home delivered in London brings down car ownership and encourages people to shift their transport mode to greener options.



Our new Sustainable Development Framework

Following nearly three years of development, piloting and collaborating, our new Sustainable Development Framework sets out how social impacts, economic development and environmental stewardship can be integrated into all our projects. As well as looking at the climate emergency, the framework addresses a host of wider environmental, social, and economic issues.

By sharing our experiences, we aim for our portfolio of projects to lead the commercial building sector in delivering sustainable developments for all Londoners. We are engaging with our partners and stakeholders to finalise the detailed guidance that will support the framework. The framework is a key tool that underpins how we work with partners and stakeholders on our commercial development projects.

Our London Plan guidance

We have developed, published and consulted on London Plan guidance on sustainable transport. This guidance is a material consideration in planning decisions and strengthens our ability to protect transport assets and operations across London. It replaces out-of-date, revoked guidance and is much more strongly focused on ensuring boroughs plan active travel networks and enhance the transport network through new developments.



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' and helping to create a safer, 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 by walking, cycling or using public transport by 2041. To make this a reality, we prioritise sustainability, health and the quality of people's experience in everything we do.

We run most of London's public transport services, including the London Underground, London Buses, the DLR, London Overground, Elizabeth line, London Trams, London River Services, London Dial-a-Ride, Victoria Coach Station, Santander Cycles and the IFS Cloud Cable Car. The experience, reliability and accessibility of these services is fundamental to Londoners' quality of life.

We manage the city's red route strategic roads and, through collaboration with the London boroughs, we are helping to 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, improve air quality, revitalise town centres, boost businesses and connect communities. As part of this, our expanded Ultra Low Emission Zone and fleets of increasingly environmentally friendly and zero-emission buses are helping to tackle London's toxic air.

During the pandemic, we took a huge range of measures to ensure people were safe while travelling. This included extensive cleaning regimes across the public transport network and working with London's boroughs to introduce the Streetspace for London programme, which provided wider pavements and cycle lanes for people to walk and cycle safely and maintain social distancing. London's recovery is vital to the UK's recovery as life returns to normal. We want to ensure London avoids a car-led recovery and we continue to reassure people the capital and our transport network is safe and ready for them.

We have constructed many of London's most significant infrastructure projects in recent years, using transport to unlock much needed economic growth. This includes major projects like the extension of the Northern line to Battersea Power Station and Nine Elms in south London, as well as our work at Barking Riverside and the Bank station upgrade.

Working with the Government, we opened the Elizabeth line in time for Queen Elizabeth II's Jubilee. This transformational new railway adds 10 per cent to central London's rail capacity and supports the delivery of high-density, mixed-use developments, which are planned around active and sustainable travel to ensure 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 using information, 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 who 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. By working together, we can create a better city as London's recovery from the pandemic continues.

Appendix 3

TfL Capital Strategy 2023

11 Background

- 11.1 The Prudential Code for Capital Finance in Local Authorities (2017) requires all local authorities including Transport for London (TfL) to prepare and publish a Capital Strategy. This 2023 Capital Strategy supersedes TfL's Capital Strategy published in previous years.
- 11.2 On 30 August 2022, we reached agreement with the government on funding until 31 March 2024, which keeps us on track to reach operational financial sustainability by April 2023. The agreement with government means that across the funding period, we are able to deliver more capital investment than previously budgeted, although still below the long-term level necessary to meet the priorities of national and regional government.
- 11.3 TfL plays a crucial role in driving growth and jobs across London and the UK, and equally we can support the government's national priorities to progress to a carbon-free and climate change resilient future and create wealth and employment that will level up the national economy. In the short term, we are seeking to maximise the benefits we can deliver within a constrained capital envelope, but it remains important to look ahead and identify what investment is needed to renew and improve the transport network in line with the Mayor's Transport Strategy (MTS) and in support of national priorities. Even with the uncertainty of long-term planning, this Capital Strategy will support us in being resilient to a wide range of potential future economic and transport demand outcomes.
- 11.4 Our Capital Strategy sets out the investment required to maintain safety and operability in the short term as well as the level to which investment should over time increase to achieve the aims of the MTS. The MTS, published in 2018, aims to encourage a shift from cars to active, efficient and sustainable modes of travel, with the central aim for 80 per cent of all trips in London to be made on foot, by cycle or using public transport by 2041. This Capital Strategy covers a 20 year period until 2042.
- 11.5 We will continue to make the case to government for confirmed capital funding over the long term to support the level of investment described here. We have already recognised the new realities brought about by the pandemic and adapted our capital investment to defer major growth schemes such as Crossrail 2 and the Bakerloo Line Extension, so we can focus on protecting core assets and services. The Capital Strategy reiterates our preferred level of investment from 2030 onwards, as set out in the Policy Consistent scenario of our 2021 Long-Term Capital Plan. In the first five years, this Capital Strategy is aligned to our GLA Budget submission, with investment assumed to increase through the late 2020s towards the necessary long-term level to support key MTS goals.
- 11.6 The Capital Strategy forms part of TfL's financial planning process and is based on a number of assumptions including the likely cost of the future capital programme and expectations in terms of funding. It is a planning exercise that will need to evolve as TfL's long-term funding position becomes clearer, and the Capital Strategy will be reviewed and developed year on year.

12 Benefits

- 12.1 Our Capital Strategy enables clearer and more transparent long-term decisions to be made on the investment needs of London. Many transport schemes take a long time to develop and deliver. A long-term view that reflects the current realities and charts a trajectory towards supporting London's post-pandemic recovery is critical to ensure enhancements to London's transport network are delivered when they are needed.
- 12.2 Our Capital Strategy sets out a pipeline of investment for 20 years. Giving clear sight of our investment aspirations over this period, subject to funding, is useful for a variety of audiences, including customers, London's businesses and our supply chain, who will be able to resource accordingly to meet the demand for construction in London.
- 12.3 Investment in transport infrastructure benefits many different groups, and it is appropriate that the funding packages for these investments reflect these various beneficiaries. These beneficiaries range from central government, through increased taxation on economic activity and property, all the way to local businesses and residents, who most directly benefit from improved transport links. Formulating full funding packages for large schemes is complex and takes time, as was the case with Crossrail 1. This Capital Strategy identifies schemes in the longer term that require such funding packages and discusses some options for funding them. Developing this work further will help to ensure such schemes are funded in a fair and sustainable way.
- 12.4 It is not possible to commit to long-term projects unless and until there is long-term funding available to ensure they can be completed. Therefore, a lack of certainty of funding can delay the commencement of essential improvements. A key benefit of the Capital Strategy is that it enables these funding requirements to be identified in sufficient time for them to be addressed.

