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## This paper will be considered in public

### 1 Summary

- 1.1 The Business Plan 2017 sets out TfL's plans for the five years from 2018/19 to 2022/23.
- 1.2 Under Standing Orders, the authority sought in this paper is reserved to the Board. On 9 November 2017 the Board delegated to the Finance Committee authority to approve those matters reserved to the Board in relation to the approval of the Business Plan.

### 2 Recommendation

- 2.1 **The Committee is asked to note the paper, and in accordance with the delegation granted by the Board on 9 November 2017, to approve the TfL Business Plan 2017.**

### 3 TfL Business Plan 2017

- 3.1 The 2017 Business Plan sets out how TfL will deliver an efficient, affordable and modern transport network for London, and focus its commitment to implementing the Mayor's Transport Strategy to make London a fairer, greener, healthier and more prosperous city.
- 3.2 Over the next five years TfL will deliver major investment in services across London, including record capacity on the Underground and take forward an integrated investment programme across walking, cycling, air quality and buses. TfL fares will remain frozen until 2020, keeping services affordable and accessible for Londoners.
- 3.3 From 2018/19 TfL will absorb an average £700m per annum reduction in its Government grant to support operating costs, becoming one of the only major cities in the world to operate a public transport network without Government subsidy to cover day to day running costs. Furthermore, the vehicle excise duty of £500m raised every year in London will be invested in roads outside the capital. In this Business Plan TfL is calling on the Government to make sure the link between roads tax and roads investment is applied in London, as well as the rest of the country. Against this economic back drop TfL has reduced operating costs by £153m last financial year, the first such reduction in its history.

- 3.4 The 2017 Business Plan will deliver a huge range of capacity improvements designed to achieve the Mayor's aims, including the opening of the Elizabeth line on time from December 2018, with step free access at every station, the Four Lines Modernisation upgrade on the Circle, Hammersmith and City, Metropolitan and District lines and beginning work on providing new trains and signalling on the Piccadilly line, adding 60 per cent extra capacity and a new next-generation fleet of trains. This will be further supported by brand new fleets of trains on the Docklands Light Railway and London Overground networks that will boost capacity and support the development of large swathes of London.
- 3.5 Transport improvements will continue to be supported by TfL to deliver new homes and jobs. Completing the Northern Line Extension to Battersea, extending London Overground to Barking Riverside and continuing to progress plans for Crossrail 2 and Bakerloo Line Extension, together will support the delivery of thousands of new homes across London.
- 3.6 TfL will invest significantly (£2.2bn over the plan period) in the Healthy Streets and Air Quality portfolios, to deliver a number of major schemes across London's boroughs such as Old Street roundabout and Stratford Gyratory, and the transformation of Oxford Street, which is currently under public consultation. By September 2020 all London buses will be Euro VI compliant, creating one of the greenest bus fleet in the world.
- 3.7 The improvements confirmed in the 2017 Business Plan will be achieved despite a difficult economic backdrop and continuing uncertainty over the economic effects of Brexit, both of which affect passenger numbers.
- 3.8 TfL will continue working closely with colleagues in the Metropolitan Police Service and the British Transport Police, and collaborate every day to prevent and tackle crime ensuring our customers and road users are safe.
- 3.9 In seeking to deliver the programmes and projects set out in the Business Plan 2017, TfL will have due regard to the matters set out in section 149 of the Equality Act. At appropriate stages in the decision-making process, as proposals develop, TfL will carry out an assessment of the likely impact on and implications for individuals with protected characteristics. This includes considering ways in which TfL can, in delivering our proposals, contribute to the elimination of unlawful discrimination, harassment and victimisation. TfL will also have regard to the need to advance equality of opportunity and to foster good relations between people who share a protected characteristic and those who don't.

**List of appendices to this report:**

Appendix 1: TfL Business Plan 2017

**List of Background Papers:**

None

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# Transport for London Business Plan

2018/19 to 2022/23

MAYOR OF LONDON



**TRANSPORT  
FOR LONDON**  
EVERY JOURNEY MATTERS

## About Transport for London (TfL)

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

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

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

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

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

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

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

We are constantly working to improve the city for everyone. This means freezing fares so everyone can afford to use public transport, using data and technology to make services intuitive and easy to use, and doing all we can to make streets and transport services accessible to all. We reinvest every penny of our income to continually improve transport networks for the people 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. We all need to pull together to deliver the Mayor's Transport Strategy; by doing so we can create a better city as London grows.

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# Mayor's introduction

My TfL Business Plan sets out how I will continue to make commuting in London and travelling around our city more affordable, while investing record amounts in creating a fairer, greener, healthier and more prosperous London.

My first TfL Business Plan in 2016 set out how I start delivering the commitments in my manifesto. I have already frozen TfL fares, which, on average, will put £200 back in Londoners' pockets by 2020. I have also protected TfL's travel concessions, which provide more than £300m of free or discounted travel every year to children, people over 60, and those on income support. I brought in the Hopper fare, got Night Tube services up and running, announced all-night services on the London Overground, and implemented the T-Charge to start cleaning up London's toxic air.

Since then, I have consulted on my draft Transport Strategy, which sets out the role transport will play in the future of London. To make the most of our public spaces and improve Londoners' quality of life, I am aiming for 80 per cent of trips in London to be made on foot, by cycle or by public transport by 2041 – a much larger proportion than today's level of around 65 per cent.

To make this vision a reality, every decision TfL makes must support this objective, from investment to improve streets and public transport networks to major new transport projects that will support London's growth. This is a big change for TfL, and the future health and prosperity of the city and its residents depend upon it.

Our spending decisions become even more important in today's economic climate. While all other major transport operators in the world receive some



form of central government subsidy, the Government has taken £2.8bn away from TfL's operational funding. In this context, we are making important advances in how to run efficient, affordable and accessible transport services, to improve our city.

Against a backdrop of falling passenger numbers on National Rail services in London, ridership on TfL services has been more resilient, with my TfL fares freeze and Hopper fare clearly helping Londoners afford to travel. The latest passenger figures show the benefit of my fares freeze in encouraging more people to use public transport. London Overground, where I have frozen fares, was the only one of the four main train operators within London and the South East to see passenger numbers rise. Passengers on Govia Thameslink Railway, South West Trains and Southeastern all fell by more than five per cent in April to June 2017-18, compared to the previous year, as their fares rose. Tube ridership

is also only marginally down compared to last year despite the lower economic growth. Bus passenger numbers outside London have also seen sharp falls, whereas in London they have dipped much less and then stabilised as the benefits of more affordable and reliable journeys have been felt.

When I became Mayor, I told TfL to find the savings I knew were there and to use them to provide a better, more affordable and more accessible transport network for all Londoners. As a result, in 2016/17, TfL reduced its year-on-year operating costs for the first time in its history. This plan sets out the continuation of that work and TfL's trajectory to achieving financial sustainability by 2021, reflecting the removal of all Government operating grant.

Efficient and affordable transport is vital to our national success. We must work with authorities throughout the UK to invest in transport infrastructure to drive growth and productivity across the country.

In London, after years of planning and construction, the Elizabeth line will open fully in 2019, adding an estimated £42bn to the UK economy, and 10 per cent to London's rail capacity.

But we cannot afford to stop there. As the National Infrastructure Commission has said, we must press ahead now with plans for Crossrail 2, so that the new railway can be ready to support the

national economy in the 2030s. Crossrail 2 will create hundreds of thousands of homes and jobs across the South East, generate employment in London throughout the national supply chain. It will improve air quality by taking 35,000 car trips off the roads every day, at the same time as reducing crowding on Tube and rail services by 20 to 30 per cent.

Without it, many commuter services around London and the wider South East would grind to a halt, and our work to reduce car dependency and improve quality of life for millions of people would be under threat. The Government must make a positive decision quickly on the funding proposals I have put forward for the scheme (including for how London will meet 50 per cent of the costs during construction), to allow TfL to press ahead with preparing a Hybrid Bill for submission to Parliament in 2020.

Transport is one of the most important features of a world city like London, shaping places and enabling people to live active, healthy and fulfilling lives. With this Business Plan, I will help deliver my vision for a fairer, greener, healthier and more prosperous city.

**Sadiq Khan**  
Mayor of London

# Commissioner's foreword

The Mayor's draft Transport Strategy describes his ambition for how people will move around the city in 2041.

By 2041, 80 per cent of journeys will be made by walking, cycling and public transport compared with around 65 per cent today. Travel will be healthier, easier and more affordable for everyone in London.

Dozens of new, mixed-use property developments on TfL land will offer commercial, retail and leisure space, while thousands of affordable homes will help to create jobs and support economic growth.

With the Mayor's strategy to guide us, now is the right time to revise our Business Plan. We have combined investment in London's transport network with the Healthy Streets Approach to present a more holistic plan for the city than ever before. This document sets out our journey towards delivering the Mayor's vision.

Next year, we will become one of the only major cities in the world to operate a public transport network without Government subsidy to cover our day-to-day running costs. This means that the £700m, on average, we had been receiving from the Government per year will disappear completely by 2018/19.

This comes at a crucial time for the UK as we face the challenge of exiting the EU and lower economic growth than previously forecast, and we must work with our partners across the country to support the national economy.

TfL fares will stay frozen until 2020. We will invest record amounts to deliver the



Mayor's draft Transport Strategy. This will include significant investment in London Underground on the completion of the modernisation of the Circle, District, Hammersmith & City, and Metropolitan lines, increasing step-free access at stations and the delivery of the Healthy Streets portfolio to improve the health and quality of life for Londoners, and clean up the Capital's air. Safety will always remain our top priority, with our resources focused on making sure we operate a safe network for everyone.

Against that background, last year's Business Plan set out a path to financial sustainability and we have already begun to deliver that successfully. Last year, for the first time in our history, we reduced our year-on-year operating costs by £153m. This plan continues that trajectory by creating a surplus over the next five years.

At the heart of these savings is a cost reduction and modernisation programme

that is considering all of our activities to make sure we are providing the safest and most efficient transport service for Londoners. We have already streamlined many of our processes and removed management layers, duplication and bureaucracy. This work will be continuous.

We would not have been able to achieve these savings, or have confidence in our plans for further efficiencies, without the support of our partners, suppliers and our people. In particular, we are committed to working constructively with trade unions to find better ways for us all to work together for London.

We will also raise more income than ever from our commercial activities. We have worked closely with the Mayor on a plan to generate significant revenues from property development to reinvest in the transport network, while at the same time delivering 50 per cent affordable homes across our portfolio.

We will also grow our advertising revenue and we have taken the first steps towards establishing a consulting arm of TfL, which will offer our expertise around the world.

The strength of these income streams and our successful cost savings programme mean that we can run an affordable, accessible network and invest in delivering the Mayor's vision.

As is the case with all public services, we also, of course, have to make difficult

choices. From next year, we will be addressing the critical needs of our road network, including congestion, road danger, maintenance and air quality, without a Government grant. Meanwhile, the £500m raised every year from Londoners paying Vehicle Excise Duty will be collected by central Government and invested in roads outside the Capital.

Given the end of Government funding of the road network, our Business Plan looks at ways to safely reduce the cost of our roads maintenance programme in the short term while we identify a new, long-term funding stream to support that important work.

We all need to work together to deliver this plan, and a diverse team is a stronger one. I am committed to ensuring that TfL is representative of the city we serve. We are beginning to make progress but there is a long road ahead of us.

Through this plan, we will deliver the Mayor's Transport Strategy and a net operating surplus by 2021/22. With this strong financial foundation, and more efficient operations, we will encourage the healthy growth of London and underpin its reputation as a resilient and attractive world city.

**Mike Brown MVO**  
Commissioner  
Transport for London

Our Business Plan describes how, over the next five years, we will manage our resources to deliver the Mayor's commitments. It includes:

#### Affordable transport

Keep all TfL fares **frozen** until 2020

Extend the **Hopper fare**

**Protect** all fares concessions

#### Making transport more accessible

More than **40%** of Tube stations step-free by 2021/22

**Improve** bus stop and taxi rank accessibility

**100%** step-free Elizabeth line

#### Safer London

**Vision Zero** target for road safety

**More** roads targeted in Safer Junctions programme

**Improved** safety standards for buses in London

#### Housing and regeneration

Developing sites for **10,000** homes on TfL land (50 per cent affordable)

Lobby for powers to extend **Bakerloo line**

**Crossrail** development

Silvertown **tunnel**

#### Public transport, walking and cycling

**Better,** more reliable bus journeys

**Open** Elizabeth line

**Extra** capacity on four Tube lines

**More** cycling and walking

#### Improving air quality

**ULEZ** Ultra Low Emission Zone launches

Purchase only **green** double-decker buses from 2018

**New** licensing requirements for zero emission capable taxis

#### Harnessing technology

Concession products available through **ticketing app**

**More** automatic refunds for maximum fares

**Oyster weekly capping**

#### Raising commercial revenue

More than **£80m** investment to upgrade our advertising estate

**Build** a commercial consulting business

#### Creating attractive and iconic places

**Transform** Oxford Street for pedestrians

**Improve** London's streets

#### Helping business

**More** integrated deliveries

**Retiming** deliveries

#### Community/borough partnerships

Significant levels of borough investment **maintained**

#### Diversity and inclusion

A more **representative** workforce and senior management



# Delivering the Mayor's Transport Strategy

Our aim is that, by 2041, 80 per cent of trips will be made on foot, by cycle or using public transport.

This is a big ambition, and the draft Mayor's Transport Strategy (MTS) sets out the new approach we are taking to make it a reality. Every decision we make will support this,

and this Business Plan describes how our programme of investment for the next five years will begin to deliver the three core MTS themes.

## Healthy Streets and healthy people

Investment will focus on improving the experience of being in the places where people live, work, go to school, spend time and travel. Reducing traffic dominance

and prioritising walking, cycling and public transport use will help Londoners live active, healthy lives and help create a city that works well for its residents.

## A good public transport experience

The right investment will ensure that public transport becomes an increasingly attractive alternative to using a car. Proper planning for the whole journey will help integrate public transport and

street-level investment. Making sure the right services are available where people need them, reducing overcrowding and keeping fares affordable will help to reduce car dependency.

## New homes and jobs

Transport improvements are vital to the creation of new homes and jobs, and can ensure that London's growth supports healthy lives. Our investment will help to create communities where

local amenities are within walking and cycling distance and public transport is available for longer journeys, reducing car dependency and improving quality of life.



We will support the Mayor's Transport Strategy by investing in Healthy Streets



Our projects will help tackle pollution and improve quality of life

# The focus of this plan

New connections and a healthier, balanced approach will change the face of London's streets.

The investment in this plan will increase the quality and capacity of public transport, reduce car dependency and get people more active. By using the resources we have to create a better city and improve quality of life, we will be delivering the Mayor's Transport Strategy and responding to the opportunities and challenges London is facing.

The growth of the Capital's population – towards 10.5 million by 2041 – could put increasing strain on transport networks and public space. Poor air quality and low active travel levels have left Londoners facing a public health crisis. The projects here and in the rest of this Business Plan will tackle these issues head on.

The Elizabeth line will  
**boost**  
capacity and cut journey times



Transforming Oxford Street would create one of the world's

**finest**  
public spaces



Sustainable investment in transport and public spaces will support London's

**growth**



## Elizabeth line



The opening of the Elizabeth line is the largest milestone in this Business Plan. The first new railway to pass through central London in decades, it will open fully in 2019.

### Improving public transport connectivity

The Elizabeth line will serve 41 stations and stretch more than 60 miles from Reading and Heathrow in the west through tunnels in central London to Shenfield and Abbey Wood in the east. It will increase rail capacity in London by 10 per cent and provide a safe, reliable, accessible public transport option for more than 200 million people each year.

### A better customer experience

The Elizabeth line will set a new standard for customers. Its 200-metre trains will be energy-efficient and accessible. They will have walk-through, air-cooled carriages providing live, accurate travel information and free WiFi.

The line will also dramatically reduce journey times across central London. Today, the fastest route from Paddington to Bond Street is by Tube, and takes between 10 and 15 minutes. It is not accessible and involves changing trains at Baker Street. On the Elizabeth line, that same journey will be fully accessible and take less than five minutes.

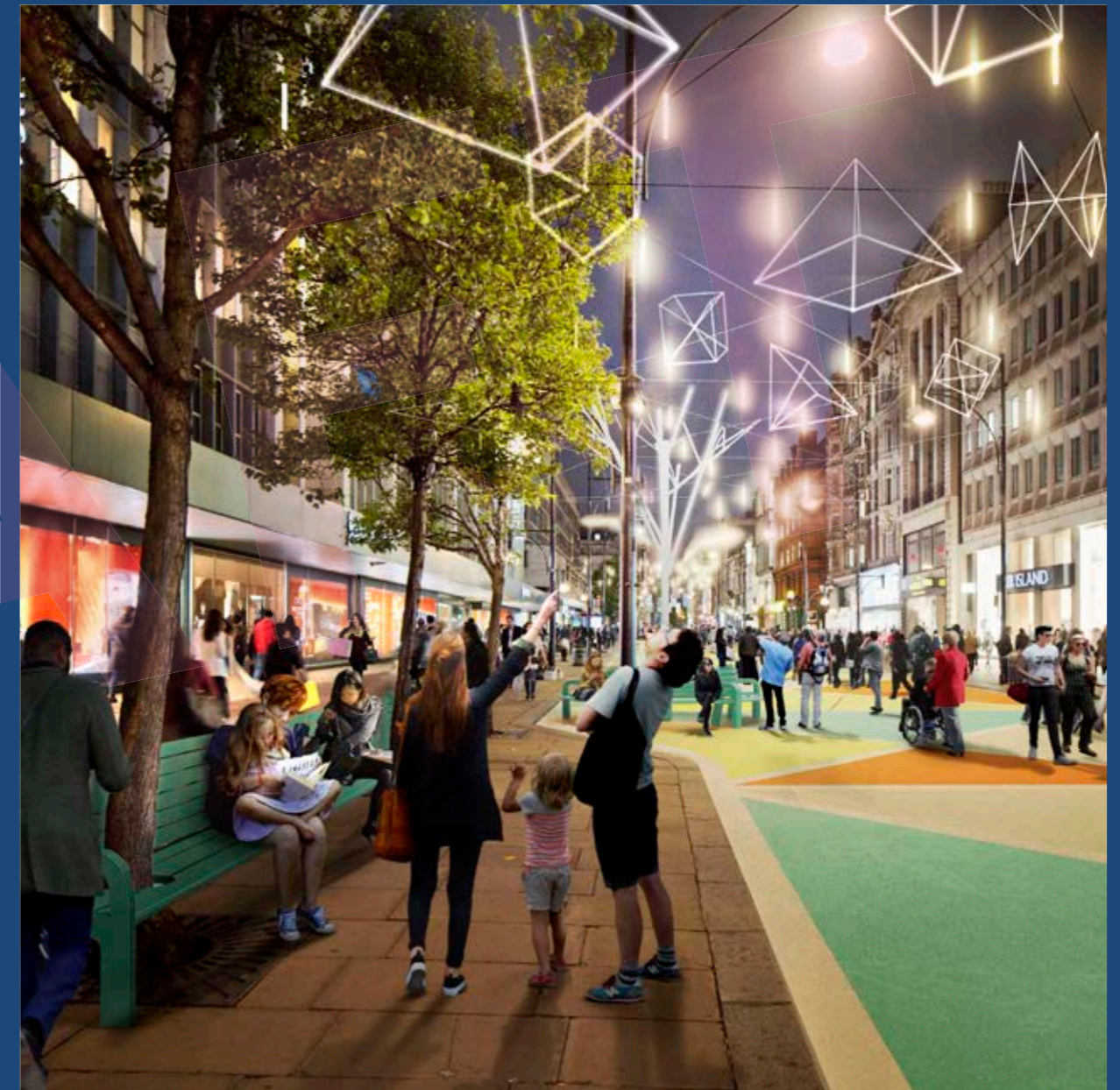
## Oxford Street transformation

Perhaps the most significant example of our vision for London's streets is the proposed transformation of Oxford Street, which will also maximise the benefits of the Elizabeth line through central London.

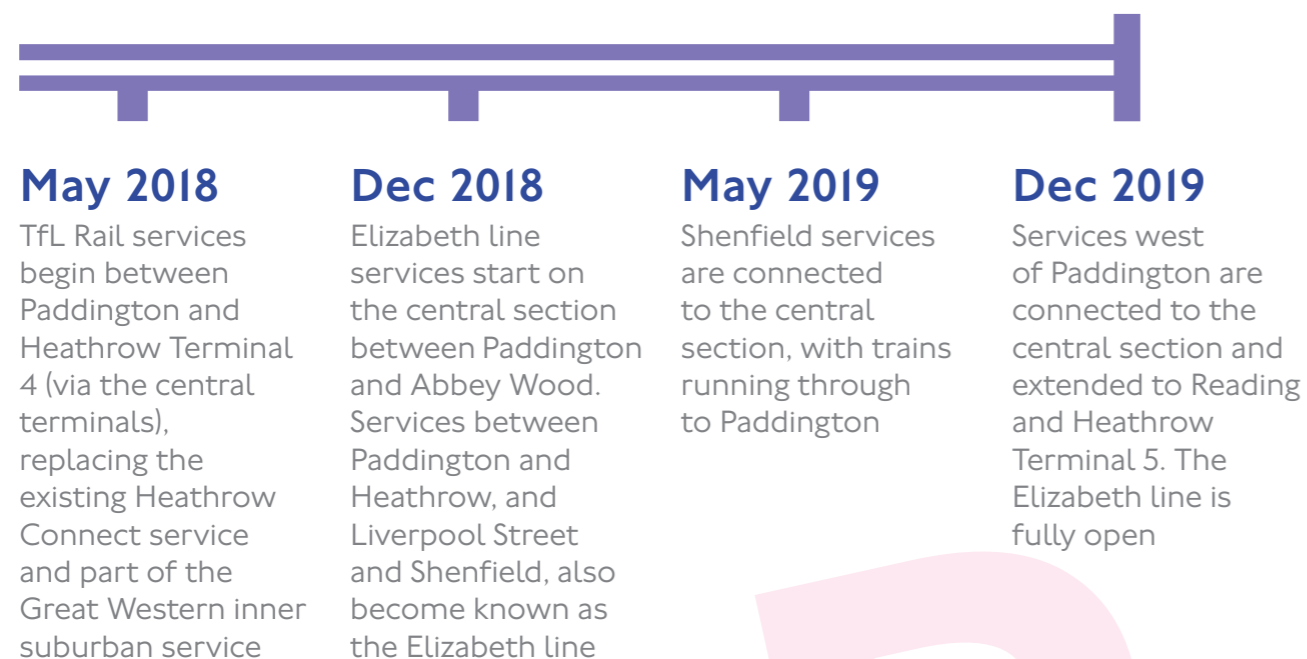
Working in partnership with Westminster City Council, Camden Council, the New West End Company BID, private sector partners and potential investors, our

ambition is to create a more pleasant, healthier and accessible place, as the Elizabeth line brings millions more people to this iconic location.

In addition to establishing it as the best shopping experience in the world, we will make it easier and safer to walk and cycle, improve air quality, reduce noise pollution and create one of the world's finest public spaces for years to come.



## Phased opening of the Elizabeth line



## Oxford Street timeline



\*Subject to the outcome of consultation

## Investing sustainably across London



The opening of the Elizabeth line and the transformation of Oxford Street are large-scale examples of the improvements we will be making all over London. Such projects allow us to rethink how we serve the city and create new and better connections within neighbourhoods, and between communities.

Changes to how people travel in and around Oxford Street when the Elizabeth line opens in 2018 will mean fewer buses are needed in the West End. At the same time, modernised stations further along the route in outer London may require better bus services to make it easier for more people to use public transport for their entire journey and unlock growth. A shift toward public transport in areas of outer London would reduce suburban traffic congestion and pollution, and encourage more people to walk and cycle, while improving air quality.

There will be other opportunities to direct our services where they are needed most. For example, we will continue to consider how using technology responsibly – as we did for the WiFi connectivity pilot on the Tube in late 2016 – can provide a more accurate picture of how people travel.

We can only understand and meet the changing demands of the capital by working closely with London's boroughs, residents and businesses.

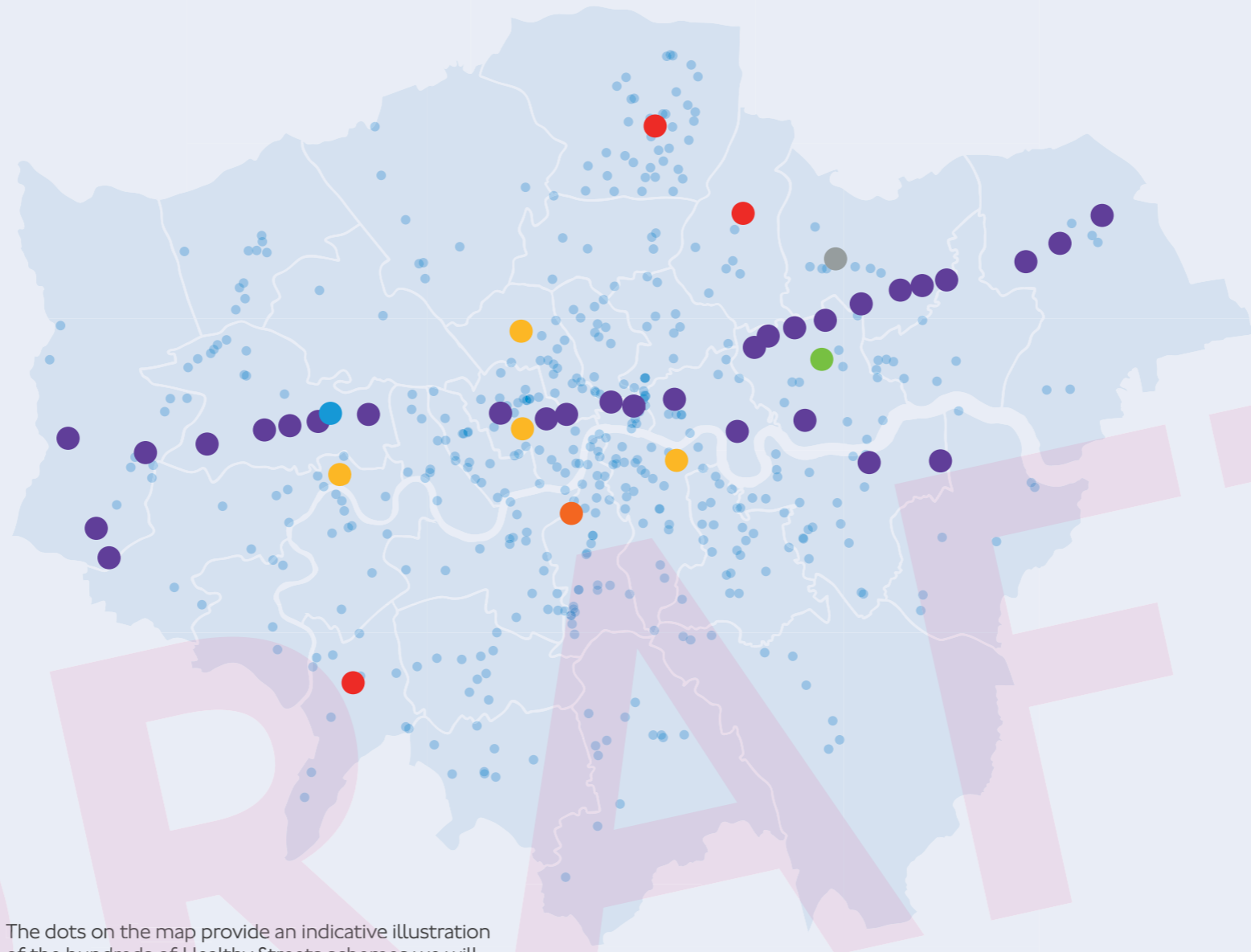
A visible example of this is our Healthy Streets portfolio, which is changing the landscape of streets to encourage more walking, cycling and use of public transport. Over the course of this Business Plan we will work with our borough partners to invest record levels in schemes across the city.

We want to continue this level of investment despite the lack of financial support for our operating services from the Government. We must develop our funding streams into robust, sustainable sources of income for the future, and at the same time we will have to make choices about our investment programme as the needs of the city develop.

We will work with local communities to make these choices so that our services are convenient, accessible and affordable, while securing our long term financial resilience. In doing so, we will also meet our ambitious targets to improve our environment, and make London a safer and healthier city.

# Healthy Streets across London

We are investing record amounts in hundreds of schemes across the city, working closely with London's boroughs. These projects will make it safer and easier for more people to walk, cycle and use public transport. Here are just a few examples of how and where we are embedding the Healthy Streets Approach.



## Cycle Superhighways ●

Camden, Ealing, Greenwich, Hammersmith & Fulham, Hounslow, Kensington & Chelsea, Lewisham, Southwark and Westminster



Clear and safe segregated routes across London

The dots on the map provide an indicative illustration of the hundreds of Healthy Streets schemes we will be delivering over this Business Plan period.

## Vauxhall Gyratory ●

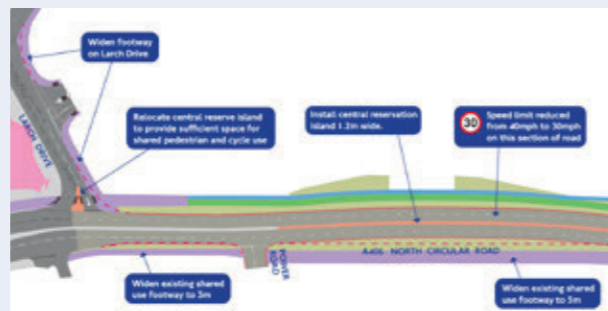
Lambeth



Returning to two-way roads for better walking and cycling

## Gunnersbury Avenue ●

Hounslow



Major street improvements for safer for walking and cycling

## Mini-Hollands ●

Enfield, Kingston and Waltham Forest



Three outer boroughs with a network of cycle routes

## Elizabeth line ●

Brentwood, Ealing, Greenwich Havering, Hillindon, Islington, Newham, Redbridge, Tower Hamlets and Westminster



Improved public areas and interchanges outside 18 outer London Elizabeth line stations

## Charlie Brown's Roundabout ●

Redbridge



New pedestrian and cycle crossings, and fewer delays to traffic and buses

## Stratford Town Centre ●

Newham



A safer, more attractive town centre for people to spend time in

# What we will deliver

We are investing to create Healthy Streets, improve the customer experience and provide new homes and jobs.

## Healthy Streets and healthy people

By focusing our streets investment on the needs of people, rather than vehicles, we can transform London, improving health and quality of life of its residents.

We're investing a record £2.2bn in street schemes and initiatives designed to make walking, cycling and public transport safer, cleaner and more appealing, including funding eight new Cycle Superhighways and transforming major junctions like Waterloo IMAX, Old Street roundabout, Lambeth Bridge north and south, and Highbury Corner. Within this investment, our new Liveable Neighbourhoods programme will provide £114m for boroughs to improve local communities in every part of London.

### A safe, secure network

Nothing is more important than Londoners' safety and our priority is to run, maintain and improve our services so they meet the highest safety standards. Our vision for safety is 'Everyone home safe and healthy each day'.

We have a close relationship with our colleagues in the Metropolitan Police Service (MPS) and British Transport Police (BTP) and collaborate every day to prevent and tackle crime. We will work together to become more efficient, and savings will be achieved in non-frontline policing costs. TfL will continue to fund the same number of BTP and MPS police officers patrolling the transport and roads networks.

We will continue to work with our policing partners to ensure our customers and road users are safe and feel confident about using our services and being on London's streets at all times.

Over the past year, we have improved safety on the tram network in Croydon, following the tragic derailment at Sandilands in November 2016. Working with the operator, we have installed a new in-cab driver protection device that detects and prevents fatigue and distraction.

Extra safety measures introduced include additional speed restrictions and a permanent maximum speed reduction from 80kph to 70kph, new signage for drivers, chevron signs at sites with significant bends, and an upgrade of the CCTV system. Further improvements will include an alert system for monitoring and managing tram speed, plus testing options to strengthen the glass fitted to trams.

We are also well advanced in acting on the recommendations in the interim Rail Accident Investigation Branch's report and will continue to do everything we can to support those who were injured, and the families of those who lost their lives.

### Road danger reduction

No death or serious injury that happens on London's roads is acceptable, and we are committed to addressing this as part of our 'Vision Zero' approach to road danger.



We are making London a better place for people to walk and cycle

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The Mayor has committed to the world's first Direct Vision Standard for heavy goods vehicles (HGVs), which assesses and rates how much drivers can see directly from their cab, in relation to other road users. Subject to consultation, we will work towards banning the most dangerous lorries from the Capital by 2020 and will make standards even stricter.

Over the period of this plan, our bus safety programme will help to reduce the number of people killed or seriously injured on or by a bus in London by 70 per cent. We are already trialling new technologies and will use the results to shape our improved bus safety standard, which we will introduce in 2018.

#### **Tackling traffic on London's roads**

We will continue to manage current congestion levels by improving our road status information and coordinating roadworks. But because walking, cycling and public transport are more space-efficient ways for people to move around, the only way to tackle congestion in the longer term will be to support a shift towards these forms of transport.

All our investment will support this, but specific measures are also needed. Freight makes up a fifth of all traffic in London, so we will work with businesses to improve delivery and servicing. London's boroughs manage 95 per cent of the city's streets, and we will help them develop traffic reduction strategies that will benefit residents.

#### **Improving air quality**

We have already committed significant resources to cleaning up London's air and will continue to do so. On 23 October we launched the Emissions Surcharge (also known as the Toxicity Charge or T-Charge). It means cars, vans, minibuses, buses, coaches and HGVs in central London must meet minimum exhaust emission standards, or pay £10 per day. This is in addition to paying the Congestion Charge.

We have also launched the first Low Emission Bus Zone on Putney High Street. Since last year, indicative results show this has contributed to a 90 per cent reduction in the times, per hour, that levels of nitrogen dioxide have exceeded EU limits. We will introduce a further 11 zones by 2020 and, from 2018, we will only purchase double-deckers that are hybrid or zero-emission.

Taxis form a critical part of our network, and from January 2018 all taxis receiving a London licence for the first time will be zero emission capable. To support this, we will continue our investment in rapid charging points, delivering 300 by 2020.

The Ultra Low Emission Zone (ULEZ) will be introduced in central London in 2019 and we will expand it across Greater London for heavy diesel vehicles, including buses, coaches and lorries, in 2020. It will be extended to the North and South Circular roads for cars and vans in 2021.

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## **A good public transport experience**

The Mayor's Transport Strategy will deliver an easy-to-use, affordable and accessible public transport system.

#### **Better services for more people**

Over the next five years, the Elizabeth line will provide the biggest boost to public transport services. It will open in central London in 2018 and along the whole route in 2019.

We will deliver our modernisation plan to upgrade the Circle, District, Hammersmith & City and Metropolitan lines, adding 33 per cent more capacity; begin work on our Deep Tube programme to upgrade the Piccadilly line, and complete the Barking Riverside extension. Over the plan, we will also increase capacity and frequency on the existing network. This year we ran a train every 100 seconds on the Victoria line, one of the most frequent services in the world.

We will also make better use of our existing assets to run faster and more frequent services. On the Jubilee and Northern lines, we will bring in faster and more frequent services by making better use of technology and modernising how we work.

We will also use our understanding about journey patterns to make our services more efficient so they meet all Londoners' needs. This could include increasing frequency on parts of the London Overground, or reconfiguring the bus network to help create healthier streets.

#### **Affordable and accessible**

Fares on our services remain frozen for the Mayor's term, so customers will pay the same for TfL Tube and bus journeys in 2020 as they did in 2016. Fares tied to National Rail will increase unless services are devolved to the Mayor, or the Government follows his lead to freeze prices. We will continue to lobby for the devolution of more suburban rail services to the Mayor so that he can make more rail journeys across London more integrated, affordable and accessible.

The Hopper fare has been hugely successful in its first year and we will expand it so that, from early next year, customers can make unlimited bus or tram transfers within the hour.

Record levels of investment in step-free access will continue and, by 2022, at least 30 more stations will be fully step-free. This is in addition to the Elizabeth line, which will also be step-free when it opens fully in 2019. In parallel, we will continue to look at how we provide for people with more specific transport needs and carry on our work to make bus stops and taxi ranks more accessible.

#### **Faster, more reliable journeys**

In the next five years, we will complete major station upgrades at Victoria and Bank – two of the busiest, most crowded stations on the Tube – and at Bond Street, and begin work at Camden and Holborn stations.

To maintain reliability, we will plan further bus priority measures, taking into account the needs of other road users.

### Harnessing the power of technology

Across our business, we are improving the way we use technology to make it easier for people to travel, how and when they want.

Following a successful trial in 2016, we are looking at how we can use data collected from anonymous WiFi connections on Tube stations to better understand customers' journey choices. This information could be used to reduce crowding, prioritise investment and improve services. And working with the Home Office, we will introduce the new Emergency Services Network on the Underground in 2019, with the aim of launching cellular access for the public soon after.

In addition to our own information products, our open data strategy has created a community of more than 13,000 developers, who can access the data for free, powering more than 600 apps that are used by 42 per cent of Londoners. We will look to make further data sets available to enable the production of more innovative products and services.

Our social media presence also continues to grow – we have 6.4million Twitter followers, 733,000 Facebook fans and 47,000 followers on Instagram.

### More digital services

We will continue to look at new ways in which to provide travel information.

In September 2017, we launched a new app that enables customers top up their Oyster card with pay as you go credit and buy Travelcards while on the move. In October 2017 we extended this to enable purchases to be collected on buses for the first time. The app, which is available to download for free via the Apple App Store, also allows people to check their credit and receive a 'low balance' alert direct to their smartphone. Future releases will include support for contactless payment cards, customers with travel concessions, and the ability to request refunds more easily.

We launched the TfL TravelBot on Facebook Messenger in June 2017. Since then, our first conversational 'bot' has engaged with more than 10,500 customers. The bot understands language queries, such as 'when is the next bus?', and responds using artificial intelligence. As well as bus arrival times and route information, users can find out the status of Tube services and access maps. We will add new functionality, such as journey planning, as we learn more about customers' needs.

Digital displays around the network will be optimised to provide better real-time information, particularly during periods of disruption. We will also make it easier to access personally relevant travel

information, particularly for customers with accessible travel needs.

As well as modernising our services, technology is allowing us to update our advertising estate – and boost commercial revenues – and we will install more than 750 digital screens on the Tube and Elizabeth line, along with 120 cross-track projection screens. This will mean our advertisers can reach their target audience with even greater impact.

Technology is also improving customers' connectivity – we plan to launch the first phase of 4G on the Underground in 2019.

### Smartcard ticketing

We will continue to enhance the Oystercard. Among the improvements will be the introduction of weekly capping to bring it into line with contactless payment and a system to help us get refunds to customers more reliably. We also will make 'pay as you go' available on the Elizabeth line.

Contactless payment is now used for 43 per cent of pay as you go journeys. We expect this figure to grow as more customers adopt mobile payment as it is progressively enhanced by the payment providers.

We will work with fare collection providers to maximise revenue from licensing the intellectual property we own in our contactless payment system. We will also deliver a second generation handheld device for our revenue inspectors, and a new, more reliable smartcard reader on all buses.

Around **50m** journeys with contactless a month

**13,200** developers use our data to create 600 apps

**10,500** unique visitors to the TfL TravelBot on Facebook Messenger





## New homes and jobs

Work to improve our transport services directly supports London's growth.

### Sustainable travel

Our focus on Healthy Streets gives us a guide for how to promote walking, cycling and public transport as part of new developments, so people can live active and healthier lives.

This has been built into proposals for new river crossings in east London, which we are progressing. A new walking and cycling crossing between Rotherhithe and Canary Wharf would create a sustainable transport link between two Opportunity Areas that, together, are expected to support more than 36,000 new homes and 112,000 jobs.

Further east, we will investigate options for more public transport links across the river, including a DLR extension to Thamesmead and begin building an extension of the London Overground to Barking Riverside.

In west London, working with the Old Oak and Park Royal Development Corporation, we will invest in transport measures in and around Old Oak Common, in preparation for the new High Speed 2 and Crossrail station opening on the site in 2026. We will look at what can be delivered in the short, medium, and long term, and how we can maximise funding opportunities both from central Government and the private sector.



**200,000**

new homes will be supported by Crossrail 2 and

**10,800**

new homes supported by the Gospel Oak to Barking Riverside London Overground extension

**60,000**

jobs will be supported by Crossrail 2 during construction



### Unlocking opportunities

As part of this Business Plan, we will develop proposals for Crossrail 2 so that a Hybrid Bill can be submitted to Parliament in early 2020. The scheme is the next big step for the development and growth of the whole city; it will enable up to 200,000 new homes and directly support 60,000 jobs across the country during construction and a further 200,000 when services begin. We are working closely with the Government and Network Rail on this nationally significant infrastructure project.

This year we received powers from the Government to begin building the 4.5km extension of the Gospel Oak to Barking line to Barking Riverside, a project that will support 10,800 homes on one of east London's largest new housing developments. Construction will begin in 2018 and services will start running in 2021.

We have also been developing plans for the Silvertown Tunnel, which will help to address the lack of cross-river connections in east London and reduce the environmental impact of traffic congestion. Coupled with a package of bus services and concessions for local residents, the new crossing presents huge potential for growth, both north and south of the river. We are currently awaiting a decision on the Development Consent order which would give us the powers to build and operate the scheme.

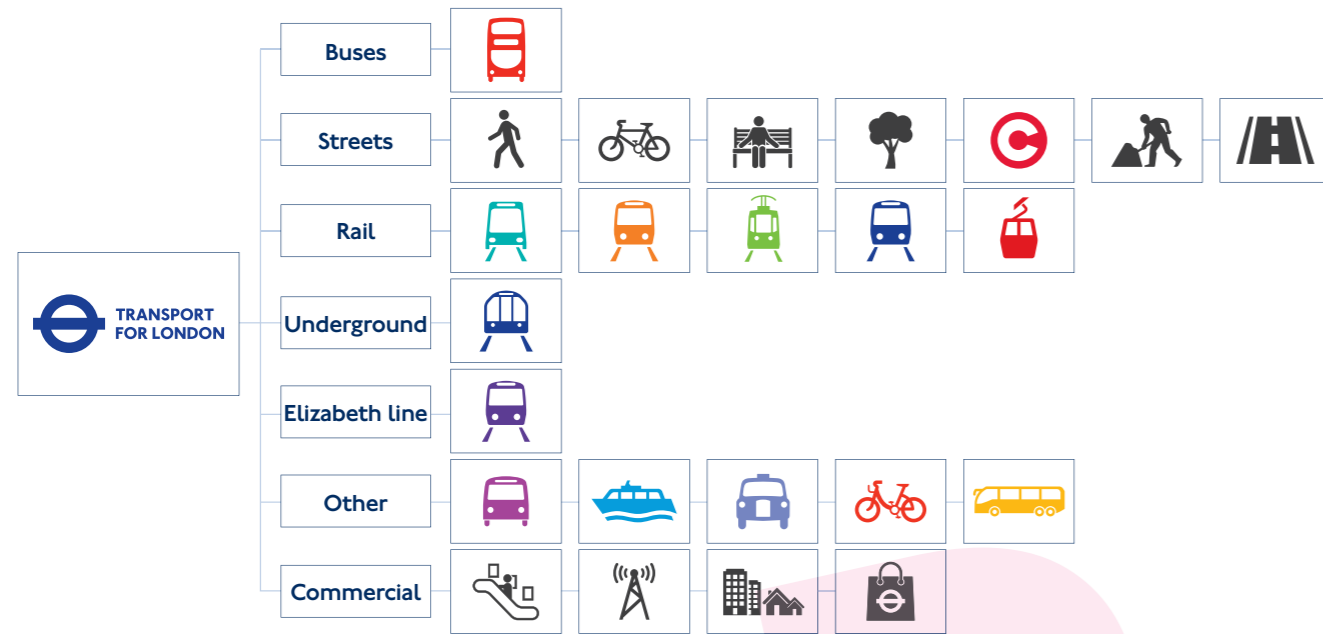
Our £550m Growth Fund will finance transport infrastructure schemes that lead to tens of thousands more homes and jobs, and unlock development and regeneration opportunities in some of London's most important growth areas. Over the next five years, schemes include funding for new stations in Tottenham Hale, White Hart Lane and Beam Park; road schemes in Bromley-by-Bow, Croydon, Wandsworth and Vauxhall; and larger projects such as the new Rotherhithe to Canary Wharf crossing and an extension of the tram network in Sutton.