13 Approach and Updates this year

- 13.1 Our Capital Strategy reflects the long-term priorities set out in the MTS and other Mayoral strategies, including the need to run services safely and reliably. This is set in the context of significant uncertainty on the level of available funding to TfL which will be determined by the pace and level of recovery of passenger demand and the long-term level of government funding.
- 13.2 This strategy is based on previous Capital Strategy, which was approved by the TfL Board in December 2021. Last year's Capital Strategy was based on the 2021 Long-Term Capital Plan (LTCP), which was approved by the TfL Board in July 2021. The late agreement of a new funding settlement this year and the ongoing uncertainty about longer-term funding means we have not refreshed our LTCP in 2022. We plan to complete a more fundamental update to our LTCP and Capital Strategy in 2023. Therefore, this year's Capital Strategy is broadly similar to last year's, though updated in the early years to reflect this GLA Budget submission and the assumptions behind it, with minor changes to later years where needed to be consistent with this. We have also updated the outturn figures for the significant changes in inflation over the period, but this does not impact the strategy in real terms

- 13.3 In the first five years of the strategy, the first two years are covered by our funding agreement with government with the remaining three years seeing us maximise achievement of outcomes as far as possible within our funding constraints.
- 13.4 The following five years broadly align to the principles of the Financially Constrained scenario of our LTCP ramping up our investment towards the key MTS goals. In the later years, our investment spend transitions into the Policy Consistent LTCP scenario which delivers closest to the MTS vision by 2041.
- 13.5 Due to the need to combine different scenarios to show a transition from a low rate of investment in the next five years towards the Policy Consistent level by the 2030s, there are some instances of spend profiles that, in a more stable planning environment, could be smoothed. As a result, this document is a high-level planning exercise rather than a detailed guide to very specific investment plans for the next 20 years. TfL regularly revisits its future forecasts and our understanding of future capital investment needs will develop and improve as the future environment becomes clearer.
- 13.6 Risk allowances have been updated and funding assumptions in the longer term are particularly indicative at this time, being subject to future discussions with the government. We hope that future Capital Strategies will be able to present greater clarity in this area.

14 Influences

14.1 Our Capital Strategy is directly influenced by:

- 14.1.1 the Mayor's policies and statutory strategies for London, including the MTS, the London Plan, and the London Environment Strategy
- 14.1.2 the UK's infrastructure requirements, as set out in the National Infrastructure Assessment
- 14.1.3 our near-term delivery plans and financial position, in particular the funding and conditions that were part of the funding agreement we reached with government on 30 August 2022
- 14.1.4 the condition and lifecycle of our asset base; and
- 14.1.5 underlying behaviour trends in London, as analysed in documents such as our annual Travel in London report.

14.2 Our Capital Strategy will be directly or indirectly influenced over time by:

- 14.2.1 central government policy, in areas such as direct infrastructure funding and devolution, as well as other specific policies such as the Transport Decarbonisation Plan.
- 14.2.2 external events with the potential to impact on the national economy, London's growth and/or our financial position, such as the war in Ukraine, the cost-of-living crisis, climate and ecological change and rising inflation levels. and
- 14.2.3 the Mayor's future decisions on allocation of devolved business rates to functional bodies of the Greater London Authority.

- 14.2.4 Availability of finance through bodies such as the UK Infrastructure Bank may affect availability of financing for our projects.
- 14.3 This Capital Strategy continues to set out the level of capital expenditure required in the long term to deliver the MTS, which was written and approved before the pandemic. We are experiencing a steady but ongoing recovery on our transport network as a result of the pandemic with ridership now increasing to around 80 per cent of pre-pandemic levels. Demand on our network interacts with transport trends in the wider south east and rest of the UK, for example through demand for commuting to/from London, which has been affected by the pandemic. Although the long-term effects of the pandemic will be complex and wide-ranging and impossible to fully predict at this time, the broad objectives of the MTS are almost certain to remain applicable in all potential future circumstances. Strategic aims such as increasing the shift to more sustainable ways of travel and improving the quality of public transport are central to securing a green recovery for London and supporting the national priorities of decarbonisation and economic growth.
- 14.4 Our financial planning since the pandemic has considered a range of potential demand scenarios to recognise the uncertainty around future travel demand. How the Mayor's transport policies in the MTS are implemented will need to be considered as the longer-term impacts of the pandemic on travel demand become clearer. As these long-term impacts become clearer, we will keep our future investment programme under review, and future Capital Strategies will further reflect any necessary changes resulting from new forecasts of future travel demand.

15 Policies

- 15.1 Our Capital Strategy is fully aligned to the Mayor's policies, the MTS policies and TfL's submission to the GLA's Budget on which the Capital Strategy is in part based.
- 15.2 Any activity in delivering the Capital Strategy will be executed in accordance with our statutory functions and approved policies. The most important of these policies and functions are outlined here.
- 15.3 In adherence with the Prudential Code for Capital Finance in Local Authorities (the 'Prudential Code') issued by CIPFA and last updated in 2021, the Capital Strategy references key principles underpinning our approval and governance processes for capital expenditure, commercial activity (including long-term liabilities) and treasury management. For detailed aspects, the documents referenced below and TfL Standing Orders are published on our website.
- 15.4 Capital spend on transport infrastructure and commercial/investment activity is budgeted for and included in our financial plans covering both the near- and medium-term. These plans are produced at certain points throughout the year and are approved by the Board (or, under delegation, the Finance Committee). We typically produce a medium-term plan that aligns to delivery of the overall MTS, and a more detailed budget, reflecting our near-term targets.
- 15.5 TfL's financial planning is balanced, integrating capital spend inclusive of commercial activity and investment strategies with the financing strategy for planned expenditure. Short-term extraordinary financial and funding assistance was provided by the government during the

coronavirus pandemic, culminating in the funding agreement of August 2022. The 2021 government Spending Review confirmed £1 billion annual investment funding for London's transport system to 2024/25 through Retained Business Rates.