On the Tube, our work to upgrade the existing network will support 80,000 homes across the city. We will complete the Northern line extension from Kennington to Battersea and, subject to consultation, start applying for powers to build the extension of the Bakerloo line south of Elephant and Castle. These will serve important Opportunity Areas and lead to more homes and jobs.

In parallel, we will continue providing new, affordable housing through the development of our own property estate. By 2021, we will have started work on sites that will deliver 10,000 homes – 50 per cent of which will be affordable – as well as new workspaces and offices.

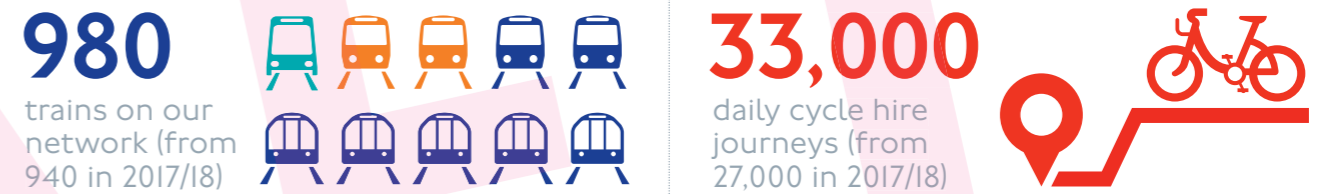
# Business at a glance

## How we report on our business



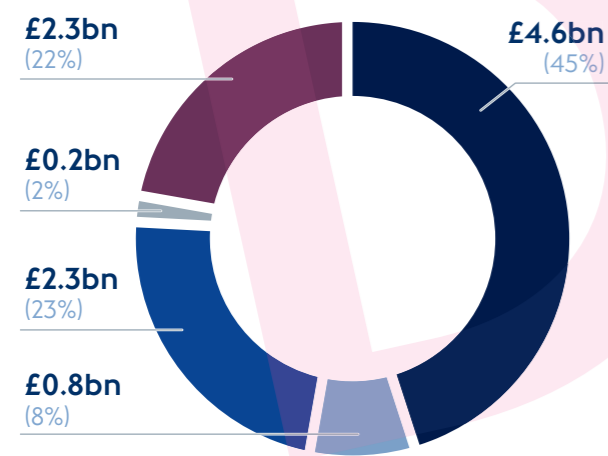
## Facts and figures

By 2022/23...

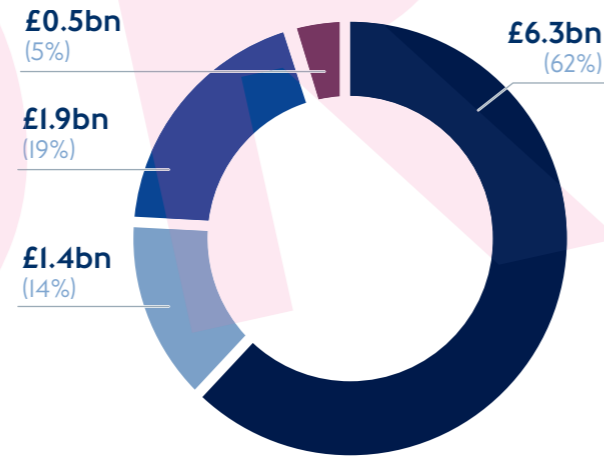


## Sources of funding

2017/18 – projected



## 2022/23 – plan



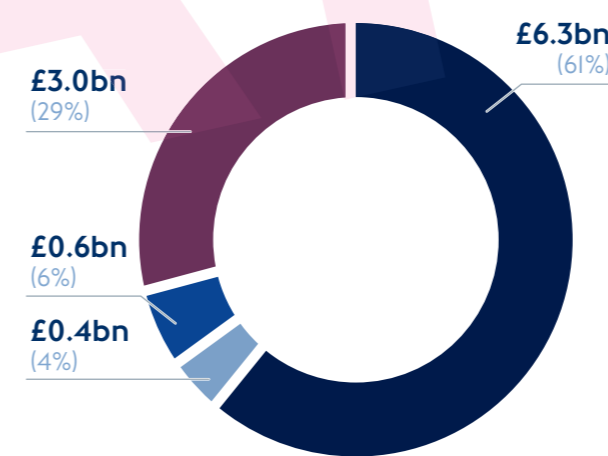
Total: **£10.3bn**

Total: **£10.2bn**

■ Passenger income ■ Other income ■ Grant funding ■ Crossrail funding ■ Use of borrowing and cash reserves

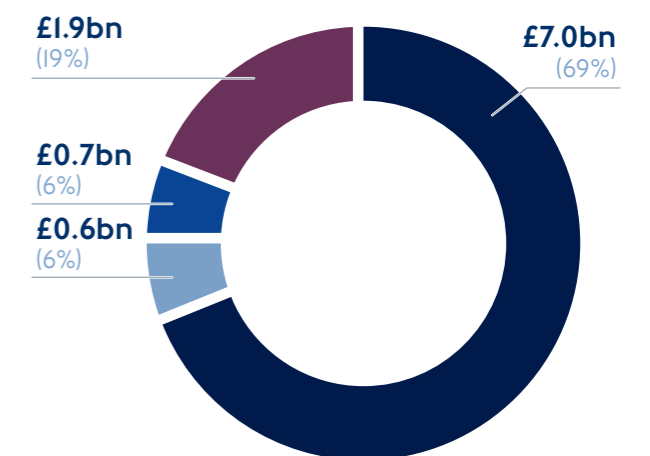
## Total costs

2017/18 – projected



Total: **£10.3bn**

## 2022/23 – plan



Total: **£10.2bn**

■ Operating costs ■ Net financing costs ■ Capital renewals ■ New capital investment

# Financial summary

We must cover our day-to-day operational costs from sustainable income sources and generate a surplus to fund capital investments.

We will continue to invest record amounts in new and improved infrastructure without the operational general grant funding from central government from 2018/19.

We will achieve this while meeting our commitments to deliver the Mayor's Transport Strategy, by improving Londoners' quality of life with record funding for the Healthy Streets portfolio.

We are focusing on street improvements, improving air quality and maintaining a safe and reliable transport network to promote a shift to walking, cycling and public transport.

Our 2016 Business Plan was a transitional plan, ahead of the new Mayor's draft Transport Strategy, as we set ourselves the financial objective of breaking-even on the cost of day-to-day operations, including the costs of financing, in 2021/22.

This latest plan builds on that to generate a surplus in later years. We need to generate a growing budget surplus to continue to invest in new capacity and replace assets as they reach the end of their useful life.

Since the 2016 plan, passenger volumes have been lower than anticipated owing to changing economic factors affecting how and when people travel. We have, therefore, assumed lower overall growth in journey numbers over this plan period.

One year into our latest cost reduction programme, we have successfully delivered against budgeted savings. This year, we will exceed our budgeted operating cost savings by £138m. We can go further over the remaining years of the plan, having identified opportunities for new efficiencies including receiving better value from our supply chain, consolidating our buildings and reviewing our organisational structure, while protecting safety, services and reliability.

## Operating account

| TfL Group (£m)                                 | Actual       | Forecast     | Plan         | Plan         | Plan         | Plan         | Plan         |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  | 2016/17      | 2017/18      | 2018/19      | 2019/20      | 2020/21      | 2021/22      | 2022/23      |
| Passenger income                               | 4,694        | 4,638        | 4,793        | 5,156        | 5,721        | 6,007        | 6,306        |
| Other operating income                         | 717          | 728          | 843          | 896          | 996          | 1,254        | 1,295        |
| <b>Total operating income</b>                  | <b>5,411</b> | <b>5,366</b> | <b>5,636</b> | <b>6,052</b> | <b>6,717</b> | <b>7,261</b> | <b>7,601</b> |
| General grant                                  | 447          | 228          | -            | -            | -            | -            | -            |
| Mayoral business rates                         | 854          | 854          | 929          | 854          | 854          | 854          | 854          |
| Other revenue grants                           | 51           | 73           | 55           | 37           | 6            | 6            | 6            |
| <b>Total income</b>                            | <b>6,763</b> | <b>6,521</b> | <b>6,620</b> | <b>6,943</b> | <b>7,577</b> | <b>8,121</b> | <b>8,461</b> |
| Operating cost                                 | (6,172)      | (6,278)      | (6,608)      | (6,698)      | (6,768)      | (6,816)      | (7,005)      |
| <b>Net operating surplus</b>                   | <b>591</b>   | <b>243</b>   | <b>12</b>    | <b>245</b>   | <b>809</b>   | <b>1,305</b> | <b>1,456</b> |
| Capital renewals                               | (636)        | (593)        | (496)        | (621)        | (650)        | (652)        | (652)        |
| <b>Net cost of operations before financing</b> | <b>(45)</b>  | <b>(350)</b> | <b>(484)</b> | <b>(376)</b> | <b>159</b>   | <b>653</b>   | <b>804</b>   |
| Net financing costs                            | (413)        | (434)        | (484)        | (511)        | (543)        | (575)        | (651)        |
| <b>Net cost of operations</b>                  | <b>(458)</b> | <b>(784)</b> | <b>(968)</b> | <b>(887)</b> | <b>(384)</b> | <b>78</b>    | <b>153</b>   |

## Capital account

| TfL Group (£m)                  | Actual         | Forecast       | Plan           | Plan           | Plan           | Plan           | Plan           |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                                 | 2016/17        | 2017/18        | 2018/19        | 2019/20        | 2020/21        | 2021/22        | 2022/23        |
| New capital investment          | (1,224)        | (1,550)        | (1,512)        | (1,356)        | (1,210)        | (1,210)        | (1,895)        |
| Crossrail investment            | (1,593)        | (1,402)        | (460)          | (65)           | -              | -              | -              |
| <b>Total capital investment</b> | <b>(2,817)</b> | <b>(2,952)</b> | <b>(1,972)</b> | <b>(1,421)</b> | <b>(1,210)</b> | <b>(1,210)</b> | <b>(1,895)</b> |
| <b>Financed by:</b>             |                |                |                |                |                |                |                |
| Investment grant                | 944            | 960            | 976            | 993            | 1,010          | 1,030          | 1,051          |
| Property and asset receipts     | 14             | 89             | 875            | 162            | 8              | 140            | 106            |
| Borrowing                       | 682            | 621            | 801            | 500            | 601            | 501            | 500            |
| Crossrail funding sources       | 170            | 208            | 312            | 53             | 144            | 42             | 46             |
| Other capital grants            | 154            | 211            | 213            | 216            | 13             | 12             | 16             |
| <b>Total</b>                    | <b>1,964</b>   | <b>2,089</b>   | <b>3,177</b>   | <b>1,924</b>   | <b>1,776</b>   | <b>1,725</b>   | <b>1,719</b>   |
| <b>Net capital account</b>      | <b>(853)</b>   | <b>(863)</b>   | <b>1,205</b>   | <b>503</b>     | <b>566</b>     | <b>515</b>     | <b>(176)</b>   |

## Cash flow summary

| TfL Group (£m)                              | Actual         | Forecast     | Plan     | Plan         | Plan       | Plan       | Plan       |
|---|----------------|--------------|----------|--------------|------------|------------|------------|
|   | 2016/17        | 2017/18      | 2018/19  | 2019/20      | 2020/21    | 2021/22    | 2022/23    |
| Net cost of operations                      | (458)          | (784)        | (968)    | (887)        | (384)      | 78         | 153        |
| Net capital account                         | (853)          | (863)        | 1,205    | 503          | 566        | 515        | (176)      |
| Working capital movements                   | (42)           | 1,134        | (234)    | (43)         | (65)       | 24         | 270        |
| <b>Increase/(decrease) in cash balances</b> | <b>(1,353)</b> | <b>(513)</b> | <b>3</b> | <b>(427)</b> | <b>117</b> | <b>617</b> | <b>247</b> |

We must deliver a step change in driving new revenue streams from our commercial activities, by looking at how to make more of our retail spaces at stations and on high streets, advertising opportunities, and establishing TfL consultancy services.

We have optimised our capital investment programme to make the most efficient use of current capacity, and the new capacity being added during this Business Plan, together with record new investment in Healthy Streets. The Elizabeth line will add 10 per cent capacity, and the upgrade of the Circle, District, Hammersmith & City and Metropolitan lines will add 33 per cent capacity to the Tube network, as per our current programmes. The benefits from the largest investment programme in the Tube's history, combined with the huge capacity increases coming soon from the arrival of the Elizabeth line, means that

we are temporarily pausing our plans to buy more trains for the Jubilee and Northern lines. We will also introduce new trains on the DLR, additional trains on the London Overground, begin modernising the Piccadilly line, and continue our step-free access programme to open up more journey options using public transport.

From next year we have to, for the first time, address the critical issues of London's road network, including congestion, road danger, maintenance and air quality, without any Government operating grant. Furthermore, from 2021, the £500m raised every year from Londoners paying Vehicle Excise Duty will be collected by central Government and only invested in roads outside the Capital.

This means the net operating costs of London's roads, currently almost £200m each year, and the cost of

renewing these roads, between £100m to £150m each year, are effectively being cross subsidised from fare-paying public transport users. This is neither sustainable nor equitable. As a result, in the short to medium term we will have to significantly reduce our programme of proactive capital renewals on the road network, although we will ensure safety of the network is maintained.

In the medium to long term, it is important that we identify new, sustainable funding sources for London's roads. We and the Mayor are calling on the Government, as part of their Transport Investment Strategy, to make sure that a link between Vehicle Excise Duty and roads funding is applied to London as well. This would allow us and the boroughs to continue modernising London's road network, as well as support more walking and cycling journeys across the Capital.

The success of this plan will depend on the delivery of our cost reduction programme and identifying new funding for London's streets. We must continue to increase public transport journeys and do everything we can to encourage fast take up of new Elizabeth line services.

We will be more efficient and cost-effective, and we will keep our promises to the Mayor and to London. We have an opportunity to create a great legacy of not only a safer and more reliable transport

network, but also one that is financially sustainable for future generations.

The main projects planned over the next five years include:

### Underground and rail

- The completion and opening of the Elizabeth line
- A signalling upgrade adding 33 per cent capacity on the Circle, District, Hammersmith & City and Metropolitan lines
- New trains and signalling on the Piccadilly line, providing 60 per cent extra capacity
- Station upgrades at Victoria, Tottenham Court Road, Bond Street, Bank, Holborn and Camden
- A major programme of investment to improve accessibility at Tube stations across the network
- The London Overground extension to Barking Riverside as part of a wholesale regeneration of the area
- Forty-three new DLR trains by early 2020
- Northern line extension to Battersea opening with services starting in 2020, supporting 25,000 new jobs and 20,000 new homes

### An integrated programme for streets and buses

- A comprehensive Healthy Streets portfolio, including the transformation of Oxford Street, local walking and cycling schemes, and the Rotherhithe to Canary Wharf, which is currently being consulted upon
- An accelerated programme of air quality and environmental improvements, including the implementation of the ULEZ
- A bus safety programme that brings together technology, training, monitoring and standards to contribute towards the Mayor's bus-specific road safety targets
- The Silvertown Tunnel, as part of a broader plan for more river crossings in the east

### Building for the future

- Coordinated investment to move towards 80 per cent of trips being made on foot, by cycle or using public transport
- Crossrail 2, a northeast-to-southwest rail route to relieve congestion on lines into Waterloo
- An extension to the Bakerloo line
- A development programme that delivers 50 per cent affordable housing while generating income to reinvest in transport services

### Passenger journey analysis

Trends in the number of passenger journeys are described in more detail in the operational trends section and the divisional summaries.

The opening of the Elizabeth line will have the biggest effect on capacity and passenger journeys in this plan, with an increase from 46 million currently, on TfL Rail, to nearly 270 million by 2022/23, when the line will have been fully open for more than three years.

Growth in passenger journeys on London Underground will be steadier, reflecting assumed lower growth and passengers migrating to the Elizabeth line, particularly from the Central line. We anticipate an increase in Tube passengers of five per cent over this five-year plan.

As we continue to improve London's streets and air quality, and encourage people to walk, cycle and use public transport, we will see a 45 per cent rise in cycling trips and a five per cent increase in walking trips.

We will be focusing our activities on the bus network to provide capacity that meets demand across London. Combined with the effect of our investment in reducing congestion and improving reliability on our roads, we expect bus passenger numbers to steadily increase from 2017/18 and reach 2.3 billion by 2022/23.

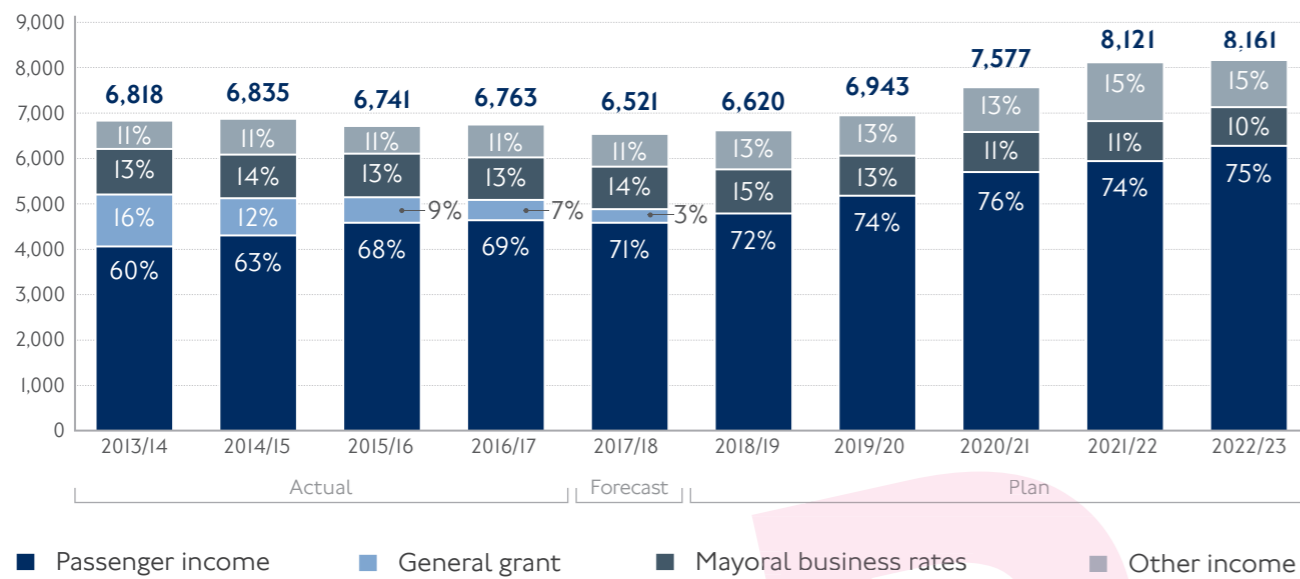
### Passenger journey analysis

| Passenger journeys* (millions) | Actual       | Forecast     | Plan         | Plan         | Plan         | Plan         | Plan         | Variance 2017/18 - 2022/23 % |
|--------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------------------|
|                                | 2016/17      | 2017/18      | 2018/19      | 2019/20      | 2020/21      | 2021/22      | 2022/23      |                              |
| London Underground             | 1,378        | 1,333        | 1,340        | 1,341        | 1,339        | 1,371        | 1,403        | 5%                           |
| Buses                          | 2,262        | 2,230        | 2,248        | 2,255        | 2,258        | 2,282        | 2,299        | 3%                           |
| DLR                            | 122          | 124          | 124          | 117          | 112          | 114          | 120          | -3%                          |
| London Overground              | 189          | 194          | 212          | 231          | 238          | 248          | 262          | 35%                          |
| London Trams                   | 30           | 29           | 30           | 30           | 30           | 32           | 33           | 14%                          |
| Emirates Air Line              | 1            | 1            | 1            | 1            | 1            | 1            | 2            | 7%                           |
| Elizabeth line                 | 48           | 46           | 80           | 163          | 258          | 263          | 269          | 485%                         |
| Dial-a-Ride                    | 1            | 1            | 1            | 1            | 1            | 1            | 1            | 0%                           |
| London River Services          | 11           | 11           | 11           | 12           | 12           | 12           | 12           | 9%                           |
| Cycle hire                     | 10           | 10           | 11           | 11           | 11           | 11           | 12           | 20%                          |
| Walking                        | 2,435        | 2,460        | 2,485        | 2,510        | 2,535        | 2,560        | 2,585        | 5%                           |
| Cycling                        | 273          | 299          | 326          | 353          | 379          | 406          | 433          | 45%                          |
| <b>Total</b>                   | <b>6,760</b> | <b>6,738</b> | <b>6,869</b> | <b>7,025</b> | <b>7,174</b> | <b>7,301</b> | <b>7,431</b> | <b>10%</b>                   |

\*All figures are London-wide

# Financial trends

**Total income (£m)**



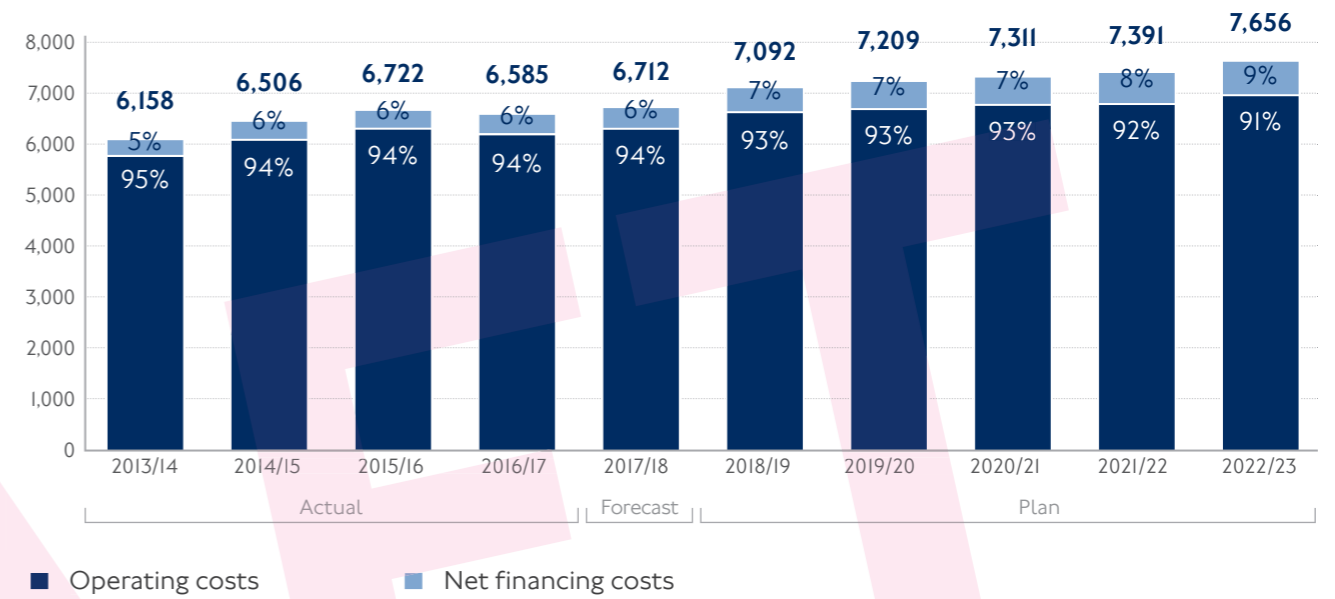
We have seen lower growth in demand for our services than previously forecast for this year, largely owing to economic factors affecting the whole of the UK, including the uncertainty of Brexit. Lower consumer confidence, GDP growth stagnating, real wage growth and a softening housing market are all affecting services and retail in London, leading to lower than forecast passenger numbers. Current patterns in rail journeys show a year-on-year reduction in trips within Zone 1, and this is reflected in our lower passenger income. These economic factors have also affected our commercial revenue.