- 15.6 TfL's commercial activity plans are produced reflecting the Investment Management Strategy (IMS) for non-financial assets, which is updated at least annually and considered by the Finance Committee prior to submission to the Board for final approval.
- 15.7 The IMS outlines the strategic objectives of the commercial activities, long term direction of the investment programme, metrics to inform decision making framework, risk management policies and the use of independent and specialist experts.
- 15.8 TfL manages its investments in financial assets and its debt financing in line with its Treasury Management Strategy (TMS), which is updated at least annually and approved by the Finance Committee.
- 15.9 TfL's treasury management is directed and governed by the TMS comprising the Investment Strategy, Borrowing Strategy, Liquidity Strategy, Risk Management Strategy and Counterparty Exposure Limits. The TMS is implemented, operated and administered in accordance with the Treasury Management Policies and the TfL Group Policy Relating to the Use of Derivative Investments, both of which are approved by the Finance Committee.
- 15.10 Within the year, unbudgeted activity is monitored by various means and is explicitly captured through monitoring of the Prudential Indicators which are aligned to the TfL Group Budget and TfL's submission to the GLA Budget, and define an operational boundary and authorised limit of external debt including borrowing and long-term liabilities for the following year. The Prudential Indicators set an expected estimate of capital financing costs and capital expenditure for the following year. The Prudential Indicators are considered by the Finance Committee prior to submission to the Board for approval annually.
- 15.11 Financial guarantees granted by TfL are subject to approval by the Chief Finance Officer or higher authority according to the approvals matrix approved by the Board, as set out in TfL Standing Orders. Under section 161 of the Greater London Authority Act 1999, details of all financial guarantees so granted are disclosed annually in TfL's Annual Report and Statement of Accounts.
- 15.12 Outturn performance against the Board approved Prudential Indicators is presented to the Finance Committee who also monitor treasury management by verifying the TMS has been implemented and administered appropriately and are responsible for regular in-year monitoring of outturn performance against the TfL Budget.

Financial Investment Strategy

- 15.13 TfL maintains a low risk appetite consistent with the good stewardship of public funds, the overriding principle being the prioritisation of security before liquidity and liquidity before yield.
- 15.14 TfL considers the risk of its overall portfolio as well as individual investments, seeking to diversify its investments and has regard to the exposure to any one counterparty, country, industry, investment type, and credit. TfL targets allocating a portion of the portfolio across sovereign exposures, government agencies, financial institutions, and corporate instruments,

subject to investments available at the time. TfL will seek to invest cash responsibly by investing in counterparties with strong Environmental, Social and Governance (ESG) performance and policies.

- 15.15 The maturity profile of investments reflects the expected cash flow requirements of TfL and accommodates for potential forecast variances. The maximum tenor of cash investments is one year.
- 15.16 TfL seeks to achieve year-to-date returns greater than the year-to-date average benchmark of the Sterling Overnight Index Average (SONIA) which is widely regarded as the appropriate benchmark for short-term cash investments and is used by professional investors such as Money Market Funds.

Borrowing Strategy

- 15.17 TfL's objective is to manage its borrowing in a manner that is affordable, sustainable and prudent, combining flexibility, security of access to funds, diversity of funding sources and value for money.
- 15.18 We have historically used borrowing to help finance investment in London's transport network. All of our borrowing is conducted in line with the provisions of the Prudential Code for Capital Finance in Local Authorities issued by the Chartered Institute of Public Finance and Accountancy.
- 15.19 The total value of outstanding borrowing and other long-term liabilities is maintained within an Authorised Limit agreed by the Mayor and approved annually by the Board (as required by the Local Government Act 2003) through a separate Prudential Indicators document.
- 15.20 Given the reduction in our income during the pandemic, borrowing has not made up a significant source of our recent funding, although we have continued to refinance the majority of our maturing debt. Borrowing may continue to support our capital investment programme in future, when we reach and maintain financial sustainability. Our latest business plan assumes around £1.2bn of incremental borrowing is anticipated across 2024/25 and 2025/26, taking our outstanding borrowing to £14.0bn by the end of 2025/26, although this will be subject to a further assessment of affordability at that time. Borrowing will also be considered where the capital spend results in a clear increase in recurring operating surplus that can service the operating and financing costs.
- 15.21 In addition to the Public Works Loan Board being a readily available source to raise funds, TfL seeks to maintain access to a range of other financing sources.
- 15.22 Transport Trading Limited Properties (TTLP), a subsidiary of TfL, has secured a £200m three-year revolving credit facility and will draw on this facility as required to support its capital programme. Since 1 April 2022, TTLP has been financially independent of TfL and the revolving credit facility is non-recourse to TfL.
- 15.23 The TMS sets a limit on the level of variable debt exposure acceptable to TfL. As debt service represents a relatively significant part of TfL's annual expenditure, a high level of certainty over the interest payment amounts is desirable to meet the balanced budget requirement.

16 20 Year Capital Ambition

- 16.1 Our Capital Ambition over the long term is to deliver the outcomes of the MTS, including supporting the three pillars of that strategy: Healthy Streets and healthy people, a good public transport experience, and new homes and jobs.
- 16.2 In the later years of this Capital Strategy, we hope to improve our funding position to enable an increase in the level of investment towards what is required to improve the reliability, capacity and resilience of London's transport network, supporting London's development into a safer and greener city.
- 16.3 We estimate that delivering this Capital Ambition beyond the next five years would require an average annual spend of £4.9bn in outturn terms (including inflation), of which £3.3bn is the required cost to renew and replace existing assets. The remainder is required to deliver the enhancements and extensions that will support quality of life in the city as well as critical improvements such as making progress on decarbonising the transport network, eliminating death and serious injury from the transport network and cleaning London's air. The impact of inflation over 20 years is significant, and this is a large driver of the higher costs shown here compared to the first five years of this Budget.
- 16.4 Our Capital Ambition can be divided into three substantial categories, detailed below. Average annual costs in outturn terms for years 6-20 are shown for each category.

Rolling Stock and Signalling replacement (£1.2bn pa)

- 16.5 Across our rail services, TfL owns more than 800 trains, as well as signalling systems across each rail service and line. Underground trains have a design life of around 40 years and require replacing towards the end of this period, although in some cases it is possible to extend this life depending on asset condition. Light rail vehicles have a shorter life. We are already contractually committed to replacement programmes on the Piccadilly line and DLR. Like trains, signalling systems also degrade over time and require replacing when the costs of maintaining them are no longer efficient compared to the costs and benefits of replacing them.
- 16.6 To optimise whole-life cost, rolling stock should be replaced at the end of its design life or as close to it as reasonably possible. Over the course of the next 20 years, this will mean replacing the rolling stock on the Piccadilly, Bakerloo, Central, Waterloo & City, Jubilee and Northern lines, as well as rolling stock on Trams and more recent DLR vehicles. We will require funding support to enable this programme of replacements to progress, as set out in our funding agreement with government.
- 16.7 When TfL replaces life-expired assets, the new rolling stock and signalling typically provide much greater functionality than the older assets being replaced. This category assumes that we replace our assets with modern equivalents – which would perform at a higher level than the assets they are replacing, some of which date back to the 1970s or earlier.
- 16.8 Rolling stock for London Overground and the Elizabeth line is leased and not owned by TfL, so is not included here.

16.9 For signalling, costs are included for a replacement system on the Piccadilly line by the early 2030s, replacement Bakerloo line signalling, incremental replacement projects across the Central line and DLR, and ongoing management of existing systems on all other lines. These investments would deliver performance, reliability and capacity benefits, supporting communities all along these important routes.