Early indications are that the Mayor's policy of keeping fares affordable has

helped to dampen the effect of these negative economic factors. Where fares have been increased on the National Rail network, this has led to much sharper reductions in passenger numbers for those operators. This plan assumes the Mayor's TfL fares freeze is maintained until 2020.

We have made reasonable assumptions to estimate our future passenger revenue, based on independent economic analysis and trend data. Drawing on the Greater London Authority's worst-case assumptions for the UK economy, we expect the negative pressures on demand for our services to last for the first half of this plan. As the uncertainty of Brexit passes and London's population

**Total costs (£m)**



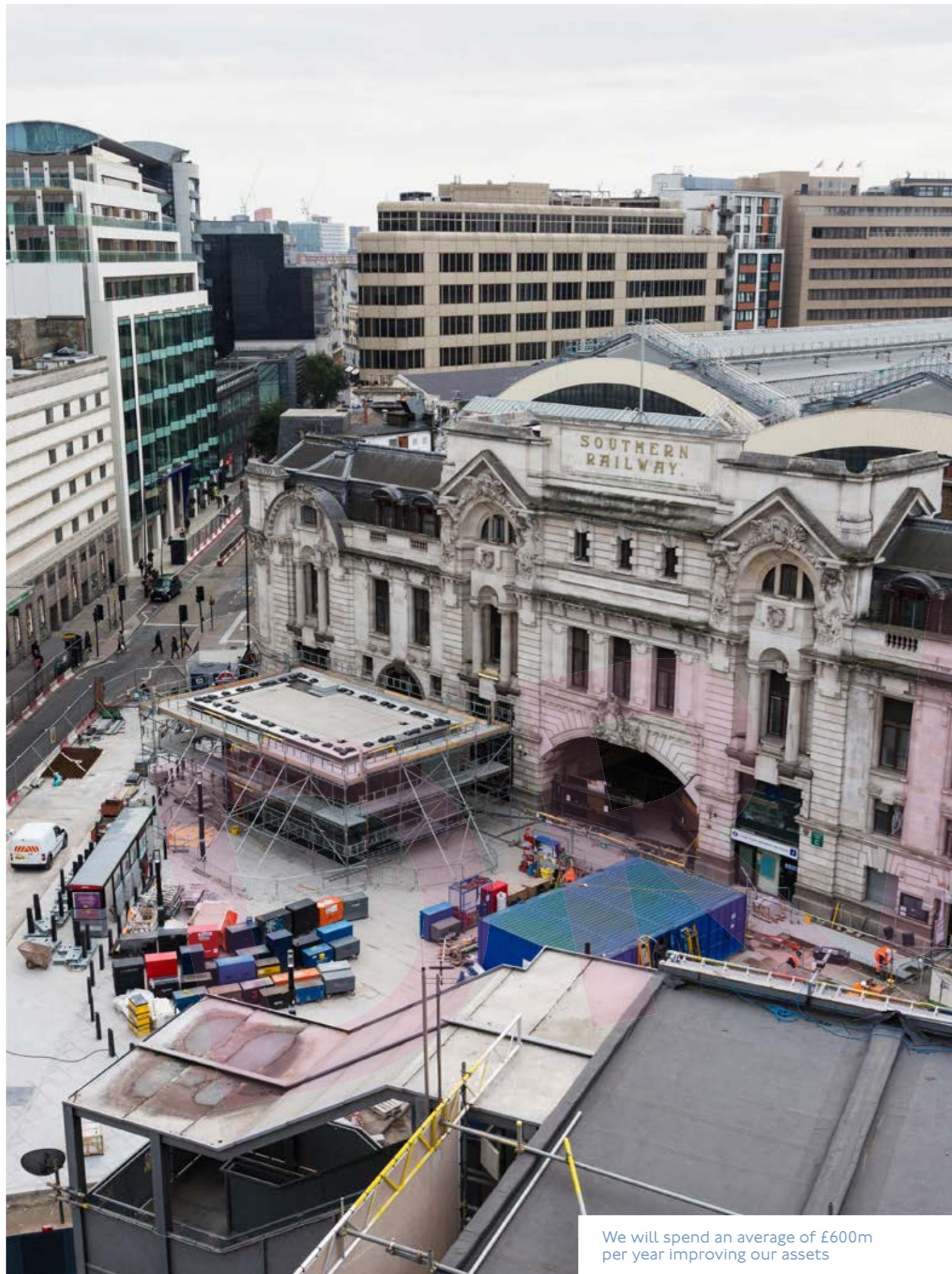
continues to grow, we expect growth to return to more typical levels for the rest of the plan.

A significant proportion of our expected revenue growth will come from the opening of the Elizabeth line. In particular, the final opening phases from 2019 will bring new passengers from outside London onto our services.

Over the past year we have successfully stopped the fall in bus revenues by a series of bus priority measures. We must make sure speeds are sustained and service levels are accurately matched to demand, to make sure the bus remains an attractive travel option.

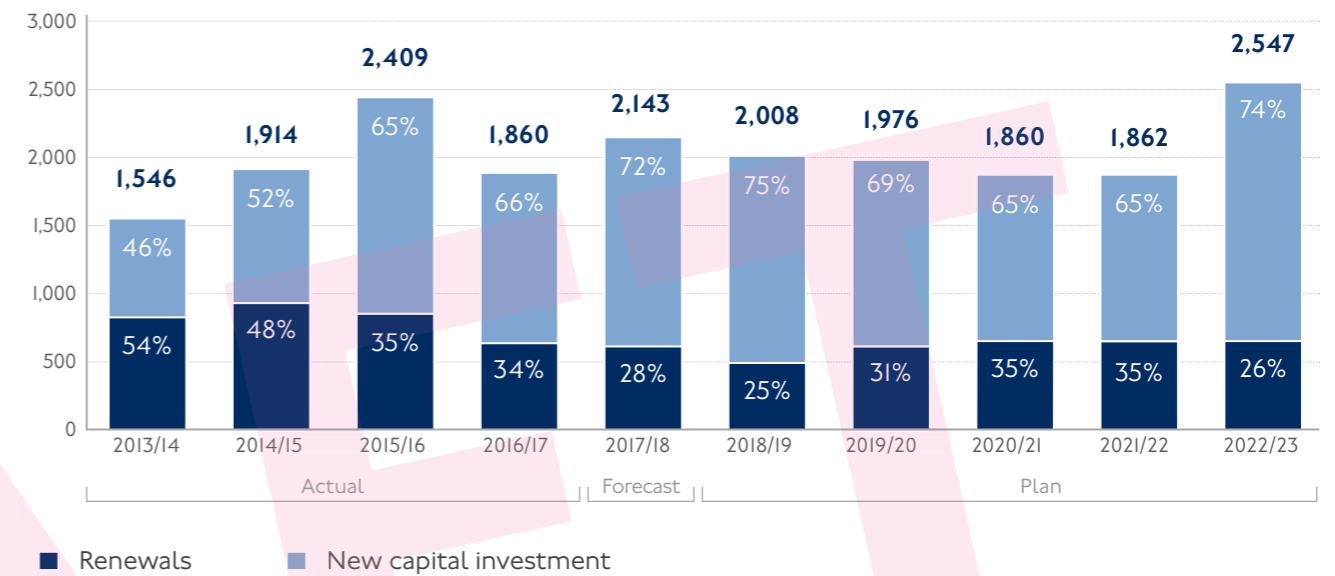
In 2017/18, we expect our outturn operating costs before financing to be £6.3bn and we are planning that, by 2022/23, they will be no more than £7bn. This rise – just 11 per cent – includes inflation and the increased costs of operating the Elizabeth line, which are largely offset by significant savings.

On a like-for-like basis – adjusting for the increased costs of operating the Elizabeth line, taking into account inflation and savings – we are holding our operating costs broadly the same with just a three per cent increase between 2017/18 and 2022/23. We are on track with the delivery of our transformation programme, which will be at the core of achieving this target.



We will spend an average of £600m per year improving our assets

### Capital expenditure (excluding Crossrail) (£m)



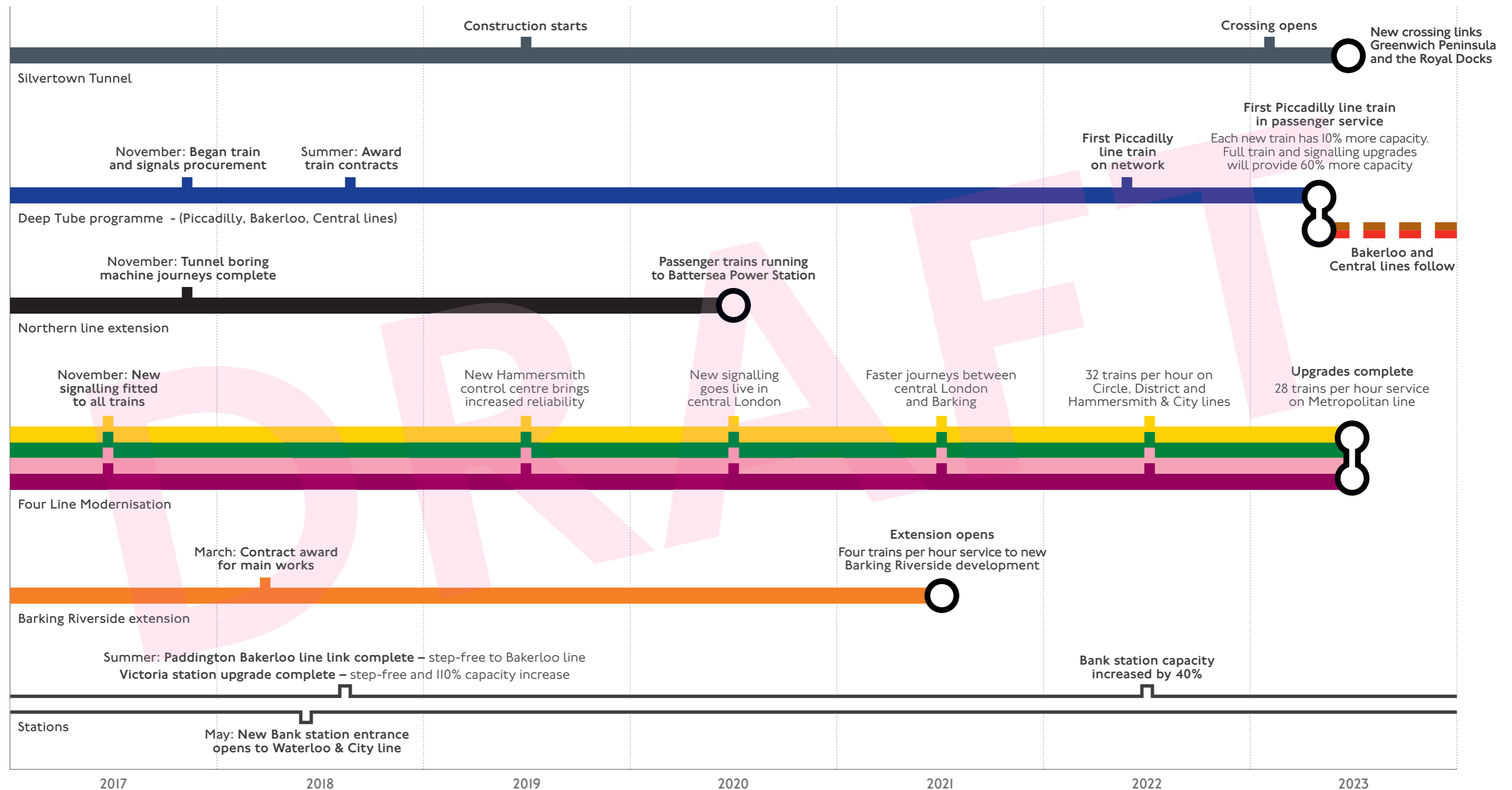
Despite some anticipated reductions in income, we will continue with record levels of capital investment, through additional savings in our operating costs and intensifying value engineering options on projects.

Capital renewals maintain our assets in a good state of repair and ensure they function properly every day. Higher rates of renewal expenditure over recent years means we can invest more in new programmes while maintaining safe and reliable levels of renewal over the Business Plan. Capital renewals are expected to account for around a third of all capital expenditure. These

programmes will improve assets such as stations, tracks and our streets, at an average of £600m per year.

New capital investment is vital to providing new capacity and greater reliability, and offering new and much-needed services. We have retained the main priorities from our previous plan and will deliver the same outcomes for less money, albeit with some projects now delivered to a different timeframe. Over the life of the plan, new capital investment is expected to average around £1.4bn, and will provide an increase in capacity.

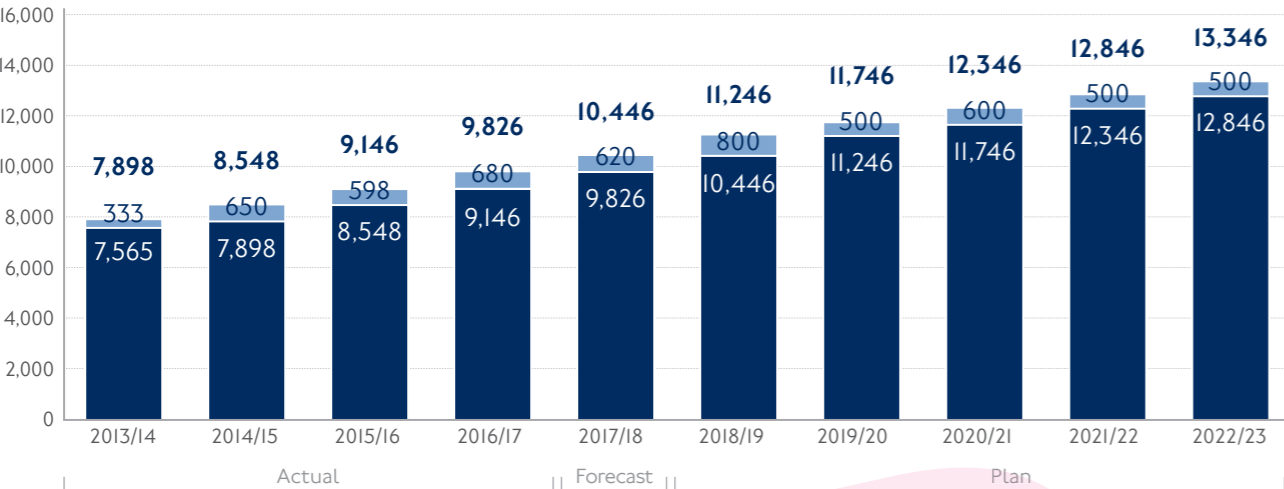
# Key milestones of the Investment programme





# Borrowing

**Total nominal value of borrowing (£m)**



■ Opening balance    ■ Incremental borrowing

Borrowing to be raised over the period of this plan will be used to finance our investment programme, including capacity and station upgrades on the Underground and rail networks, new DLR trains, and investments in cycling infrastructure schemes.

The total incremental borrowing to be raised by March 2021 is within the limits agreed with Government and set out in their March 2017 funding letter.

Our direct debt (excluding finance leases) is expected to reach £10.4bn by the end of 2017/18. It is then expected to increase by between £500m and £800m year-on-year, reaching £12.3bn by the end of 2020/21.

Our Business Plan assumes we will raise an additional £500m in debt in both 2021/22 and 2022/23. We will only borrow what we need in order to finance capital investment.



Our borrowing will support our investment programme, including station upgrades

# Operational trends

## Passenger journeys by 2022/2023

**4.4bn** total passenger journeys anticipated\*

**11%** increase in passenger journeys from 2017/18\*

### London Underground



1.4bn

### Buses



2.3bn

### Rail (DLR, London Overground, London Trams and the Emirates Air Line)



0.4bn

### Elizabeth line



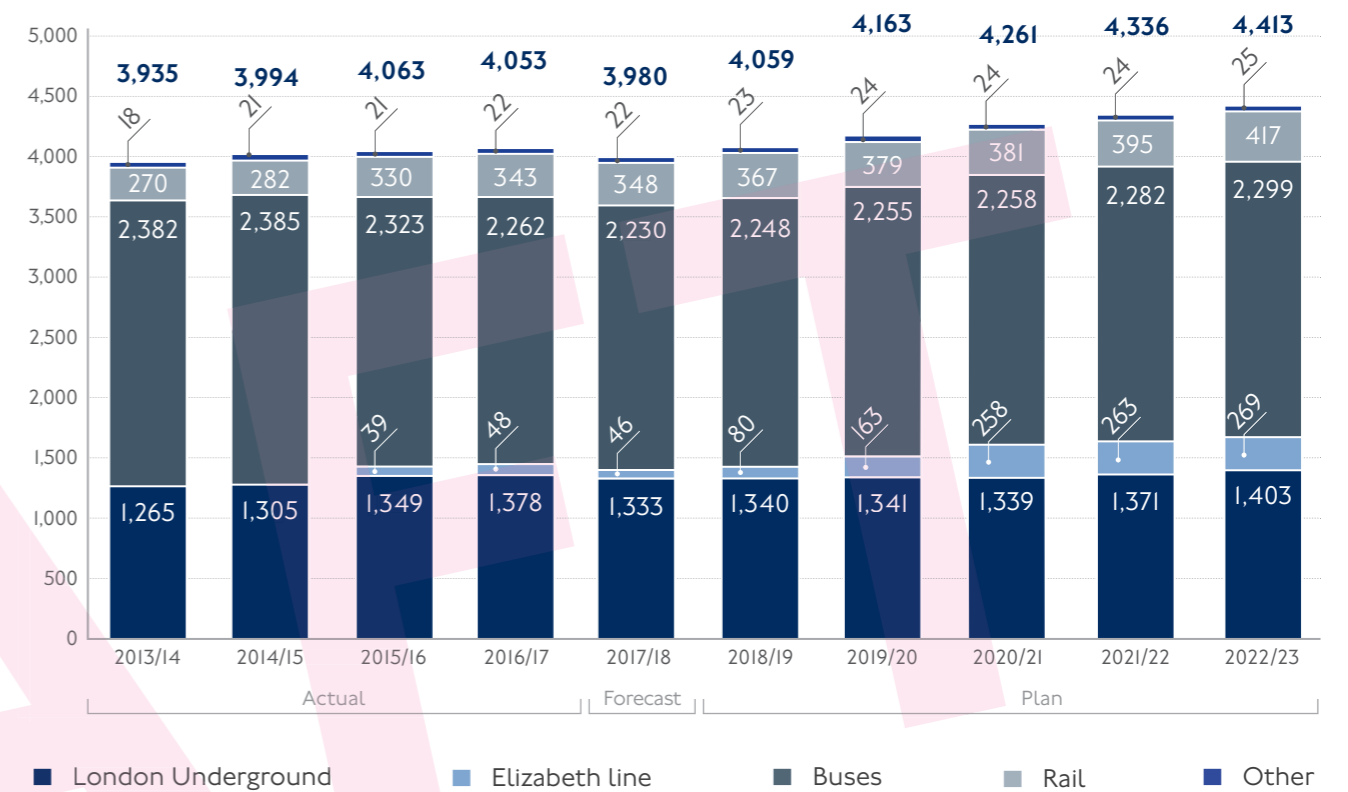
0.3bn

\* Excluding walking, cycling, car, taxi and other journeys (for details, see the table on page 35)

This year has seen lower demand for Tube services since the record high in 2016/17. Growth in journeys will be steady over the first few years of the plan, a reflection of the overall lower demand assumed within London and passengers

migrating to the Elizabeth line during the initial opening of the line in 2019. Demand is expected to increase towards the end of the plan as the Elizabeth line brings new customers from outside London on to the Tube.