Renewals (£2.1bn pa)

16.10 Separate from the large-scale projects to renew and replace rolling stock and signalling, our ongoing capital renewals cover the remaining investment in our existing asset base to maintain its condition and performance. This covers assets ranging from London Underground track, stations, power and other enabling assets to highways, bridges, cycle routes, IT systems and many others.

16.11 We continually assess asset condition to ensure we can maintain safe and reliable services. Our latest funding agreement has allowed us to increase the level of renewals of our assets compared to our previous Budget, although this is still below the rate we need to achieve in the long term. Beyond the early years of this strategy, we have increased renewals spend towards what is required for a more stable long-term investment rate.

16.12 Investing in maintaining the condition of all of our assets is crucial to the long-term sustainability of London's transport network. It supports the high standards of safety, reliability and environmental performance that we must deliver, as well as enabling the best whole-life cost for maintaining assets to be achieved. Failing to renew assets at an acceptable level will lead to reduced operations to maintain safety which will impact the reliability of our services, our revenue and financial sustainability. It will also lead to more inspections, maintenance and higher costs in the long term for emergency works and sub-optimal repairs. This strategy sets out a path to returning renewals investment to a sustainable level in the long term.

Enhancements (£1.6bn pa)

16.13 Our latest funding agreement will allow us to deliver additional enhancements compared to our previous Budget. This, however, is still below the rate we need to achieve in the long term. Beyond the early years of this strategy, we hope to be able to build up activity to accelerate progress towards making London a safer city, with cleaner air and greener, more inclusive environments. This long-term investment will also be aimed at delivering a transport network that will unlock growth and support future housing and jobs growth, to maintain London's competitiveness as a world-leading city for living, working and visiting.

16.14 The Enhancements category includes investment priorities that are required to deliver the wide range of improvements set out in the MTS. This includes progressing towards London's ambitious goal of making London's transport network zero-carbon; increasing mode shift to walking, cycling and public transport; our Vision Zero ambition to eliminate death and serious injury from London's roads; and providing step-free access at London Underground and rail stations. Improving the transport network will also require investment in our technology to increase productivity and improve customer experience.

16.15 As well as the capital investment on TfL's own assets included in this category, TfL contributes to improvements on London's street network through its operating account,

which funds work on borough roads through the Local Implementation Plans. As TfL cannot capitalise such costs due to them occurring on non-TfL assets, these sums are not included here.

- 16.16 This category also covers new-build schemes to extend existing lines or build completely new routes. We have been developing several such schemes that will unlock housing and growth across London, relieve crowding on the existing network and stimulate development in opportunity areas. None of these have been expected to commence construction in the next five years. We have adapted our capital plans to respond to our funding challenges by deferring these schemes and this presents a level of risk to delivery. Many schemes have developer and borough funding committed towards scheme development and/or delivery and delaying them will likely result in developers choosing to invest elsewhere, potentially outside London, losing significant third-party income to maximise economic growth in opportunity areas.
- 16.17 It remains crucial to focus on long-term demand and not solely on the volatility of our current circumstances. Network extensions require input from multiple stakeholders including the Mayor, developers, boroughs and other third-parties and due to their size and complexity they require bespoke delivery plans that take a long time to implement. We must plan now for longer-term enhancements that will enable us to prepare for a level of regeneration that will support recovery across London and the wider UK. It is not possible to commit to long-term projects unless and until there is long-term funding available to ensure they can be completed. Therefore, a lack of certainty of funding can delay the commencement of highly beneficial improvements.
- 16.18 The schemes included here are subject to funding becoming available to progress them. The schemes considered are a DLR extension to Thamesmead supporting up to 20,000 new homes along with bus transit links, the Bakerloo line extension to Lewisham which is assumed to commence in the 2030s and is aimed at improving connections within southeast London and into central London and the West London Orbital, a new rail service that would be part of the London Overground and improve connectivity across west and northwest London.
- 16.19 All planned schemes in this area will be dependent on third-party funding to support their affordability, reflecting the various beneficiaries such schemes deliver.
- 16.20 Many of these schemes would be likely to be delivered in cooperation with other organisations, but we have included the full estimated capital cost of each scheme at this stage as well as an assumption about funding (either from grant or other sources) that may be available to support such schemes. It is possible that TfL will not eventually incur the full capital cost as and when these schemes proceed to delivery.
- 16.21 There continues to be a strong case for developing Crossrail 2 as a major scheme for the longer-term development of London. At this stage TfL expects construction work on Crossrail 2 to commence outside the period covered by this Capital Strategy, but it remains an important long-term scheme for London. We continue to safeguard the route and are working with government to update this safeguarding. If a funding package can be identified,

work on the scheme could be brought forward to begin within the period of this Capital Strategy.

17 20-Year Capital Investment Plan

17.1 All projects included in the Capital Ambition are included within the Capital Investment Plan.

17.2 While the MTS deliverables are clear, it is not always possible to be precise about the exact schemes being undertaken, particularly towards the later years of the Capital Strategy. Where specific projects and cost estimates are not available, costs have been included based on appropriate comparator projects. This means the costs outlined in this Capital Investment Plan are not precise and will be expected to change over time.

17.3 The Capital Investment Plan covers work on TfL's existing network and anticipated extensions to it. Other investment in London's transport infrastructure not owned by TfL would be required to accomplish the outcomes of the MTS, but such investment is not included here, as it would not be classified as TfL's capital investment. TfL will continue to make the case for all investment required to deliver the MTS to be progressed, regardless of who owns the assets. If there is any transfer of responsibility for assets in future, then future Capital Strategies would reflect any required investment in this new asset base.

17.4 Increasing activity from the current level to the levels of investment proposed for later years of this strategy would require increasing our delivery capacity. This would be best supported by confirmation of long-term funding that would allow us to commit to planning and developing schemes with our supply chain to allow us to achieve the level of delivery necessary to support a larger capital programme.

17.5 While we have a funding agreement with government taking us to March 2024, the uncertainty of funding over a longer period constrains TfL's ability to optimise investment delivery. It is also inconsistent with the commitments we need to make to projects that take many years to design and build and an asset portfolio that, in order to be efficient, requires a whole life approach to maintenance. Without a clear picture of future resources, TfL cannot plan for the future of the network, and the benefits it brings nationally, in an optimal way.

17.6 The combined Capital Investment Plan and Capital Funding Plan are presented in Table 7.

18 20-Year Capital Funding Plan

18.1 TfL is on course to reach a financially sustainable position by 2023/24. This will mean that capital renewals are funded by operating income. While the level of renewals will need to increase in later years of this strategy, our intention will be to continue to fund them within a balanced operating account.