## Passenger journeys (millions)



We expect bus passenger numbers to steadily rise year-on-year in line with population growth. We will maintain reliability and rebalance services to better meet changing customer demand.

We forecast that DLR passenger volumes will initially rise before reducing in 2019/20 and 2020/21, largely owing to the opening of the Elizabeth line.

Cycle hire use will see steady year-on-year growth with the introduction of new Santander Cycles and continued investment in cycling infrastructure overall. We also anticipate a rise in the number of people using London River Services, continuing the trend of recent years, and expect 12 million passenger journeys by 2022/23. Dial-a-Ride journeys will be maintained at current levels.



Many of our staff will re-locate to new offices in Stratford

# Transformation programme

We will continue with the comprehensive review of our organisation and changing the way we work to make sure we deliver the Mayor's vision for London.

We have a tough financial challenge – to turn an operating deficit into a surplus and absorb, on average, a £700m per year reduction in Government funding over five years. To achieve that target, we are making significant structural and cultural changes to become more efficient and effective. We are radically reducing our operating cost base and transforming how we work to sustain these changes and become more agile and commercial.

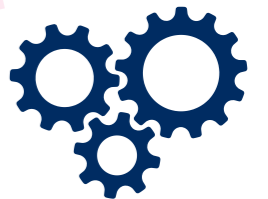
## Value

We are making good progress in reducing costs and are on track to reach our net operating surplus target by 2022/23. We continue to rigorously identify opportunities to cut day-to-day operating costs, negotiate further savings and capitalise on commercial opportunities. Activities include:

- Reviewing, retendering and re-negotiating bus contracts, saving £375m by 2022/23
- Consolidating our head office accommodation, vacating older buildings and co-locating staff to our new hub in Stratford, saving more than £0.1bn by 2022/23. This will also improve collaboration and enable smarter, more flexible working
- Continuing the modernisation of London Underground, including exiting a private partnership maintenance contract saving £0.2bn by 2022/23
- Developing plans to deliver £1.2bn of value engineering efficiencies in our Investment Programme by 2022/23

**£153m**

net surplus on operations by 2022/23



**£1.2bn**

reduction of annual operating costs by 2022/23



More than

**£11m**

of operating model savings each year up to 2022/23



## Organisation

We have been reviewing every part of our business, identifying and implementing new structures and ways of working that will enable us to function more efficiently and at lower cost.

Organisational change activity taking place includes:

- Appointing a new director leadership team, reducing the group by 10 per cent, saving £2m a year
- Reducing the number of organisational layers to make our structure less complex, so decisions can be made more effectively
- Re-evaluating 15 business areas – 10,000 members of staff have been through extensive organisational change
- Completing a TUPE transfer of engineering, major projects, change delivery and project management activity from London Underground to TfL. This is leading to new Engineering and Major Projects functions as part of our new operating model, reducing duplication and ensuring efficiencies

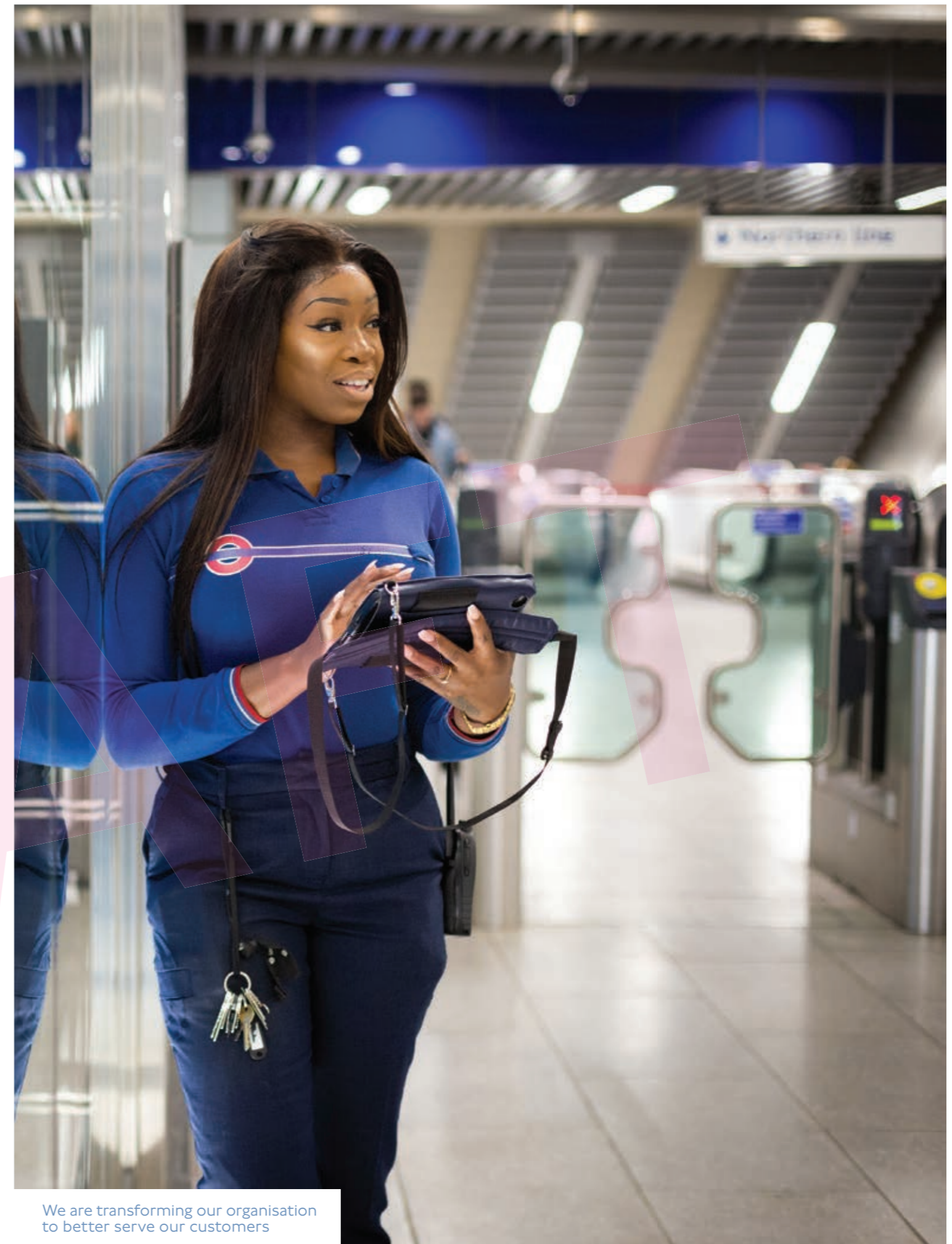
## Culture

To ensure our financial savings and organisational changes are sustainable, we must modernise the way we work. We have launched a toolkit for our leaders that outlines the objectives and behaviours they need to demonstrate to make sure our evolving culture is a success.

We have also improved how we implement change across the organisation. This includes setting up new forums to ensure regular engagement with our trade unions' representatives.

Throughout our transformation we are keeping our employees updated on progress and are listening to their feedback. A new measure – reporting on the engagement of our people – has been added to our business scorecard. This has allowed us to take immediate action to improve our engagement, where necessary.

Our transformation programme continues across all areas of our business, as we drive the development of a modern, efficient, high performing organisation.



We are transforming our organisation to better serve our customers

# Diversity and inclusion

We want to be the most diverse and inclusive organisation in London.

We take very seriously our role in creating a city that is open to all, where difference is celebrated and respected and where everyone can thrive, regardless of their background.

## Working for all Londoners

By providing safe and accessible transport, we contribute to the growth of a vast labour market in the Capital and beyond. This creates economic growth and brings prosperity in areas of high social disadvantage. Transport helps people to fully participate in public life.

We are prioritising issues that disproportionately affect some customers. We know people have different opportunities depending on where they live, and those in deprived areas are more likely to experience poorer health and air quality issues. Creating healthier communities must be central to all that we do.

Alongside this, we are dealing with unwanted sexual behaviour and hate crime on our network and giving customers the confidence to report issues and know that action will be taken.

## A more accessible network

The ability for all people to travel spontaneously and independently is at the heart of our approach to accessibility. As well as looking at the physical infrastructure, the new draft Mayor's Transport Strategy will also address overcrowding, safety and affordability.

Customer information is now available in more languages and in 'Easy Read' formats and we continue to look for additional ways to help people plan their journeys. In April, we introduced the 'Please offer me a seat' badge to help people with hidden disabilities travel with confidence. We will also work closely with London boroughs to continue to develop our Assisted Travel Service.

We will also launch a mental health strategy to increase awareness among our staff and, ultimately, improve support for customers. This is a significant step towards removing the barriers that prevent people from using the network.

Our Independent Disability Advisory Group provides us with valuable scrutiny and support, and we liaise with advocacy groups across London. We will prioritise our efforts to better understand how we can improve our services for all passengers when designing and developing our policies and plans.

## Reflecting the city we serve

Our aim is to recruit, retain and develop a diverse workforce and make sure our people have the opportunities to become the best they can be.

By assessing candidates on their potential rather than their experience, we have significantly increased the number of black, Asian and minority ethnic (BAME) apprentices. In 2017, there was a 32 per cent increase in BAME apprentices recruited compared with last year on a like-for-like basis, and we expect that figure to rise. We will support such recruitment through a range of activities including engaging with schools in highly diverse boroughs and overhauling our recruitment process.

To reduce the gender pay gap, and improve diversity in senior management roles, we will set more ambitious targets. More opportunities for career progression will be made available and we will measure our people's experiences of TfL, with the aim of eradicating any disparity.

We will also promote inclusive working practices by encouraging flexible hours and initiatives, such as our Steps into Work programme, which offers young

people with learning disabilities the chance to gain valuable experience within our organisation.

We recognise that engaging with young Londoners, schools and careers services is essential to address the impending skills shortage and challenge any gender stereotypes that are placed on girls and young women. Our schools engagement programme will continue to encourage young people to consider a future in the transport industry, and specifically at TfL.

As an internationally renowned STEM science, technology, engineering and maths business, we are well placed to lead this debate and have launched a Diversity in STEM Advisory Board, made up of experts in the field.

In addition, we will work with our suppliers to address challenges across the industry regarding recruitment and progression of people from diverse backgrounds.

We will put new requirements in contracts; host joint recruitment events for underrepresented groups in STEM careers; and co-produce joint initiatives to increase the recruitment of people from underrepresented groups.

# Buses

We operate one of the most frequent and extensive bus networks in the world, with around 9,000 vehicles serving 675 routes.

## What customers can expect

Buses are vital to the Capital's continued success, and we are working to make sure the network is adjusted to best cater for current and future demand. Improving vital services in central London and reviewing those that are underused, as well as using spare capacity to provide new links where they are needed, will ensure that buses help London to grow in a way that benefits everyone. In addition, we are improving London's bus network by:

- Ensuring the safety and security of customers and introducing new bus safety standards
- Making journeys quicker and more reliable by investing in bus priority schemes, route and traffic management, and traffic signal timing reviews
- Making travelling on buses more attractive through our 'Hello London' training programme for drivers, bus controllers and other operational staff. Also, as part of our 'whole journey' approach, we are improving the quality and consistency of customer service at bus stations, as we have done at Tube stations
- Modernising our fleet so it is among the least polluting in the world and introducing Low Emission Bus Zones in areas with the poorest air quality
- Providing better customer information, before and during journeys

We are reducing services in central/inner London, matching demand while still supporting excellent access and complementing wider schemes, such as the transformation of Oxford Street. Capacity in suburban areas is being improved, within funding constraints, particularly to support housing growth and associated travel.

## Low Emission

Bus Zones will improve London's air quality



We will protect reliability and journey times



We are modernising our fleet and improving customer service

## Operational performance in the future

| Bus measures                             | Forecast | Plan    | Plan    | Plan    | Plan    | Plan    |
|--|----------|---------|---------|---------|---------|---------|
|  | 2017/18  | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| Passenger journeys (millions)            | 2,230    | 2,248   | 2,255   | 2,258   | 2,282   | 2,308   |
| Service volume (million km operated)     | 486      | 471     | 456     | 449     | 449     | 453     |
| Bus customer satisfaction score (points) | 86       | 86      | 86      | 86      | 86      | 86      |
| Bus excess wait time – (minutes)         | 1.0      | 1.1     | 1.1     | 1.1     | 1.1     | 1.1     |
| Average bus speeds (mph)                 | 9.3      | 9.2     | 9.2     | 9.2     | 9.2     | 9.2     |

We expect passenger numbers to increase over the plan, driven by population growth and stable operational performance. We need to reconfigure services to match changing patterns of demand in specific locations. As we redistribute our services, our direct operating costs will remain flat at 2015/16 levels until 2019/20.

### Customer satisfaction

Our annual target customer satisfaction score of 86 points is in line with stable reliability and journey times.

Reliability (in the form of excess wait time and average bus speeds) is the main driver of satisfaction with bus services. Other aspects of the service, such as how easy it is to travel, driver behaviour and personal comfort also contribute significantly.

Reliability is expected to be broadly consistent across the plan period. We have plans to improve our customers' experience, bus driver standards, the smoothness of the ride and safety, so we can maintain our high levels of customer satisfaction.

## Financial summary

### Buses

| £m                              | Actual       | Forecast     | Plan         | Plan         | Plan         | Plan         | Plan         |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                 | 2016/17      | 2017/18      | 2018/19      | 2019/20      | 2020/21      | 2021/22      | 2022/23      |
| Passenger income                | 1,474        | 1,446        | 1,468        | 1,488        | 1,516        | 1,579        | 1,645        |
| Other operating income          | 13           | 12           | 9            | 8            | 7            | 7            | 7            |
| <b>Total operating income</b>   | <b>1,487</b> | <b>1,458</b> | <b>1,477</b> | <b>1,496</b> | <b>1,523</b> | <b>1,586</b> | <b>1,652</b> |
| Direct operating cost           | (2,086)      | (2,090)      | (2,094)      | (2,092)      | (2,140)      | (2,210)      | (2,299)      |
| <b>Direct operating deficit</b> | <b>(599)</b> | <b>(632)</b> | <b>(617)</b> | <b>(596)</b> | <b>(617)</b> | <b>(624)</b> | <b>(647)</b> |
| <b>Net capital investment</b>   | <b>(88)</b>  | <b>(49)</b>  | <b>(76)</b>  | <b>(60)</b>  | <b>(45)</b>  | <b>(52)</b>  | <b>(14)</b>  |

We have combined our investment in planning for buses and roads in line with our Healthy Streets Approach and targeted a combined net direct operating deficit of around £800m a year with around £600m annual deficit for Buses and around £200m for streets. This is designed to be a sustainable and affordable level, but in the medium term we must identify a new funding source for roads.

Based on work to maintain passenger numbers in the short term and grow demand by the end of the plan period, we forecast that bus income will rise at an average rate of more than two per cent a year. We will continue matching service levels to passenger demand in specific areas.

There remains a competitive market for bus operator contracts, ensuring efficient service provision. Greener vehicles will continue to be introduced and this is accounted for in our operating costs.

Together with the planned service reductions, these factors will hold the operating cost of bus operations broadly flat until 2019/20, which means we have held the gross operating costs of the bus network mostly constant since 2015/16. However, given inflationary pressures, and the investment in greener vehicles, operating costs will rise broadly from 2020/21.

## Safety and security

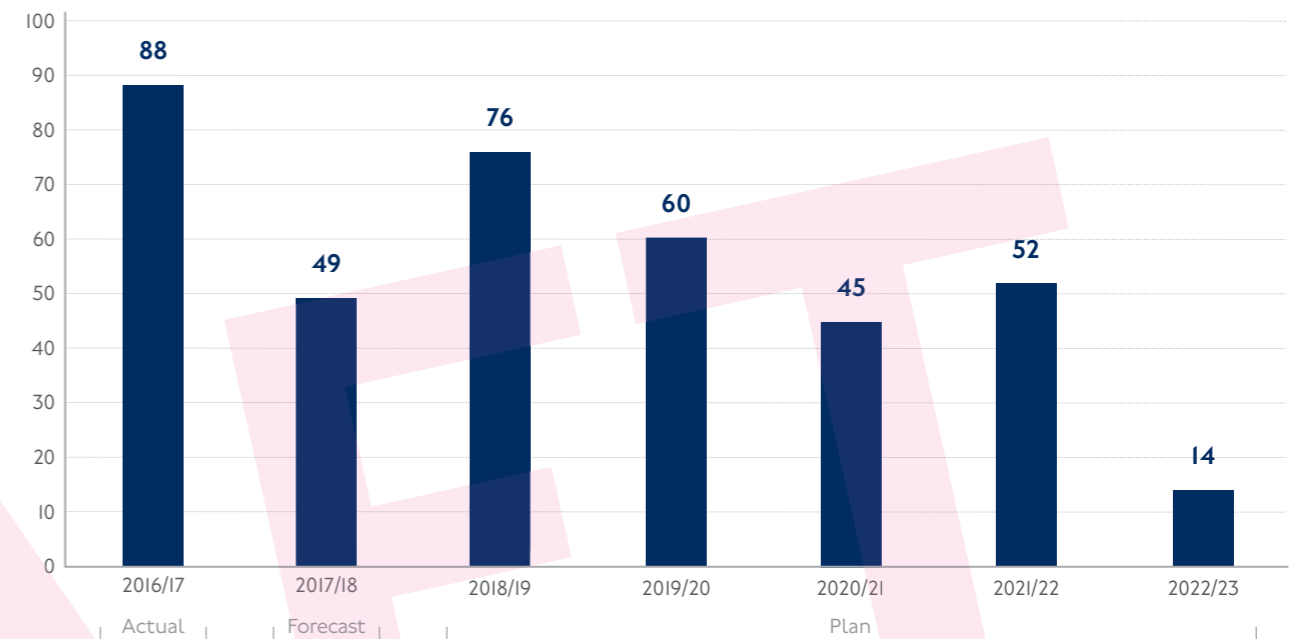
|   | Forecast | Plan    | Plan    | Plan    | Plan    | Plan    |
|---|----------|---------|---------|---------|---------|---------|
| Safety and security measures  | 2017/18  | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| Recorded crimes per million passenger journeys – bus network                      | 7.3      | 7.3     | 7.3     | 7.3     | 7.2     | 7.1     |
| Killed or seriously injured on or by a bus – % reduction against 2005-09 baseline | 54.1     | 55.6    | 58.0    | 61.2    | 65.2    | 70.0    |

Crime on the bus network has more than halved over the past 10 years and we are committed to reducing it further. We will continue to fund, and work alongside, the Metropolitan Police Roads and Transport Policing Command to prevent crime, antisocial behaviour and fare evasion. Safer Transport Teams, operating across London, will carry on providing local and accessible policing for passengers and our customer-facing employees.

They will be supported by specialist crime investigation teams to ensure that people who commit crimes on the bus network are brought to justice.

We will continue our Bus Safety Programme to reduce collisions involving buses and other road users. Measures include reviewing bus safety technology and vehicle design, developing a bus safety standard, an updated contracts and performance management system and new safety training for our drivers and their instructors.

## Capital investment (£m)



Capital expenditure reduces in 2017/18 as the programme to purchase New Routemaster buses, ordered in the previous mayoralty, has been completed and no further orders will be made. Capital investment increases again in 2018/19 as the work to fit Selective Catalytic Reduction systems to more than 4,500 of London's bus fleet ramps up. This programme will continue until September 2020, contributing to making the entire bus fleet Euro VI compliant.



As well as our own action on bus safety, we will be investing across the network through our Healthy Streets portfolio and bus priority programmes. This includes projects to improve London's air quality.

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#### Key projects/programmes

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##### Addressing air pollution

We will make sure the entire bus fleet meets the Euro VI emissions standard by September 2020. This will primarily be achieved through retrofitting enhanced Selective Catalytic Reduction systems on more than 4,500 vehicles. We will also introduce Low Emission Bus Zones in some of the worst pollution hotspots.

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##### Bus priority

Bus priority investment will provide the infrastructure needed for a high quality, reliable public transport network that sustains a growing city. Bus priority schemes introduced as part of this Business Plan will support the Low Emission Bus Zones and improve passenger journeys across London. Measures will be funded as part of our Healthy Streets portfolio.

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**4,500+**

vehicles retrofitted with Selective Catalytic Reduction Systems



Entire fleet will meet Euro VI emission standards by

**September 2020**



We will ensure our bus fleet is Euro VI compliant



We are funding road improvements through our Healthy Streets portfolio

# Streets

Making streets better places for people to travel and spend time will transform our city.

## What customers can expect

As owners of the most strategically important five per cent of London's streets, we can make the city more appealing to live in and visit by tackling the problems of car dependency and traffic dominance. Londoners' future health and prosperity depend on using street space in new ways. We will prioritise walking, cycling and public transport and have combined all our streets funding into a Healthy Streets portfolio to focus on these priorities. We will also reduce road danger, improve air quality and enhance freight services. We will:

- Continue major projects to support growth and improve London's public spaces, such as the transformation of Oxford Street and the removal of traffic-dominated gyratories in Wandsworth town centre and Vauxhall Cross
- Continue to build a network of cycle Quietways, the Central London Cycle Grid, Cycle Superhighways and Mini-Hollands in Enfield, Kingston and Waltham Forest
- Adopt the Vision Zero approach to eradicate deaths and serious injuries on our roads, supported by our Safer Junctions programme
- Continue significant funding for London's boroughs including through the Liveable Neighbourhoods programme, to transform town centres and neighbourhoods so they are attractive places to walk, cycle and spend time
- Use new and improved strategic management, technology and communications to address problems on our roads

## Safer

roads for cyclists and pedestrians



# 30%

of all road journeys are made on roads managed by TfL



Spend

# £2.2bn

over the plan on the Healthy Streets and air quality portfolios



## Operational performance in the future

|  | Forecast | Plan    | Plan    | Plan    | Plan    | Plan    |
|--|----------|---------|---------|---------|---------|---------|
|  | 2017/18  | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| <b>Cycling and walking performance</b>   |          |         |         |         |         |         |
| Journey numbers – walking (millions)   | 2,460    | 2,485   | 2,510   | 2,535   | 2,560   | 2,585   |
| Journey numbers – cycling (millions)   | 299      | 326     | 353     | 379     | 406     | 433     |
|  |          |         |         |         |         |         |
|  | Forecast | Plan    | Plan    | Plan    | Plan    | Plan    |
|  | 2017/18  | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| <b>London-wide road performance</b>  |          |         |         |         |         |         |
| London-wide serious and severe disruption planned and unplanned (hours)          | 3,100    | 4,000   | 4,000   | 3,900   | 3,803   | 3,707   |
|  |          |         |         |         |         |         |
|  | Forecast | Plan    | Plan    | Plan    | Plan    | Plan    |
|  | 2017/18  | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| <b>Transport for London road network performance</b>                             |          |         |         |         |         |         |
| TLRN overall customer satisfaction (score)                                       | 71       | 69      | 69      | 70      | 70      | 70      |
| TLRN pedestrian and cycling customer satisfaction (score)                        | 71       | 69      | 69      | 70      | 70      | 70      |
|  |          |         |         |         |         |         |
| TLRN resolution time – unplanned serious and severe (disruption hours per event) | 1.8      | 1.9     | 1.9     | 1.8     | 1.8     | 1.7     |

## Journeys

With eight Cycle Superhighway routes and new cycling infrastructure now open, levels of cycling are forecast to increase by approximately 45 per cent by the end of the plan.

Through the Healthy Streets portfolio, walking will also become a more attractive and viable journey option, with the number of trips made on foot set to rise by 125m during the period of the plan.

## Customer satisfaction

We expect a slight reduction in TLRN scores in 2018/19 and 2019/20 as major infrastructure schemes are under way. This includes the Oxford Street transformation, Baker Street two-way works and the Vauxhall gyratory. We expect a rise when the schemes complete.

## Reliability

We will coordinate our own major works, alongside those of utility companies and the London boroughs, more effectively.

We will also work with our policing and enforcement partners to reduce congestion and disruption. This includes the Roads Transport Policing Command and our Enforcement and On-Street Operations officers who address, and prevent, issues affecting the road network

Our investment in maintenance and renewals aims to ensure network safety and provide a serviceable level of 'state of good repair' for all highway assets, including carriageways, footways, traffic signals, bridges, tunnels, street lighting, drainage and trees. Given the end to Government funding of the road network, this will mean a slight dip in asset condition from current levels. Activities will be prioritised using a risk-based approach so we get the best results for our investment.

## Financial summary Streets

| £m                              | Actual       | Forecast     | Plan         | Plan         | Plan         | Plan         | Plan         |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                 | 2016/17      | 2017/18      | 2018/19      | 2019/20      | 2020/21      | 2021/22      | 2022/23      |
| Passenger income                | -            | -            | -            | -            | -            | -            | -            |
| Other operating income          | 324          | 324          | 363          | 347          | 371          | 380          | 379          |
| <b>Total operating income</b>   | <b>324</b>   | <b>324</b>   | <b>363</b>   | <b>347</b>   | <b>371</b>   | <b>380</b>   | <b>379</b>   |
| Direct operating cost           | (580)        | (511)        | (519)        | (533)        | (534)        | (532)        | (580)        |
| <b>Direct operating deficit</b> | <b>(256)</b> | <b>(187)</b> | <b>(156)</b> | <b>(186)</b> | <b>(163)</b> | <b>(152)</b> | <b>(201)</b> |
| <b>Net capital investment</b>   | <b>(245)</b> | <b>(208)</b> | <b>(154)</b> | <b>(364)</b> | <b>(329)</b> | <b>(396)</b> | <b>(399)</b> |

With our Healthy Streets Approach to planning and investment in integrating roads with buses, we have targeted to maintain the net direct operating deficit of buses and roads at around £800m per annum. Income will increase by an average of seven per cent a year over the plan period. This rise reflects proposed policy changes to zone administration to support our Healthy Streets Approach, including greater Penalty Charge Notice fines to make sure they continue acting as a deterrent.

Our focus on delivering efficiencies and obtaining value from our suppliers will see net operating costs rise by only one per cent each year from 2017/18 to 2021/22, despite the greater operational expenditure necessary to generate

additional income. This will reduce the net operating deficit over the Business Plan. In 2022/23, there are new costs in the operating and capital accounts owing to maintenance for new capital assets and the AI3 PFI contract.

Despite our progress, our current income sources do not cover the cost of operating, maintaining and renewing the road network, which includes major structural restoration to bridges and tunnels. It is essential we find a long-term source for funding roads.

The principal elements of the investment programme to enhance our road network include the pedestrianisation of Oxford Street, and increased spend on cycling and other Healthy Streets improvements.

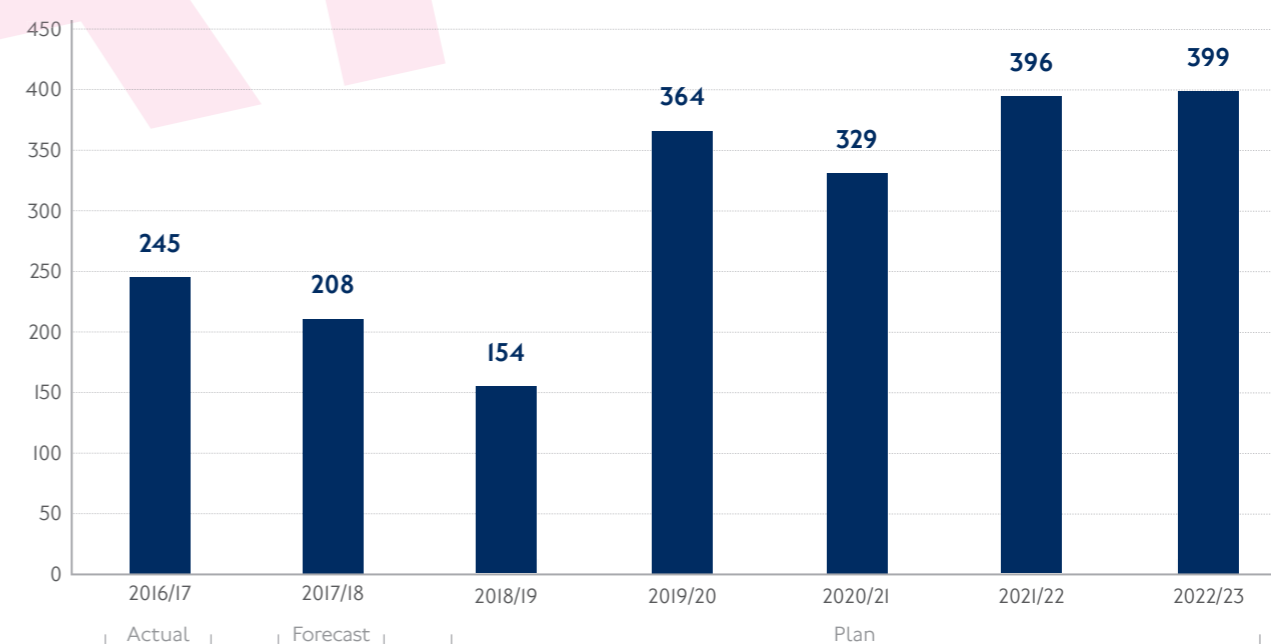
## Safety and security

In 2017, we adopted Vision Zero – our commitment to eradicating deaths and serious injuries from London's roads. To achieve this we have a new target of a 70 per cent reduction in the number of people killed or seriously injured (KSIs) by 2022 compared with the 2005-09 baseline.

| Safety and security measures                                    | Forecast | Plan    | Plan    | Plan    | Plan    | Plan    |
|---|----------|---------|---------|---------|---------|---------|
|   | 2017/18  | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| Reduction in people killed or seriously injured London-wide (%) | 44.0     | 45.4    | 48.2    | 52.4    | 58.0    | 65.0    |

We will work with our partners, including the Metropolitan Police Roads and Transport Policing Command and City of London Police and other enforcement partners and contractors, to reduce road danger and increase compliance and assurance activities.

## Capital investment (£m)



Examples of the projects included in this programme are outlined below.

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## Key projects/programmes

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### Oxford Street transformation

We are working in partnership with Westminster City Council to significantly improve Oxford Street and the surrounding roads. The proposals will enhance the environment and facilities for pedestrians, and address poor air quality. They will also support businesses in the district, encouraging economic growth. The first phase of works will focus on Oxford Street West, which runs between Orchard Street and Oxford Circus, and is planned to be completed before the opening of the Elizabeth line in late 2018.

### Cycle Superhighways

We intend to make London a byword for cycling around the world, so in addition to the existing eight Cycle Superhighway routes, we have begun construction work on phase 2 of the North-South Cycle Superhighway. This will be followed by the implementation of Cycle Superhighway routes 4, 9, 10 and 11. The plan also makes provision for the design of four new routes to ensure we sustain a long-term programme of high-quality cycling infrastructure, along with safer and more attractive public spaces.

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### Vauxhall Cross

In partnership with the London Borough of Lambeth, we will remove the Vauxhall gyratory, improve pedestrian and cycling facilities and create new public spaces. The scheme will also include an improved bus station at Vauxhall. Subject to obtaining all necessary approvals, work will begin in 2020.

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### Wandsworth gyratory

In partnership with the London Borough of Wandsworth, we will remove the gyratory and re-route traffic from the town centre. This will provide more space for pedestrians, cyclists, public transport users and local traffic. Subject to securing the necessary internal and external consents, including the statutory processes for a compulsory purchase order, we envisage construction starting in 2020.

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### Fiveways Croydon

Plans include widening the A23 Waddon Station Bridge, a renowned congestion hotspot and barrier to cycling at the intersection of the A23 and A232. We will simplify the junction layout, provide a new public space and widen Epsom Road, converting it to two-way traffic. We are working with the London Borough of Croydon to develop the plans and construction could start in early 2021.

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### Old Street roundabout

We will create a new peninsula to replace the roundabout at Old Street. Plans include introducing two-way traffic, enhancing the local environment and providing crossing facilities for pedestrians to improve access to new station entrances. Segregated cycle facilities will be introduced in locations where traffic movement will not be affected and substantive construction works will commence in 2018.

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### Waterloo

We are working with the London Borough of Lambeth to encourage active travel and make Waterloo a more pleasant neighbourhood. Creating a peninsula at the IMAX will support growth and enhance the local area. We will also improve pedestrian crossings and cycle links and upgrade the bus station and satellite bus stops. Design work will continue during 2018/19, ahead of construction starting in late 2019.

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### Bromley-by-Bow

As part of the Lower Lea Valley regeneration, we are improving transport links and the local area at Bromley-by-Bow and Marshgate Lane. New signalised junctions are proposed, which will get more people walking, cycling and using public transport. The first construction works are planned to commence during 2021.

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### Stratford town centre

We are working with the London Borough of Newham to transform Stratford town centre. As well as enhancing the local area, we will replace the gyratory with two-way traffic, provide better cycling facilities and improve bus accessibility. Works are under way and are scheduled to be completed by spring 2019.

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### Silvertown Tunnel

If we gain the necessary consents, work will begin on a new road tunnel under the River Thames, linking the Greenwich Peninsula and the Royal Docks. This will improve the reliability of the Blackwall Tunnel crossing, increase the resilience of the road network in east London, and enhance opportunities for new cross-river bus links. Construction could commence in 2019 with the new crossing open and available for use in 2023.

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### Rotherhithe to Canary Wharf

We are working with the local boroughs to develop proposals for a new river crossing between Rotherhithe and Canary Wharf. We expect to submit a Transport and Works Order application for the powers to build and operate the new crossing in 2019. Subject to gaining the necessary consents this would provide a safe, attractive, and direct route for pedestrians and cyclists, reducing journey times and encouraging healthier travel.

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### Brent Cross London

We are working with development partners, the London Borough of Barnet and Highways England to support the regeneration of the Brent Cross area.

Funded by the developer, improvements in the first phase include two new bridges to provide better connectivity over the A406 for pedestrians, cyclists and public transport users, a new world-class bus station, and significant junction improvements at the M1, A41 and Staples Corner, delivering bus priority and greater capacity for road users. Construction will start in 2018 and finish by the end of 2022.

### Highbury Corner

We are working closely with the London Borough of Islington to make Highbury Corner more pleasant and accessible. Proposals include improved pedestrian crossings, new cycle facilities and partially opening up the arboretum. Construction is planned to start as soon as possible after the completion of the bridge replacement works.

## Four

new Cycle Superhighways to be built, and four more in design



With our partners, we'll

## transform Oxford Street

into one of the world's finest public spaces



Working with the London Borough of Lambeth, we will return the

## Vauxhall gyratory

back to a two-way road



Working with Lambeth Borough, we are improving Vauxhall Cross



We will replace DLR rolling stock with 43 new trains

# Rail

Our rail services incorporate the DLR, London Overground, London Trams and the Emirates Air Line.

## What customers can expect

London's predicted population growth will have a significant impact on our rail network. The need to unlock access to new homes, commercial development and jobs is therefore paramount, and to do so we must develop our infrastructure and assets to meet demand. Major, long-term projects include:

- Improving safety, capacity and reliability on our rail network
- Capacity expansion works at DLR and London Overground stations
- Replacing DLR trains with higher-capacity rolling stock by the early 2020s
- Extending our current network from Gospel Oak to Barking Riverside to support more than 10,800 more homes
- Developing proposals for an extension of the tram network to Sutton

# Improve

safety, capacity and reliability on our rail network



# 10,800

more homes supported by the Barking Riverside extension

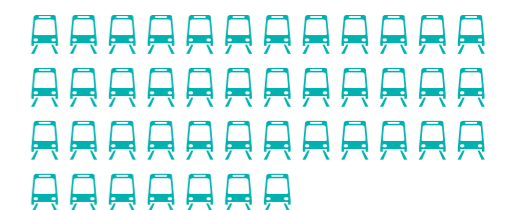
Increase in passenger income of more than

# 20%



# 43

new DLR trains



## Operational performance

|   | Forecast | Plan    | Plan    | Plan    | Plan    | Plan    |
|---|----------|---------|---------|---------|---------|---------|
| London Rail                                 | 2017/18  | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| <b>Passenger journeys (millions)</b>        |          |         |         |         |         |         |
| DLR   | 124      | 124     | 117     | 112     | 114     | 120     |
| London Overground                           | 194      | 212     | 231     | 238     | 248     | 262     |
| London Trams                                | 29       | 30      | 30      | 30      | 32      | 33      |
| Emirates Air Line                           | 1        | 1       | 1       | 1       | 1       | 2       |
| <b>Customer satisfaction survey (score)</b> |          |         |         |         |         |         |
| DLR   | 88       | 88      | 89      | 89      | 89      | 89      |
| London Overground                           | 84       | 85      | 85      | 85      | 85      | 85      |
| London Trams                                | 89       | 89      | 89      | 90      | 90      | 90      |
| Emirates Air Line                           | 93       | 93      | 93      | 93      | 93      | 93      |

We aim to maintain, and where possible improve, our performance levels and we will work with industry partners, including Network Rail, to achieve this.

### Passenger journeys

The volume of rail passenger journeys is expected to rise in the longer term owing to increased services and investment in infrastructure. However, it is anticipated that the opening of the Elizabeth line will temporarily reduce numbers on the DLR in the short term.

### Customer satisfaction

We will continue to maintain customer satisfaction at a high level by improving our customer information, increasing reliability and adding more capacity.

## Financial summary

### Rail

|                                 | Actual       | Forecast    | Plan         | Plan         | Plan         | Plan        | Plan         |
|---------------------------------|--------------|-------------|--------------|--------------|--------------|-------------|--------------|
| £m                              | 2016/17      | 2017/18     | 2018/19      | 2019/20      | 2020/21      | 2021/22     | 2022/23      |
| Passenger income                | 420          | 432         | 459          | 474          | 486          | 515         | 558          |
| Other operating income          | 14           | 11          | 11           | 10           | 12           | 10          | 10           |
| <b>Total operating income</b>   | <b>434</b>   | <b>443</b>  | <b>470</b>   | <b>484</b>   | <b>498</b>   | <b>525</b>  | <b>568</b>   |
| Direct operating cost           | (435)        | (447)       | (507)        | (524)        | (534)        | (545)       | (556)        |
| <b>Direct operating deficit</b> | <b>(1)</b>   | <b>(4)</b>  | <b>(37)</b>  | <b>(40)</b>  | <b>(36)</b>  | <b>(21)</b> | <b>12</b>    |
| <b>Net capital investment</b>   | <b>(106)</b> | <b>(98)</b> | <b>(110)</b> | <b>(121)</b> | <b>(128)</b> | <b>(71)</b> | <b>(329)</b> |

The financial target for Rail is to collectively cover the direct operating costs of services with operating income by the end of the Business Plan, making us financially sustainable without our operating grant from Government.

Passenger income will rise by more than 20 per cent over the plan period, as a result of additional investment plus new and improved services. This is despite an expected decline in DLR passenger numbers by the end of the plan, owing to customers using the Elizabeth line.

The increase in services, predominantly on London Overground, will see an expected 24 per cent rise in operating costs during the same period.

The profile of capital expenditure reflects the continuing annual renewals programmes, at an average of £38m per year, plus investment in the Barking Riverside extension, which will be completed in 2021, and new DLR rolling stock at the end of the plan.



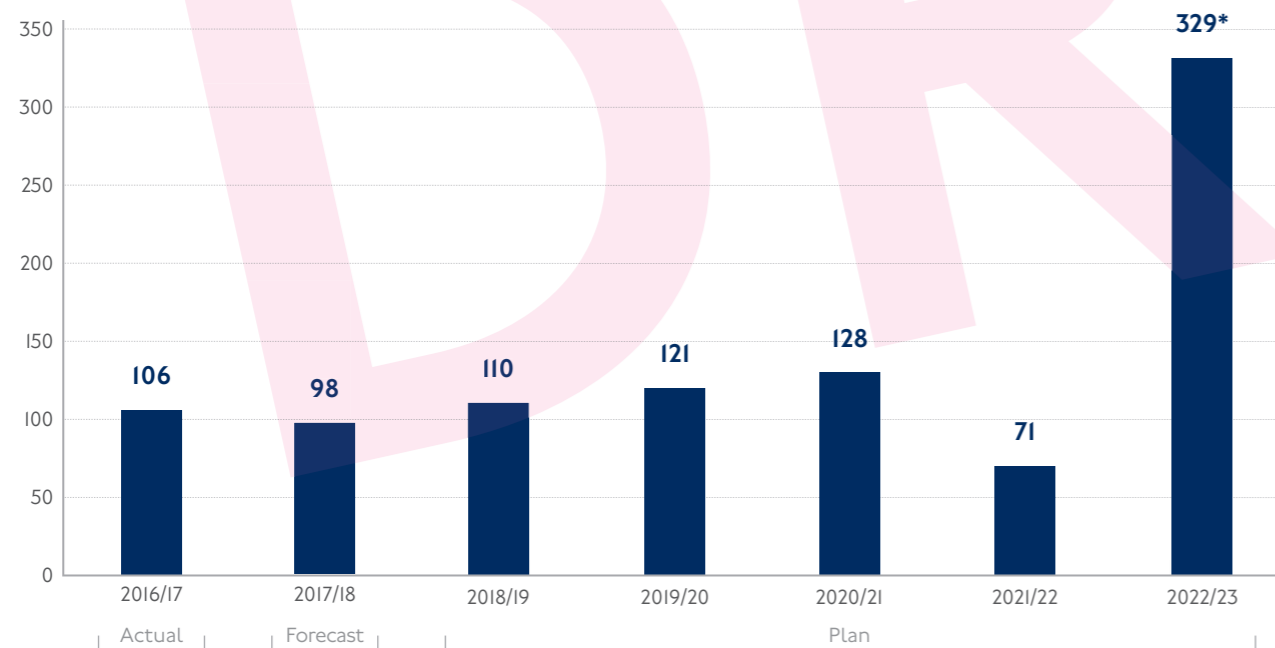
## Safety and security

|  | Forecast | Plan    | Plan    | Plan    | Plan    | Plan    |
|--|----------|---------|---------|---------|---------|---------|
| Safety and security measures   | 2017/18  | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| Recorded crimes – London Overground network (per million passenger journeys) | 7.6      | 7.0     | 6.5     | 6.3     | 6.1     | 5.9     |

Vision Zero means we are committed to eradicating the number of people killed or seriously injured on our services by 2041. To achieve this, we will reduce casualties by 20 per cent, compared to the 2014/15-2017/18 baseline, by 2022/23.

Our rail network is one of the safest ways to travel in London and we will continue working closely with the BTP to ensure it remains so. We will invest in infrastructure improvements and CCTV and will make sure safety and security are fully considered in the planning and design of services.

## Capital investment (£m)



\*Investment in 43 DLR trains to replace current rolling stock

Examples of the projects included in the Rail portfolio are outlined below.

## Key projects/programmes

### Barking Riverside extension

This is a new 4.5km London Overground extension to connect Barking Riverside, an Opportunity Area, with up to 10,800 new homes within Barking. Construction on the line is scheduled to begin in early 2018, with train services running from 2021.