18.2 The remaining categories contain the largest number of schemes, including all streets investment and much of our London Underground and Rail investment to renew, improve and grow the existing network. A steady and sustained level of capital improvements not only delivers efficiencies and reduces whole life costs but improves the reliability of our transport network.

- 18.3 A significant funding source for these enhancements is the capital element of retained business rates (formerly paid as an Investment Grant direct from central government). This is insufficient to cover all investment included here, particularly given the need to replace rolling stock and signalling on the Deep Tube lines dating back to the 1970s or earlier.
- 18.4 Our funding agreements with government have acknowledged that we would not be expected to fully fund the replacement of life-expired rolling stock and signalling. Accordingly, we have assumed some government contributions towards this investment during the years of our Business Plan, although we note there is no confirmation of this beyond March 2024.
- 18.5 We regularly review the amounts we can borrow, ensuring they are prudent, affordable and sustainable. We have not assumed any incremental borrowing until after we have reached financial sustainability. Around £1.2bn of incremental borrowing is anticipated across 2024/25 and 2025/26, which is subject to a further assessment of affordability at this time. We also plan to refinance the borrowing due to mature throughout the period of this plan. We have not included borrowing in later years of this strategy, as our operating account is not forecast that far into the future, so affordability is not able to be assessed.
- 18.6 Network extensions not only improve transport but also stimulate a step change in development in the areas they run through, and they are of strategic importance to the future of London and the wider South East. We must plan for the long-term demand and growth that London will need in the aftermath of the pandemic, to put it on the path to full economic recovery. Network extensions not only unlock growth, jobs and new homes but increase capacity and accessibility to jobs. They are a significant contributor to the national priorities of economic growth, levelling up and decarbonisation and not delivering them will likely put London and the wider UK's economic recovery at risk.
- 18.7 Due to the size, complexity and expense of these schemes, they require bespoke funding and delivery plans, as was the case for Crossrail 1 and the Northern Line Extension. Sources of funding for these projects could range from central government investment grant through to devolved income streams, contributions from developers and other forms of land value capture. Elements of some projects would be expected to be delivered by bodies other than TfL, such as Network Rail.
- 18.8 Given the early stages of development of these schemes, it is natural that their funding packages have not yet been fully agreed. This Capital Strategy includes funding where sources have already been identified.
- 18.9 Other possible funding sources towards this investment are considered in the next section.

Table 7: Capital Investment and Funding

All figures are adjusted for future forecasts of inflation

TfL's Capital Strategy £bn	2022/23 to 2026/27 £bn	2027/28 to 2031/32 £bn	2032/33 to 2036/37 £bn	2037/38 to 2041/42 £bn	Total Yrs 6-20	Average pa Yrs 6-20
Crossrail	(0.3)	-	-	-	-	-
Rolling Stock and Signalling Replacement	(4.5)	(4.7)	(7.3)	(6.2)	(18.3)	(1.2)
Enhancements	(1.7)	(5.0)	(7.6)	(11.1)	(23.7)	(1.6)
TTLP	(1.1)	(0.7)	(0.1)	(0.1)	(1.0)	(0.1)
Renewals	(3.9)	(8.4)	(10.7)	(11.9)	(31.1)	(2.1)
Total capital expenditure	(11.5)	(18.8)	(25.8)	(29.3)	(74.0)	(4.9)
Funding						
Capital Receipts	0.8	0.7	0.1	0.1	1.0	0.1
Revenue Contributions	8.5	14.3	17.2	19.1	50.6	2.1
Borrowing	1.5	-	-	-	-	-
Working Capital and Reserve movements	0.4	-	-	-	-	-
Capital Grants	0.0	1.5	0.1	0.8	2.4	0.2
Crossrail I Funding	0.3	-	-	-	-	-
Total funding	11.5	16.5	17.5	20.0	54.0	3.6
Overall additional funding required	-	(2.3)	(8.4)	(9.3)	(20.0)	(1.3)

19 Ambition Gap

- 19.1 Beyond the first five years, there is a gap between the Capital Ambition and identified funding sources. The long-term financial situation of TfL is uncertain and also subject to discussions with the GLA and the government, although in the longer term there is greater flexibility and the potential ability to identify new, sustainable sources of funding.
- 19.2 The main funding source for investment before the pandemic was the capital element of retained business rates (formerly paid as an Investment Grant direct from central government). This is insufficient to cover all investment included here, particularly given the need to renew our existing assets while also investing to improve and expand our network. Delivering all of the investments London needs to replace and upgrade its infrastructure will require further funding beyond that currently identified.
- 19.3 Various mechanisms exist for raising this additional funding, including:
- a. **Further government support beyond the current business rates arrangements.** This could include a larger allocation to London, reflecting its contribution to the national economy, and a longer-term settlement enabling us to plan with more certainty for investments that will take many years to deliver. We continue to make the case to government, for confirmed capital funding to support the investment described in this strategy.
 - b. **Devolution of financial powers to London (and other cities).** London controls relatively little of the tax raised within it. Devolving powers over taxes such as stamp duty and vehicle excise duty could allow the cities of the UK to better manage their own growth.
 - c. **Generating an operating surplus and devoting this to investment.** We intend to achieve operational financial sustainability in 2023/24 and then generate a growing operating surplus from 2024/25 onwards. Any such surplus would be used to fund further investment.
 - d. **Generating new commercial income.** We generate income from property development, management of our media and advertising estate, and leveraging our expertise and intellectual property in markets in the UK and overseas. Any new commercial income (beyond that already planned) could potentially be reinvested in capital investment.
 - e. **Funding from new income sources.** We are considering and implementing new sources of operating income as part of the latest funding agreement conditions. This income is included within this strategy. Further new income sources identified in future could address the funding gap.
 - f. **Bidding for targeted support from central government.** This could come from existing sources such as the Housing Infrastructure Fund, Major Road Network funding, Public Sector Decarbonisation Scheme, or from new sources.
 - g. **DfT funding for Major Rolling Stock and Signalling Replacements** as acknowledged in the Funding Agreement
 - h. **Private financing on a case-by-case basis where it delivers value for money.** Such financing would generally have to be paid back over time through the operating account, so this option should only be considered as a short-term financing solution where circumstances justify it.

- i. **Borrowing.** The borrowing set out in this strategy has been assessed against rigorous affordability criteria and we have not assumed any incremental borrowing until after we have reached financial sustainability. If our operating revenues increase sufficiently, it may be possible in future to use further borrowing to close short-term financing gaps, but this would only be appropriate to fund projects that will in the long run generate sufficient operating surpluses to service the interest on this borrowing. Borrowing could take place against revenues/funding sources that continue or begin beyond the 20-year period covered by this Capital Strategy. We have included the provision for non-recourse borrowing as part of a proposed plan for TTLP to deliver 20,000 homes over 10 years and we are in ongoing discussions with the government.
- j. **Funding contributions from developers and other third parties including boroughs.** We seek such funding for all appropriate projects.