### White Hart Lane station

The new station will include step-free access and a relocated entrance, and an underpass will be created through the existing railway embankment. The project obtained planning permission from the London Borough of Haringey in October 2016, with construction work scheduled for completion in spring 2019.

### Croydon town centre – Dingwall Road Loop

The Dingwall Road Loop, which could open in 2021, is a new section of tramway that would increase capacity between Croydon town centre and the eastern branches of the network. The project would be funded in partnership with Croydon borough and local developers.

### DLR rolling stock

This project, which will see 43 new full-length trains replacing current rolling stock, will mean 30 per cent more capacity on the network.

Dingwall Loop scheduled to open in

# 2021



Construction starts on the Barking Riverside extension in

# 2018





We will continue to increase capacity on the Tube

# Underground

Last year, there were 1.4 billion trips made on the Tube network, all connecting people to homes, employment, education, leisure and social opportunities across the city.

## What customers can expect

The millions of customers who use our services deserve a safe, reliable and world-class Tube network. Over the next five years, we will continue to invest in vital improvements and will add much-needed capacity, supporting a shift away from car use.

Our primary focus is on renewing our assets. Every day we operate and manage 270 stations, 600 trains (540 of which run during the busiest part of the day), more than 1,000km of track, 426 lifts and escalators, a vast array of signalling equipment and more than 16,000 bridges and structures. Making sure our infrastructure and equipment are in good condition is essential.

We will also invest in a number of improvements so the Tube can carry more people, easing crowding at vital locations. By the end of 2023, there will be more frequent trains on the Circle, District, Hammersmith & City and Metropolitan lines. In addition, some of our busiest stations, including Victoria, Bank and Elephant & Castle, will be significantly expanded.

The draft MTS has set a clear challenge to create a more accessible Tube. Last year we unveiled plans to increase the proportion of step-free stations from 25 per cent to 40 per cent by 2021/22. We will also bring people closer to one of the biggest regeneration areas in London – Battersea Nine Elms – by extending the Northern line from Kennington.

Our investment will mean more space for more customers, shorter waiting times and, ultimately, a better Tube.

More than

**440 million**

train kms run during the Business Plan period



**40%**

of Tube stations step-free by 2022



**270**

stations managed



**600**

trains operated daily



## Operational performance in the future

|                               | Forecast | Plan    | Plan    | Plan    | Plan    | Plan    |
|-------------------------------|----------|---------|---------|---------|---------|---------|
| London Underground forecasts  | 2017/18  | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| Passenger journeys (millions) | 1,333    | 1,340   | 1,341   | 1,339   | 1,371   | 1,403   |
| Customer satisfaction (score) | 85       | 85      | 85      | 86      | 86      | 86      |
| Excess journey time (minutes) | 4.5      | 4.5     | 4.4     | 4.3     | 4.3     | 4.2     |
| Operated km (millions)        | 85.1     | 85.6    | 87.3    | 88.8    | 90.5    | 92.0    |

This year has seen lower demand for Tube services since the record high in 2016/17. Over the first few years of the plan, passenger journeys reflect the overall lower demand assumed within London and passengers migrating to the Elizabeth line during the initial opening of the line in 2019. Demand is expected to increase towards the end of the plan as the Elizabeth line brings new passengers from outside London on to the Tube. Over the Business Plan period, we will continue to increase our capacity, running eight per cent more kilometres in 2022/23 compared with 2017/18.

Our customers remain at the heart of everything we do. Over the next five years we aim to build on customer satisfaction by running our services more reliably and working on known problem areas on the network.

## Financial summary London Underground

|                                 | Actual         | Forecast       | Plan           | Plan           | Plan           | Plan           | Plan           |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| £m                              | 2016/17        | 2017/18        | 2018/19        | 2019/20        | 2020/21        | 2021/22        | 2022/23        |
| Passenger income                | 2,669          | 2,613          | 2,691          | 2,737          | 2,873          | 3,027          | 3,163          |
| Other operating income          | 90             | 30             | 24             | 20             | 21             | 10             | 10             |
| <b>Total operating income</b>   | <b>2,759</b>   | <b>2,643</b>   | <b>2,715</b>   | <b>2,757</b>   | <b>2,894</b>   | <b>3,037</b>   | <b>3,173</b>   |
| Direct operating cost           | (2,114)        | (2,120)        | (2,111)        | (2,047)        | (2,052)        | (2,013)        | (2,015)        |
| <b>Direct operating surplus</b> | <b>645</b>     | <b>523</b>     | <b>604</b>     | <b>710</b>     | <b>842</b>     | <b>1,024</b>   | <b>1,158</b>   |
| <b>Net capital investment</b>   | <b>(1,069)</b> | <b>(1,098)</b> | <b>(1,075)</b> | <b>(1,105)</b> | <b>(1,029)</b> | <b>(1,042)</b> | <b>(1,536)</b> |

Passenger income is forecast to rise by 21 per cent from 2017/18 to 2022/23. This growth is lower than previously forecast owing to the reduced passenger demand seen this year. We will continue to add more capacity over the plan period, installing new signalling on the Circle, District and Hammersmith & City lines to complete an overall uplift of 33 per cent. And the full opening of the Elizabeth line from late 2019 will add 10 per cent more capacity to London's rail network.

We have set ourselves the ambitious challenge of reducing our direct operating costs over the plan period, including absorbing inflationary pressures and any uplift in service levels. By 2022/23, our direct operating costs will be just over

£2bn, nearly £105m lower than this year. At the same time, we will be running nine per cent more services on the Tube. This will be achieved as a result of our extensive modernisation programme, which will transform the Underground into a more efficient service. It covers all aspects of our operations, including new organisational structures to reduce management layers, eliminate duplication and improve our ways of working.

Net direct operating surplus will grow from £0.5bn to £1.2bn over the course of the Business Plan. The surplus will fully fund the investment in capital renewals on the Underground over the period of the plan. Total capital expenditure is, on average, £1.1bn a year.

## Safety and security

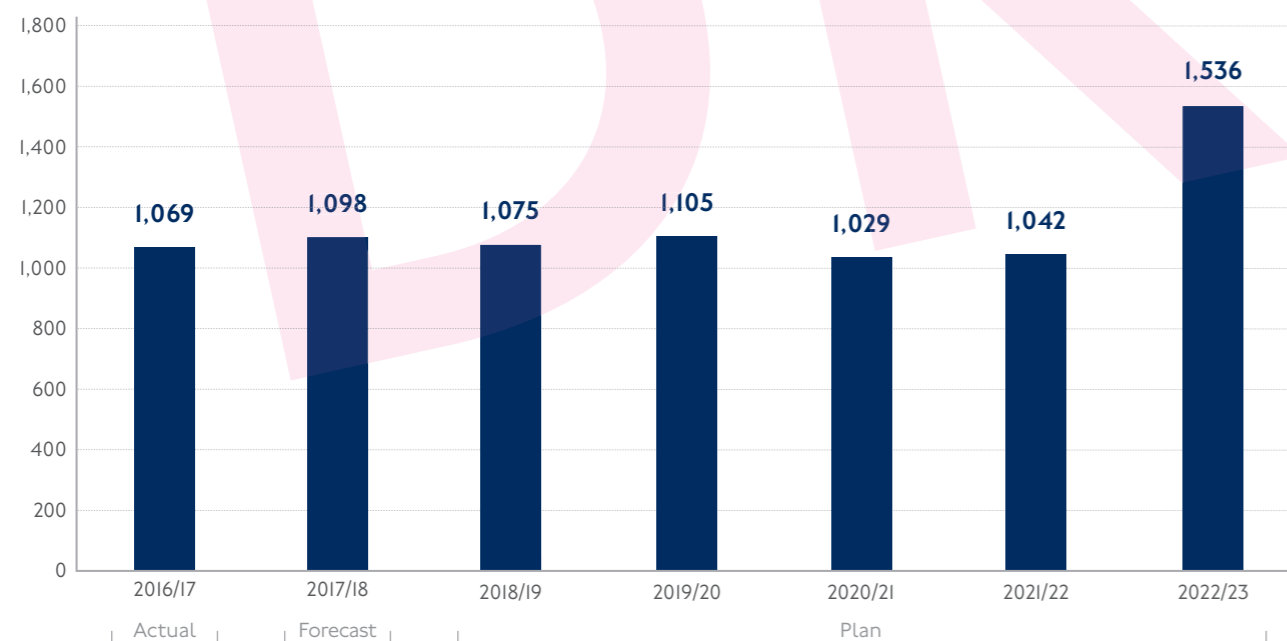
| Safety and security measures                   | Forecast | Plan    | Plan    | Plan    | Plan    | Plan    |
|--|----------|---------|---------|---------|---------|---------|
|  | 2017/18  | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| Recorded crimes per million passenger journeys | 9.5      | 9.4     | 9.4     | 9.4     | 9.2     | 9.0     |

The safety of our customers and staff remains our priority.

London Underground is already one of the safest metros in the world and we will continue to look for ways to improve safety and security. For instance, we will enhance the design

and layout of some of our major stations, minimising accidents through, for example, new escalator safety initiatives. Alongside this, we will reduce our environmental impact by designing infrastructure as efficiently as possible and tackle air quality on the Tube.

## Capital investment (£m)



We will significantly improve services through our line and station upgrade programmes.

## Key projects/programmes

### Line upgrades

#### Modernisation of the Circle, District, Hammersmith & City and Metropolitan lines

A total of 32 trains an hour will run on some sections (the highest at the moment is 27). Due to be completed by 2022/23, this will add 33 per cent more capacity. A new signalling system will make the most of the recently introduced trains, which are air-conditioned and have 10 per cent more capacity and dedicated wheelchair spaces.

### Deep Tube Upgrade Programme

Works to increase capacity will begin on the Piccadilly line with the introduction of a new signalling system and a new fleet of trains. These trains will replace the current fleet from 2023 by which time they will be 50 years old. Following this, we will also upgrade the Bakerloo, Central and Waterloo & City lines with new signalling and trains.

## Key projects/programmes

### Major station upgrades

**Victoria**  
We will complete this upgrade in 2018, including a newly refurbished, larger southern ticket hall with new escalator access to the Victoria line and step-free access to all platforms. The work will provide 40 per cent more capacity, ensuring the benefits from the upgrade to the Victoria line are maximised.

### Bank

Improvements to this vital transport hub, used by more than 400,000 people a day, will be finished by 2022. It will mean more space on platforms, stairs and concourses, and a new platform tunnel and ticket hall for the Northern line. We are also working with Network Rail to improve access at Waterloo so that, by 2019, the Waterloo & City line will become the first Tube line to go step-free.

### Elephant & Castle

This upgrade will support the area's transformation, which includes 6,000 new homes. Due to be completed in 2024, the scheme involves working with a developer to provide a new Northern line ticket hall with three new escalators, and step-free access to the Northern line platforms.

### Camden Town and Holborn

Work will begin at these two stations towards the end of the plan.

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## Key projects/programmes

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### Northern line extension

The extension from Kennington to Battersea, and new station at Nine Elms, will significantly improve services and support regeneration in the local area, which includes 25,000 new jobs and more than 20,000 homes. Tunnelling work has been completed and services are due to start running in 2020.

### Increasing accessibility

We will introduce step-free access at five more stations in 2018/19 and work will be under way at a further 13.

We will also complete around 50 detailed feasibility studies to help us develop our future accessibility programme, as we aim to meet our ambitious target of making 40 per cent of Tube stations step-free by 2022. In addition, we are using innovative, lower cost ways to make our network more accessible. This includes installing stair tactile paving, improving our turn-up-and-go service and our online accessibility information, including Journey Planner, and through the provision of open data sources, for example the number of steps at stations.

### Reducing our energy use and carbon footprint

We will introduce more schemes that exploit Tube waste heat, use our land and assets for low-carbon energy generation, and look to energy storage technology to save costs and encourage the growth of electrified transport in London.

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At least

# 38

more step-free stations by 2022/23



The Northern line extension will support

# 25,000

new jobs and 20,000 new homes



New trains are making travel easier for millions of Londoners



The walk-through Elizabeth line carriages are spacious and wheelchair accessible

# Elizabeth line

Customers will soon benefit from the most significant increase in central London's public transport capacity for decades.

### What customers can expect

During the Business Plan period, the Elizabeth line will become an operational railway, carrying more than 200 million passengers a year. Plans are for a phased delivery of the full service:

**May 2018:** TfL Rail service opens between Paddington and Heathrow Terminal 4, via the central terminals, replacing the Heathrow Connect service and part of the Great Western inner suburban service.

**December 2018:** The Elizabeth line opens when services begin operating from Paddington (Elizabeth line station) through central London to Abbey Wood. Trains will continue to run from Shenfield to Liverpool Street (National Rail station) and Paddington (also National Rail station) to Heathrow Terminal 4.

**May 2019:** Direct services operate from Paddington to Shenfield and Paddington to Abbey Wood. Those from Paddington to Heathrow Terminal 4 will continue.

**December 2019:** The line is fully open, with services running from Reading and all Heathrow terminals, including Terminal 5, through the central tunnels to Shenfield and Abbey Wood.

The Crossrail project is for completion by December 2019 and the railway is on schedule. The 10 stations being built in central London are nearing completion. Escalators, lifts and other architectural features are being installed. The new station at Abbey Wood, constructed by Network Rail, opened to passengers at the end of October.

Work will also continue to complete upgrades to the existing network being carried out by Network Rail between Paddington and Heathrow/Reading, Liverpool Street and Shenfield, and at Abbey Wood.

**£3bn**

in passenger income over the next five years



**1.5 million**

more people will be within a 45-minute commute of the West End, City and Docklands



**70**

new trains by December 2019



## Operational performance in the future

|                                 | Forecast | Plan    | Plan    | Plan    | Plan    | Plan    |
|---------------------------------|----------|---------|---------|---------|---------|---------|
|                                 | 2017/18  | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| <b>Elizabeth line forecasts</b> |          |         |         |         |         |         |
| Passenger journeys (millions)   | 46       | 80      | 163     | 258     | 263     | 269     |
| Customer satisfaction (score)   | 84       | 84      | 85      | 85      | 85      | 85      |
| Public performance measure (%)  | 94.5     | 94.5    | 94.75   | 95      | 95      | 95      |
| Operated km (millions)          | 2.7      | 5.3     | 11.2    | 13.6    | 13.6    | 13.6    |

Passenger journeys and operated kilometres will rise over the Business Plan period in line with the phased opening. Ultimately, the new service will add 10 per cent more capacity to London's rail network.

### Customer satisfaction

This measure, and that for public performance, will also increase as the service becomes operational.

## Financial summary

### Elizabeth line

|   | Actual         | Forecast       | Plan         | Plan         | Plan       | Plan       | Plan       |
|---|----------------|----------------|--------------|--------------|------------|------------|------------|
|   | 2016/17        | 2017/18        | 2018/19      | 2019/20      | 2020/21    | 2021/22    | 2022/23    |
| <b>£m</b>                                 |                |                |              |              |            |            |            |
| Passenger income                          | 83             | 90             | 151          | 431          | 817        | 862        | 913        |
| Other operating income                    | 6              | 5              | 18           | 11           | 12         | 13         | 13         |
| <b>Total operating income</b>             | <b>89</b>      | <b>95</b>      | <b>169</b>   | <b>442</b>   | <b>829</b> | <b>874</b> | <b>926</b> |
| Direct operating cost                     | (104)          | (128)          | (331)        | (467)        | (518)      | (538)      | (577)      |
| <b>Direct operating surplus/(deficit)</b> | <b>(15)</b>    | <b>(32)</b>    | <b>(162)</b> | <b>(25)</b>  | <b>311</b> | <b>336</b> | <b>349</b> |
| New capital investment                    | (199)          | (465)          | (318)        | (81)         | (5)        | -          | -          |
| Crossrail construction investment         | (1,593)        | (1,402)        | (460)        | (65)         | -          | -          | -          |
| <b>Net capital investment</b>             | <b>(1,792)</b> | <b>(1,867)</b> | <b>(778)</b> | <b>(146)</b> | <b>(5)</b> | <b>-</b>   | <b>-</b>   |

Passenger income will grow from £90m in 2017/18 to £913m by 2022/23, driven by rising demand following the phased opening of the Elizabeth line.

Our direct operating costs will also increase, to £0.6bn a year at the end of the plan. A net operating surplus will be achieved from 2020/21, growing to £0.3bn over the period.

Capital expenditure will decline as we move towards a fully operational railway.

# Other operations

We provide a range of other high-quality travel options, on the roads and the Thames, to make sure London is open to everyone.

## What customers can expect

We regulate London's taxi and private hire industry, oversee the Santander Cycles scheme, manage Victoria Coach Station, license London River Services (LRS) and fund Assisted Transport Services, including the directly operated London Dial-a-Ride service. We manage the Low Emission Zone (LEZ) and will introduce the ULEZ, which has three core elements – reducing bus fleet emissions, licensing requirements for zero emission capable (ZEC) taxis and private hire vehicles, and emissions-based vehicle charging for other road users.

We will also:

- Expand the ULEZ (for all vehicles) to the North and South Circulars and tighten the LEZ (heavy vehicles) – subject to consultation
- Deliver the Mayor's Taxi and Private Hire Action Plan, designed to create a vibrant service while driving up safety standards. We will provide financial incentives to drivers to ensure take-up of new ZEC taxis, as part of delivering the world's greatest taxi fleet
- Improve Santander Cycles infrastructure and the scheme's operation
- Work to understand how we can improve our coach infrastructure for growth and changes in demand
- Continue to harness the potential of the river by increasing pier capacity
- Introduce ULEZ-compliant Dial-a-Ride vehicles and make better use of the fleet, including mobile data terminals for drivers that allow smarter scheduling and real-time response to cancellations

Launching

## ULEZ



## £40m

funding to help taxi drivers buy ZEC vehicles



## Improve

Dial-a-Ride service



A new Santander Cycles bike was launched in October 2017



## Operational performance in the future

| Other operations measures                                    | Forecast | Plan    | Plan    | Plan    | Plan    | Plan    |
|--|----------|---------|---------|---------|---------|---------|
|  | 2017/18  | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
| Dial-a-Ride trip requests scheduled (%)                      | 89       | 89      | 89      | 89      | 89      | 89      |
| LRS passenger journeys (including Woolwich Ferry) (millions) | 11       | 11      | 12      | 12      | 12      | 12      |
| LRS customer satisfaction score                              | 90       | 90      | 90      | 90      | 90      | 90      |
| Cycle hire – number of hires (millions)                      | 10       | 11      | 11      | 11      | 11      | 12      |
| Cycle hire customer satisfaction score – overall (score)     | 82       | 82      | 82      | 83      | 83      | 83      |

Dial-a-Ride provides essential transport for older and disabled passengers who are unable to access the mainstream network, and carries more than a million people each year. We will work with the boroughs and other organisations to improve the integration and delivery of assisted transport across London, and to maximise the benefits of our combined investment. Dial-a-Ride will also work to identify opportunities to engage with the demand-responsive transport industry and investigate new models for providing the service.

We are expecting a modest rise in cycle hire use as a result of population growth and our continued investment in cycling.

Since 2010, river passenger numbers have nearly doubled, with more than 10 million people travelling on the Thames every year. We will continue to work with our partners, including the Port of London Authority, to improve and develop our city's river services.

## Financial summary

### Other operations

| £m                              | Actual       | Forecast     | Plan         | Plan         | Plan         | Plan         | Plan         |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                 | 2016/17      | 2017/18      | 2018/19      | 2019/20      | 2020/21      | 2021/22      | 2022/23      |
| Passenger income                | -            | -            | -            | -            | -            | -            | -            |
| Other operating income          | 102          | 114          | 131          | 199          | 250          | 296          | 304          |
| <b>Total operating income</b>   | <b>102</b>   | <b>114</b>   | <b>131</b>   | <b>199</b>   | <b>250</b>   | <b>296</b>   | <b>304</b>   |
| Direct operating cost           | (818)        | (847)        | (872)        | (831)        | (779)        | (759)        | (762)        |
| <b>Direct operating deficit</b> | <b>(716)</b> | <b>(733)</b> | <b>(741)</b> | <b>(632)</b> | <b>(529)</b> | <b>(463)</b> | <b>(458)</b> |
| <b>Net capital investment</b>   | <b>(115)</b> | <b>(126)</b> | <b>(173)</b> | <b>(105)</b> | <b>(210)</b> | <b>(174)</b> | <b>(48)</b>  |

The financial plan for our other operations achieves breakeven by 2020/21, through the introduction of new air quality schemes, and focuses on operating cost efficiencies in our current services.

The rise in operating income from 2019/20 will be largely as a result of the ULEZ launching in April 2019 (subject to consultation). This revenue will cover the cost of running the scheme plus a small surplus to reinvest in cleaner buses and Dial-a-Ride vehicles, and to provide delicensing incentives for the oldest, most polluting taxis. Other contributors

to the increase in income are a rise in taxi and private hire fee charges, so that licence fees cover the cost of licensing and compliance activity, and more Cycle Hire and London River Services journeys.

Operating costs include investment to deliver the Mayor's vision on air quality, which involves introducing cleaner vehicles, launching a network of rapid charge points and funding to support new borough projects. This is offset by year-on-year cost reductions driven by contract efficiencies and lower staffing costs.