20 Risks to the Capital Investment Plan

- 20.1 TfL manages an identified set of strategic risks through a defined framework. Risks are reviewed on a regular basis and reported to the relevant committee of the TfL Board annually. Some particular risks relevant to the capital account over a 20 year horizon are noted here.
- 20.2 The long-term impacts of the pandemic on travel demand remain to be fully understood. It is likely that travel demand on our network will remain lower than it was pre-pandemic for many years to come. This creates numerous risks for the delivery and funding of future capital investment. These are the subject of ongoing analysis and review and TfL will continue to revise its plans as needed in coming years as the future environment becomes clearer. This section focuses on more ongoing risks, which in many cases relate to the pandemic but would also be true regardless of it.
- 20.3 Lack of long-term certainty of funding: It is not practicable to enter into long-term contracts for major projects until funding is determined, so delay in agreement of long-term funding can result in a delay in projects commencing. This risk can be best managed by early identification and sharing of funding requirements with stakeholders.
- 20.4 Approvals and consents risk: Most projects require cooperation including approvals from other parties which may or may not be forthcoming. This includes Transport and Works Act 1992 powers / hybrid bills for many projects.
- 20.5 Delivery Risk: delivery of a significant capital programme contains many risks, particularly where cost estimates are being made many years in advance of when projects would commence and in some cases with little detail available on which to base an estimate. Developments in the construction industry could lead to increases or decreases in the ease of delivering projects included here.
- 20.6 Risk of estimating future costs: It is very difficult to predict cost inflation over 20 years, and TfL faces both general inflation and differential construction cost inflation. There are also material short term uncertainties. A two per cent increase in inflation for next year, flowing through the 20 year plan would increase costs by £1.7bn.

- 20.7 Risk that pressures on TfL's operating account require funding to be diverted away from capital expenditure. This could include for issues such as inflation or other drivers of higher operating costs for necessary staffing and maintenance levels.
- 20.8 Risk related to asset condition: Due to affordability constraints, investment in our asset base in recent years has been less than is required for a sustainable long-term rate. This means asset condition has declined. This creates risks to performance, which we will have to manage through maintenance, inspections and if necessary restrictions. In the long term, there will be ongoing risk that worse asset condition will lead to higher required spend in the future..
- 20.9 A PESTLE analysis of the Capital Strategy identifies a number of risks listed below. Many of these could impact on TfL either positively or negatively.
- Political risks: TfL is part of the regional government of London, and also works with political stakeholders at local (borough) and national levels. Different policy priorities between these groups will impact on TfL in different ways, including the availability of funding to achieve these policy priorities. This may alter the need for and funding available for TfL capital projects. Over 20 years changes in these different political stakeholders are hard to forecast, though many of the priorities towards which TfL projects contribute tend to have cross-party support.
 - Economic risks: Over 20 years many economic conditions and factors could change demand for TfL services, and hence indirectly funding available and the need to invest. TfL's revenues are particularly closely linked to the size of the London economy.
 - Social risks: Known risks include reductions in the requirement for travel such as increases in home working, internet shopping and alternatives to conventional public transport such as private hire apps, ride sharing, car clubs and new mobility solutions. Such trends if accelerated could require a re-prioritisation of the strategy
 - Technology risks: Known risks include cyber security, the impacts of Artificial Intelligence, autonomous vehicle technology and increased ability to work remotely – but there may be others yet to be invented. These could have favourable or unfavourable impacts on TfL and might challenge today's public transport model
 - Legal Risks: TfL may be compelled to undertake new activity as a result of changes in law, which may increase costs of projects or require additional ones. Legal challenges may delay TfL activity
 - Environmental Risks: The climate and ecological emergency creates a significant challenge for TfL across adaptation, resilience and decarbonisation. Increase risk of flooding, extreme weather events, drought and storms all need to be considered on our assets (including our natural assets) and network. Wider impacts due to the climate and ecological emergency include supply chain disruption, human and species migration and social unrest. We are improving our understanding of this requirement, but future climate challenges cannot be predicted with high confidence. Addressing the climate and ecological emergency will require us to invest in decarbonising our services, adapting to a changing climate and protecting and regenerating nature on our assets and through our supply chains, which we are already including in this Capital Strategy, but the specific requirements of this could change.

21 Appraisal

- 21.1 TfL's financial planning process involves input from TfL's Executive Committee, the Finance Committee and TfL Board at numerous points through the financial year.
- 21.2 Similarly, the MTS underwent a thorough review and approval process. This included substantial stakeholder engagement during its development followed by a fifteen-week public consultation in the summer of 2017. An Integrated Impact Assessment and substantial evidence base were also developed and published alongside the strategy. Taking into account comments received during this consultation, the final MTS was approved by the Mayor in February 2018, then considered by the London Assembly in March 2018.
- 21.3 The Capital Strategy has been developed in part from the 2021 Capital Strategy that was published for consultation as part of the Mayor's Consolidated 2022/23 Budget and approved by the TfL Board in December 2021. Its development has been largely informed by the 2021 Long-Term Capital Plan process in consultation with the TfL Executive Committee and TfL Board.
- 21.4 The TfL project and programme management methodology "Pathway" allows for key governance intervention points to ensure effective governance oversight and control throughout the project lifecycle. This includes our three-line assurance system, part of which involves monitoring and advice from the Independent Investment Programme Advisory Group. At a strategic level, monitoring and evaluation are in place across the MTS to ensure that the desired outcomes are delivered.

Statutory Chief Finance Officer sign off

This Capital Strategy is a planning document reflecting a high-level view at a time of considerable uncertainty. As understanding of funding and requirements of the network evolve in coming years, it will need to be kept under review. Affordability of the Capital Strategy over 20 years is dependent on TfL obtaining significant additional funding which cannot be considered certain at this point in time. The characteristics of the funding source(s) could influence the timing, cost and capitalisation of projects within the Capital Strategy. The nature of these large projects is such that they require a certainty of funding over a number of years prior to commencement. The risks noted above are a comprehensive but not exhaustive list. Significant known risks have been listed, however, it is possible that unpredictable future events and opportunities would result in an amendment to the TfL Capital Strategy. Readers of the Capital Strategy should note the considerable risk in estimating costs up to 20 years into the future, especially for novel projects.

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Appendix 4

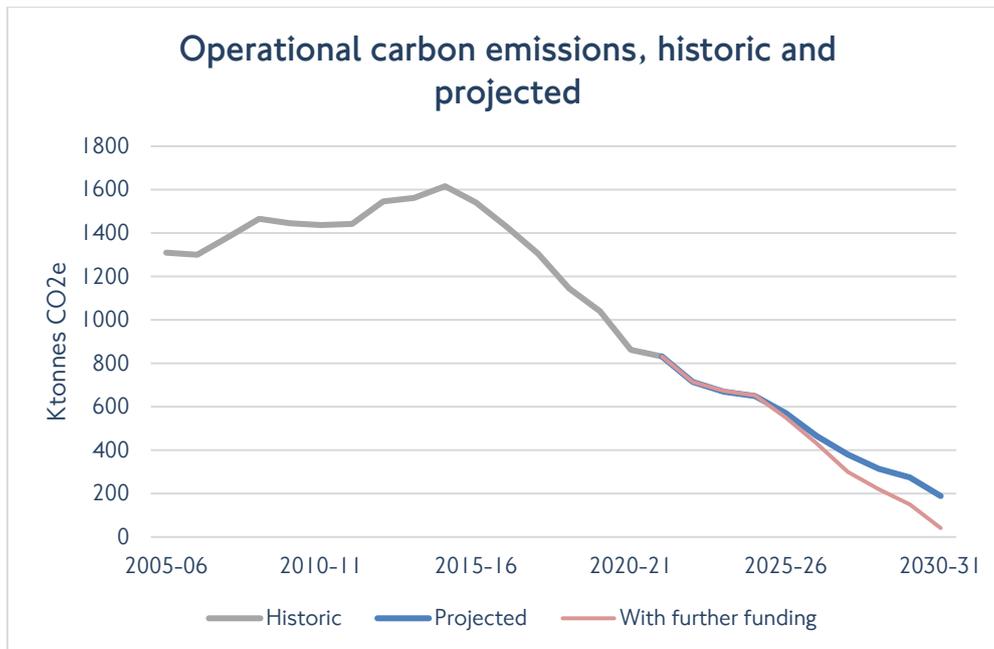
Climate Budgeting

Progress this year

- 7.1 TfL has set out its Vision & Values, which has as its central vision ensuring TfL is the “strong, green heartbeat for London”. Emissions of carbon per person for transport in London are much lower than in the rest of the UK, and have been decreasing in recent years, but we know we must go further and are setting ourselves up as an organisation to achieve this. Continuing progress on decarbonisation is set out in this Budget, and with more funding we could go even further.
- 7.2 Over the course of this year, we made a good start on our goal to adopt a Net Zero plan for our Head Offices and develop Decarbonisation Plans for all other buildings. We undertook a deep dive across our entire estate (about 2,400 sites) and developed a strategy to cut costs, carbon and energy and attracted £100k of government grant funding. Work is now underway to detail the next steps into delivery.
- 7.3 We completed the Major Projects Carbon Baseline – this is the first time the whole life carbon emissions for all ten current Major Projects have been modelled in detail and consistently over a 120-year assessment period, allowing programmes to identify their carbon hotspots. The carbon baseline contains approximately 2.3 million tonnes of CO₂ equivalent and Major Projects will be aiming to reduce their whole life carbon impacts in the coming years, by management of carbon through the design process and in collaboration with our supply chain. We are now working to expand the carbon baseline across our capital investment portfolio.
- 7.4 In recognition that everyone has their part to play on cutting carbon we launched TfL Carbon Literacy Training in the summer with the Carbon Literacy Project. Nearly 300 employees have already become Carbon Literate and 25 have become Carbon Literacy Trainers. At the start of 2023, we plan to run four courses a week and be on track to reach our target of 500 employees by end of the financial year.
- 7.5 In June we went to market with our first renewable Corporate Power Purchase Agreement covering approximately 10 per cent of our electricity demand. This year the energy market has been volatile and the response from the market was limited. We learned from the process and are revising the tender to widen eligibility with plans to relaunch it at a more stable time next year. At present our energy is 100% standard Grid mix however we are looking at sourcing approved “green” electricity.

Carbon Budget

- 7.6 The scope of this year’s Climate Budget is TfL’s operational emissions, where our target is to achieve net zero by 2030. This includes all energy and fuel that TfL purchases directly, along with the emissions associated with the operation of TfL-branded services. For example, this includes the emissions associated with the TfL bus network and London Overground, where TfL doesn’t directly purchase the energy or fuel directly.



- 7.7 We have made and will continue to make significant progress in reducing our carbon emissions. Our funded plan is demonstrated in the projected emissions scenario above. With additional funding, we could go even further, closing almost all of the gap towards the ambition of net zero operations by 2030. We do not at present “offset” any carbon emissions arising from staff air travel. Further assessment would be required to close the remaining gap beyond the ‘with further funding’ scenario.

Funded initiatives (contributing to projected emissions scenario)

- 7.8 Around 98 per cent of TfL’s operational emissions come from bus operations and the electricity we use for our rail operations (covering traction and non-traction, for example in our buildings). Therefore, our primary focus has been on tackling these two issues.
- 7.9 Bus operations make up over 50 per cent of TfL’s operational emissions. The Mayor’s Transport Strategy in 2018 set out an ambition for all TfL buses to be zero emission by 2037. In 2021, the Mayor confirmed that all new TfL buses will be zero emission and that the plan to deliver a 100 per cent zero-emission fleet would be brought forward by three years, to 2034. At the same time, he set out that, with further funding, it would be possible to accelerate further, to achieve a fully zero-emission bus fleet by our target of 2030.

- 7.10 The TfL business plan maintains the 2034 zero emission bus plan, but with confirmed investment in the next two years that allows us to keep the pathway open for an acceleration in roll-out of zero emission buses to our target 2030. Our approach will ensure we do not contract combustion engine buses into the fleet beyond 2030 over the next two years. However, to maintain the trajectory towards a 2030 target beyond 2024/25 will require significant additional funding (see section on additional funding).
- 7.11 We continue to make progress upon our plan for a cost-effective transition to zero carbon energy, of which a significant proportion (approx. 50 per cent) will be achieved through Power Purchase Agreements (PPA). TfL are using a phased introduction which will see various tranches take power at intervals up to 2030. Using this approach allows TfL to learn and adapt as the market evolves. TfL are also engaged in GLA Energy Procurement Collaboration which aims to pool the electricity demand of the GLA bodies to jointly procure PPAs. This could allow the entire Group to benefit from enhanced purchasing power whilst also bringing efficiencies in the procurement process.
- 7.12 These two key initiatives are complemented by the following range of additional initiatives.
- 7.13 Over the past year we have developed a better understanding of emissions from our buildings and have developed a strategy to minimise this impact. We are now creating a programme with dedicated funding to deliver upon this strategy, which will focus on energy efficiency upgrades and gas appliance removal that will payback within the period of the plan.
- 7.14 The Mayor's Transport Strategy (MTS) and London Environment Strategy (LES) outlines commitments for all GLA Group fleets to be zero emission by 2030. To support this, our Corporate Environment Plan sets out the following targets:
- All cars in TfL fleet must be zero emission by 2025;
 - All vans in TfL support fleet must be zero emission by 2030;
 - All heavy vehicles (greater than 3.5 tonnes) must be fossil fuel-free from 2030.

TfL operates approximately 1,000 fleet vehicles, with less than five per cent currently being Zero Emission Capable (ZEC). We have funding to convert all cars and vans in TfL to zero emission in line with our targets, with the leasing of new vehicles as well as the implementation of supporting infrastructure in the vehicle depots.

- 7.15 Solar Private Wire is a key project to enable TfL to directly receive zero-carbon electricity from new-build local solar assets, reducing the carbon emissions associated with the operation of the LU network. As well as the environmental benefits, there is the potential for financial savings based on the avoidance of costs associated with delivery of power via the grid, which typically make up circa 50 per cent of the energy bill.

Funded initiatives (not in scope)

- 7.16 Whilst not directly reducing TfL's operational carbon footprint, therefore not in-scope for this year's climate budget, TfL continues to invest in measures that incentivise active travel and reducing the usage of the most polluting vehicles in London, thereby reducing the carbon footprint of London as a whole.
- 7.17 In October 2021, we expanded the ULEZ from central London up to, but not including, the North and South Circular roads, making it the largest zone of its kind in Europe.
- 7.18 In January 2022, the Mayor published an independent report to develop pathways toward his target of London reaching net-zero carbon by 2030. As well as the urgent need to reduce carbon emissions and address climate change, the Mayor identified the need to reduce toxic air pollution and cut congestion.
- 7.19 To tackle these challenges, in November 2022 the Mayor announced that he will expand the ULEZ London-wide to tackle the triple threats of air pollution, the climate emergency and congestion, and to ensure five million more Londoners can breathe cleaner air. The expansion will come into effect on Tuesday 29 August 2023 and will operate across all London boroughs up to the existing Low Emission Zone boundary.
- 7.20 The ULEZ expansion will be accompanied by a brand new £110m scrappage scheme to support Londoners on lower incomes, disabled Londoners, charities and small businesses and sole traders. Successful scrappage applicants will receive a grant to scrap or - for the first time - retrofit their vehicle for certain vans and minibuses. Successful car owners can opt to receive a smaller grant accompanied by up to two free annual bus and tram passes, which would give them a higher financial package.
- 7.21 To maximise the potential benefits of expanding the ULEZ and strengthen alternatives to private cars, the Mayor also announced a plan for improving the bus network in outer London that will see over one million further kilometres added to the bus network. In east London, new zero-emission cross-river services will be introduced, subject to consultation.
- 7.22 We are also continuing to fund a project team to explore the delivery of waste heat opportunities that would provide CO₂ savings to London, by capturing and re-using thermal energy from London Underground ventilation shafts for use by external suppliers of local heat networks and buildings.

Uncertainty over funded initiatives

- 7.23 Although Government have provided a funding settlement to March 2024, there remains significant uncertainty on the level of funding that will be provided in 2023/24. A proportion of expected funding, linked to increased inflation, is subject to DfT review and approval. All Government funding in 2023/24 contributes to the funding of capital investment, therefore

failure to receive this funding would impact our ability to deliver our capital investment programme including carbon-related initiatives.

- 7.24 There is currently no certainty on Government funding for capital investment beyond March 2024. The TfL Business Plan makes an assumption on the level of funding that will be made available for rolling stock and signalling replacement. If this funding is not confirmed in future, this will impact the ability to fund all of TfL's capital investment including green initiatives.
- 7.25 Since the Government introduced the 'Energy Prices Act', which contained outline proposals to control energy prices – with potential implications for the wholesale price of electricity generated by renewable and low-carbon generators – there has been significant market uncertainty. This has meant we have to pause our proposed re-launch of our first PPA procurement. Ongoing market uncertainty or further changes to Government regulation, could impact the pace of progress with PPA roll outs.

With additional funding

- 7.26 With additional funding, we could deliver additional improvements that would close the gap between our forecast and net zero emissions by 2030. Some of these options are at a very early stage of development, with costs and benefits estimated only at a high level. Further funding certainty in future would allow us to develop some of these options for delivery through this decade.
- 7.27 With additional funding, we could lock-in the pathway to making the bus fleet zero-emission by our target 2030, which in combination with existing and funded initiatives would save an additional three hundred thousand tonnes of carbon. This would require circa £500-600m in additional funding, although this cost would be spread over the lifetime of the new vehicles which extends beyond 2030.
- 7.28 In addition to making all buses zero emission, further funding would allow us to make our Dial-a-Ride fleet zero emission. The Dial-a-Ride fleet was renewed with Euro VI vehicles in 2019/20 in order to be compliant with ULEZ. While this considerably improved their emissions footprint, moving to electric vehicles would remove tailpipe emissions completely. It would also improve air quality and reduce noise in residential areas where many customers live. Infrastructure would need to be installed at each Dial-a-Ride depot to facilitate charging. The current supplier market for suitable vehicles is restricted, leading to higher costs.
- 7.29 We have plans to make our support fleet of cars and vans zero emission. A more expensive intervention would be to make the 20 HGVs in the TfL support fleet zero emission, as options for such vehicles are much more limited. We have estimated costs only at a very high level, though as the market matures options may improve.

- 7.30 Energy usage and emissions from our rail modes could be reduced through further improving traction efficiency. This could include measures such as regenerative braking, energy storage and 'green CBTC' (where driving style is designed to minimise energy usage).
- 7.31 Our current funding will reduce the carbon emissions from our buildings by one third, by focusing on our most technically feasible sites. With additional funding we could eliminate all of our building emissions, however the remaining two thirds will be progressively more expensive as we take action on our more technically challenging sites. Through our new dedicated building decarbonisation programme, we are undertaking a pipeline of feasibility studies to produced detailed plans for our buildings, which will improve the accuracy of our estimated funding requirements over the coming years. Further work is required to understand the optimum level of energy efficiency measures for different buildings and sites.
- 7.32 Further investment in LEDs in our advertising infrastructure, street lighting and traffic signals would reduce another source of emissions, as well as supporting cost savings in operations.
- 7.33 Finally, further investment in solar power generation beyond the Private Wire project included in this Budget would allow more generation of renewable energy on our estate.