**Safety and security**

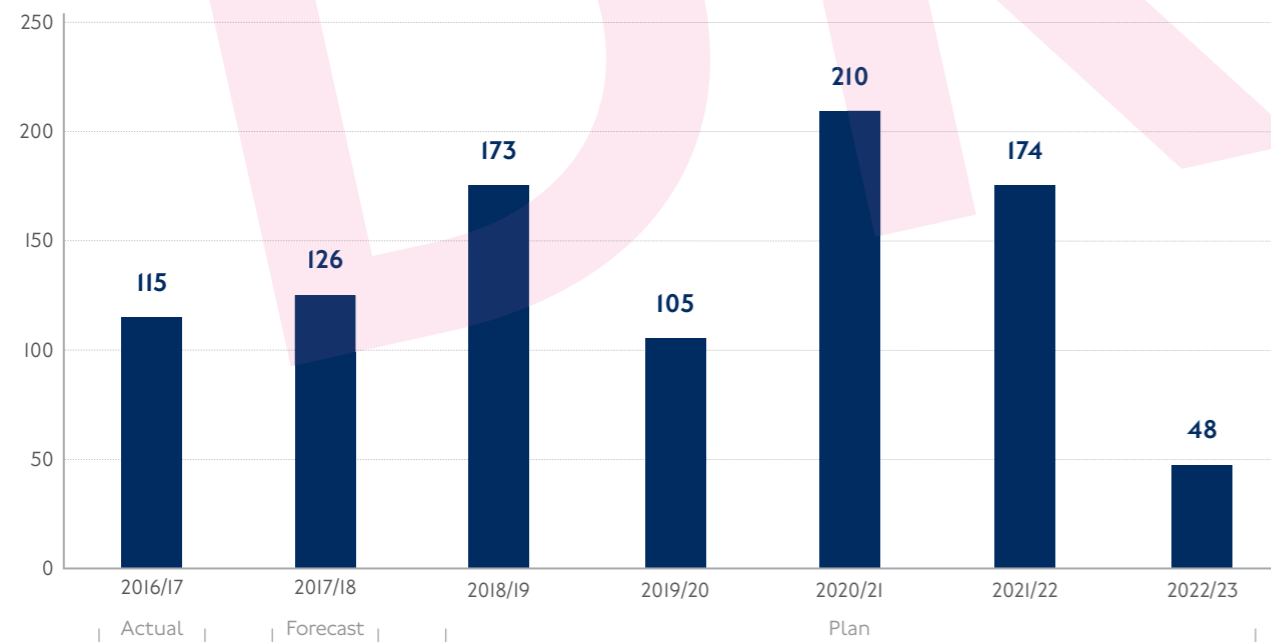
Vision Zero means we are committed to reducing the number of people killed or seriously injured on all of our public transport services to zero by 2041. In order to achieve this target we will, by 2022/23, reduce the number of people killed or seriously injured on or by TfL other operations (Santander Cycles, London River Services, Dial-a-Ride and Victoria Coach Station) by 71 per cent compared to the 2014/15-2017/18 baseline.

The safety of London’s taxi and private hire industry remains a priority. We are committed to improving standards through an overhaul of private hire regulations, rigorous policing and enforcement to tackle illegal activity,

the introduction of 250 additional compliance officers and lobbying for more effective regulation and enforcement powers such as tighter controls on cross hiring.

The Mayor’s Taxi and Private Hire Action Plan included a commitment to seek additional powers to regulate rickshaws – unsafe pedicabs are a public safety issue and can seriously disrupt traffic in central London. The riders are not subject to the same strict background checks we carry out for taxi and private hire drivers and vehicles, and there is no regulation of fares. We will continue to lobby Government to deliver on its commitment to introduce legislation to regulate pedicabs.

**Capital investment (£m)**



Examples of projects included in this programme are detailed below.

**Key projects/programmes**

**ULEZ**

The ULEZ will be introduced in central London in April 2019 and – subject to consultation – then expanded to the North and South Circulars for all vehicles in 2021. London’s low emission zone will have tougher standards for lorries, coaches and buses in 2020. Our capital programme will establish the infrastructure needed for the ULEZ, which will require motorcycles, cars, vans, minibuses, buses, coaches and HGVs to meet minimum emissions standards, or pay a daily charge.

**Santander Cycles**

A new bike has just been launched and we plan to supply around 500 each year of the plan. We will integrate the scheme more fully with our other services and make it more efficient.

**Woolwich Ferry**

We are investing in the service by purchasing new vessels that will improve reliability and reduce operation and maintenance costs.

**Dial-a-Ride**

We will continue to invest in technology to improve operational efficiency and customer satisfaction. This includes new online resources for customers, such as membership applications; trials of ‘assisted transport allowances’ with borough partners to help them allocate funding for door-to-door services; and a new booking and scheduling system in 2020. The ageing vehicle fleet will also be replaced to meet regulatory requirements.

Extending the

**ULEZ**

in 2021 to the North and South Circulars



**500**

upgraded Santander Cycle bikes, each year, from 2018



**New**

Woolwich Ferry vessels purchased



# Commercial Development



We can use our assets to generate sustainable long-term revenue streams to support our network for decades to come.

## What customers can expect

As one of the Capital's largest landowners, we can provide places to live and work and improve the connectivity that Londoners need.

Over the course of this Business Plan we will progress the development of 300 acres of land for housing and commercial space. By 2020/21, we will start on property development sites that will provide 10,000 new homes, half of which will be affordable, and a million square feet of offices, shops and workspace. We will also make a substantial contribution to improving London's connectivity by bringing 4G to the Tube and the Elizabeth line.

As our programme grows, we are making significant capital investments in opportunities to generate new income streams, including through our advertising and retail and commercial property estates. Over the next five years, we will modernise our advertising estate by installing high-quality digital screens that, when combined with data, will allow brands and agencies to more effectively communicate their messages and campaigns to target audiences.

## Project and programmes

We have already brought forward sites that will provide 1,000 homes and, during the next two years, we will bring to market further sites that will deliver 6,000 homes. We have partners appointed for our sites at Earls Court, Kidbrooke, Landmark Court and Blackhorse Road, with Northwood, Harrow-on-the-Hill, South Kensington and Limmo soon to follow. We will set up an Estate Management function to review all of our landholdings to improve efficiency use and identify further development opportunities.

One of the Capital's

# largest

landowners



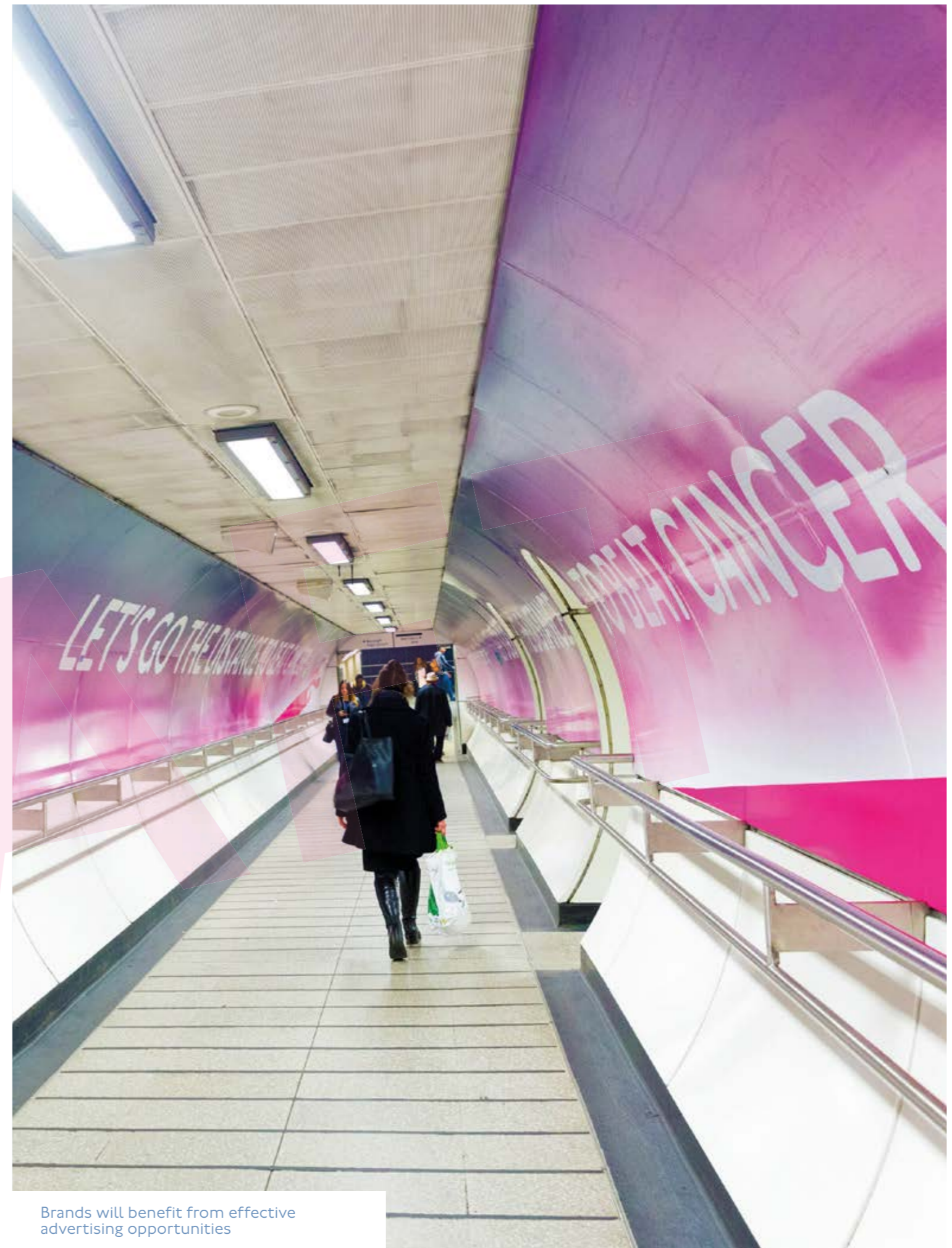
# Nine out of 10

tenants are small and medium-sized enterprises



# 4G

brought to the Tube and Elizabeth line



Brands will benefit from effective advertising opportunities

Our advertising estate is the most valuable in the world. We will install more than 750 digital screens on the Tube and the Elizabeth line along with 120 next-generation, cross-track projection screens and new digital ribbons beside escalators. On the road network, we will continue installing roadside and underpass digital screens.

Combined with better use of data, this investment will make sure our advertising estate continues to make a significant contribution to our commercial revenues, while improving customers' journey experience with more engaging and relevant content.

Our retail and light industrial properties have long provided ideal locations for London's small businesses, and more than nine out of 10 tenants are small and medium-sized enterprises. Our tenants provide the goods and services Londoners want and need, right in the heart of local communities.

We have a programme to improve our existing properties and are developing new locations, including using former ticket offices and installing new kiosks, particularly in central London. At Liverpool Street, Baker Street and South Kensington we are significantly improving the ambience and quality of the retail environment, which is benefiting our tenants and customers while helping to grow our revenues.

The next five years will be a vital time for our consulting and telecoms operations. In line with the Mayor's manifesto, we are building our commercial consulting and international operations business, which will provide our vast expertise to cities and authorities in the UK and worldwide. We are setting up the team that will lead this work and are in discussions with potential partners as we investigate a number of opportunities around the globe. Once fully established, we expect our consulting arm to make a significant contribution to our commercial revenues.

We are also using our assets to improve London's connectivity, which is another Mayoral priority. Our tunnels, tracks and on-street infrastructure are ideal places to install the equipment and technology needed to bring 4G coverage to the Tube, and to improve connectivity above ground. The infrastructure required to bring 4G to the Tube also has the potential to improve fibre networks in homes and businesses across the Capital.

We have started a competitive procurement process to identify a partner and expect to launch the first phase of 4G on London Underground by 2019. We are already working with mobile network operators to install small cells on our on-street infrastructure, for instance lighting columns. This work, which will boost signals and help address the poor 4G coverage on streets, will gather pace as London moves towards 5G and its much increased requirements for mobile phone base stations.

## Financial summary Commercial Development

|                                 | Actual      | Forecast   | Plan       | Plan       | Plan       | Plan       | Plan        |
|---------------------------------|-------------|------------|------------|------------|------------|------------|-------------|
| £m                              | 2016/17     | 2017/18    | 2018/19    | 2019/20    | 2020/21    | 2021/22    | 2022/23     |
| Passenger income                | -           | -          | -          | -          | -          | -          | -           |
| Other operating income          | 168         | 232        | 287        | 301        | 323        | 339        | 351         |
| <b>Total operating income</b>   | <b>168</b>  | <b>232</b> | <b>287</b> | <b>301</b> | <b>323</b> | <b>339</b> | <b>351</b>  |
| Direct operating cost           | (35)        | (51)       | (52)       | (46)       | (41)       | (42)       | (45)        |
| <b>Direct operating surplus</b> | <b>133</b>  | <b>181</b> | <b>235</b> | <b>255</b> | <b>282</b> | <b>297</b> | <b>306</b>  |
| Property receipts               | 14          | 89         | 75         | 162        | 8          | 140        | 106         |
| Crossrail OSD                   | -           | 43         | 155        | 31         | 139        | 34         | 42          |
| New capital investment          | (36)        | (99)       | (102)      | (141)      | (114)      | (127)      | (221)       |
| <b>Net capital investment</b>   | <b>(22)</b> | <b>33</b>  | <b>128</b> | <b>52</b>  | <b>33</b>  | <b>47</b>  | <b>(73)</b> |

Over the Business Plan period, we will grow our income through several routes. These include investing in modern technology to upgrade our media offering and developing our property portfolio to improve its diversity and returns. The latter will also support the Mayor's pledge to provide 10,000 homes for Londoners and his target for affordable housing.

We have increased our spend on feasibility studies to drive new property

and consultancy projects but, by the end of the period, operating costs will fall so they are broadly in line with today's figure.

Since last year, there has been a shift from generating capital receipts to retaining a longer-term interest in some developments. This accounts for the fall in expected capital receipts but will mean greater revenue beyond this Business Plan to reinvest in our transport network.

# Appendices

## I. TfL Group balance sheet

| Balance sheet (£m)                   | Actual          | Forecast        | Plan            | Plan            | Plan            | Plan            | Plan            |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                      | 2016/17         | 2017/18         | 2018/19         | 2019/20         | 2020/21         | 2021/22         | 2022/23         |
| Intangible assets                    | 140             | 127             | 176             | 167             | 155             | 139             | 103             |
| Property, plant and equipment        | 36,839          | 39,370          | 39,974          | 40,998          | 41,778          | 42,468          | 43,875          |
| Investment properties                | 558             | 558             | 558             | 558             | 558             | 558             | 558             |
| Investment in associate entities     | 368             | 371             | 380             | 388             | 398             | 407             | 407             |
| Long term derivatives                | 18              | 18              | 18              | 18              | 18              | 18              | 18              |
| Long term finance lease receivables  | 4               | 26              | 46              | 37              | 21              | 8               | 3               |
| Long term debtors                    | 26              | 21              | 17              | 17              | 17              | 17              | 17              |
| <b>Long term assets</b>              | <b>37,953</b>   | <b>40,491</b>   | <b>41,169</b>   | <b>42,183</b>   | <b>42,945</b>   | <b>43,615</b>   | <b>44,981</b>   |
| Stocks                               | 72              | 73              | 73              | 75              | 77              | 80              | 83              |
| Short term debtors                   | 1,821           | 570             | 544             | 388             | 311             | 280             | 283             |
| Assets held for sale                 | 15              | 14              | 14              | 14              | 14              | 14              | 14              |
| Short term derivatives               | 12              | 14              | 14              | 14              | 14              | 14              | 14              |
| Short term finance lease receivables | 1               | 9               | 17              | 18              | 18              | 15              | 6               |
| Cash and short term investments      | 1,961           | 1,448           | 1,451           | 1,024           | 1,141           | 1,758           | 2,005           |
| <b>Current assets</b>                | <b>3,882</b>    | <b>2,128</b>    | <b>2,113</b>    | <b>1,533</b>    | <b>1,575</b>    | <b>2,161</b>    | <b>2,405</b>    |
| Short term creditors                 | (2,146)         | (2,165)         | (2,009)         | (1,845)         | (1,695)         | (1,679)         | (1,944)         |
| Short term derivatives               | (4)             | (12)            | (9)             | (9)             | (9)             | (9)             | (9)             |
| Short term borrowings                | (1,106)         | (1,121)         | (1,121)         | (1,121)         | (1,121)         | (1,121)         | (1,121)         |
| Short term lease liabilities         | (77)            | (67)            | (51)            | (50)            | (52)            | (54)            | (60)            |
| Short term provisions                | (194)           | (109)           | (74)            | (72)            | (72)            | (72)            | (72)            |
| <b>Current liabilities</b>           | <b>(3,527)</b>  | <b>(3,474)</b>  | <b>(3,264)</b>  | <b>(3,097)</b>  | <b>(2,949)</b>  | <b>(2,935)</b>  | <b>(3,206)</b>  |
| Long term creditors                  | (56)            | (59)            | (68)            | (66)            | (65)            | (65)            | (64)            |
| Long term borrowings                 | (8,690)         | (9,295)         | (10,096)        | (10,596)        | (11,197)        | (11,698)        | (12,198)        |
| Long term lease liabilities          | (488)           | (433)           | (379)           | (310)           | (277)           | (245)           | (209)           |
| Long term derivatives                | (79)            | (60)            | (60)            | (52)            | (50)            | (41)            | (25)            |
| Other provisions                     | (44)            | (40)            | (34)            | (33)            | (33)            | (33)            | (33)            |
| Pension provision                    | (5,364)         | (5,362)         | (5,362)         | (5,362)         | (5,362)         | (5,362)         | (5,362)         |
| <b>Long term liabilities</b>         | <b>(14,721)</b> | <b>(15,249)</b> | <b>(15,999)</b> | <b>(16,419)</b> | <b>(16,984)</b> | <b>(17,444)</b> | <b>(17,891)</b> |
| <b>Total net assets</b>              | <b>23,587</b>   | <b>23,896</b>   | <b>24,019</b>   | <b>24,200</b>   | <b>24,587</b>   | <b>25,397</b>   | <b>26,289</b>   |
| <b>Capital and reserves</b>          |                 |                 |                 |                 |                 |                 |                 |
| Usable reserves                      | 1,861           | 1,446           | 1,458           | 964             | 923             | 1,208           | 1,267           |
| Unusable reserves                    | 21,726          | 22,450          | 22,561          | 23,236          | 23,664          | 24,189          | 25,022          |
| <b>Total capital employed</b>        | <b>23,587</b>   | <b>23,896</b>   | <b>24,019</b>   | <b>24,200</b>   | <b>24,587</b>   | <b>25,397</b>   | <b>26,289</b>   |

Through this Business Plan we will encourage the healthy growth of London

## 2. Major new capital investment (net of third-party funding)

### London Underground

| Project  | 2018/19-22/23 total |
|--|---------------------|
| <b>Modernisation of the Circle, District, Hammersmith &amp; City and Metropolitan lines</b><br>Upgrade of the four lines, resulting in a 33 per cent increase in capacity  | £961m               |
| <b>Deep Tube upgrade programme</b><br>Modernisation of the Central, Bakerloo and Waterloo & City lines (new trains and signalling) and the start of upgrades to the Piccadilly line  | £1,549m             |
| <b>Northern line extension</b><br>Extension from Kennington to Battersea   | £595m               |
| <b>Major station upgrades (including Victoria, Tottenham Court Road, Bond Street and Bank)</b><br>Station capacity projects that are already in progress   | £310m               |
| <b>Fleet and signalling renewals</b><br>Work to enable the existing train and signalling equipment to continue to operate ahead of renewal via the deep Tube upgrade programme and Rail Vehicle Accessibility Regulations compliance works | £605m               |
| <b>Station step-free access</b><br>Additional step-free schemes beyond those delivered as part of station capacity projects or Crossrail construction  | £216m               |
| <b>Camden Town station upgrade</b><br>Investment to relieve congestion   | £82m                |

| Project  | 2018/19-22/23 total |
|--|---------------------|
| <b>Holborn station upgrade</b><br>Investment to relieve congestion. Pre-requisite for the Piccadilly line upgrade  | £57m                |
| <b>Energy/carbon reduction schemes</b><br>Waste heat schemes and energy and carbon reduction initiatives including the Bunhill project in Islington, which captures waste heat produced from London Underground tunnels to help warm homes and cut energy bills. | £56m                |

**Elizabeth line**

| Project   | 2018/19-22/23 total |
|---|---------------------|
| <b>Crossrail (trains and enabling work)</b><br>Procurement of Crossrail trains (and some other works) that are paid for directly by TfL rather than through Crossrail Ltd | £404m               |

## Buses, streets and rail

| Project   | 2018/19-22/23 total |
|---|---------------------|
| <b>Healthy Streets (capital spend only)</b><br>Work recognising the value of increasing walking, cycling and public transport, more sustainable freight and servicing                                 | £1,113m             |
| <b>Air quality</b><br>Schemes, infrastructure and initiatives that improve air quality  | £289m               |
| <b>Silvertown crossing</b><br>New road crossing at Silvertown via a tunnel under the Thames   | £85m                |
| <b>DLR enhancements</b><br>Asset renewals, capacity enhancements and supporting infrastructure for new trains in 2022   | £608m               |
| <b>Barking Riverside extension</b><br>Extension of the Gospel Oak to Barking line to Barking Riverside, supporting new housing  | £65m                |
| <b>Overground enhancements</b><br>Largely a new station building at White Hart Lane, including step-free access and relocated station entrance, and investment in stations transferred to TfL in 2015 | £75m                |
| <b>Tram enhancements</b><br>Principally the construction of the Dingwall Road Loop to support higher frequencies as part of the Westfield development   | £50m                |

## Professional services

| Project   | 2018/19-22/23 total |
|---|---------------------|
| <b>Customer experience</b><br>Various renewal and investment projects relating to revenue collection assets (for example, ticket vending machines and ticketing technologies and Contact Centre systems) and to internal systems, IT infrastructure and cyber security.   | £291m               |
| <b>Commercial Development</b>   |                     |
| Project   | 2018/19-22/23 total |
| <b>Commercial development programmes</b><br>This includes work to facilitate income growth through upgrading our media infrastructure, improving our retail estate, delivering improved connectivity across our network through 4G and developing our property portfolio, including delivering the Mayor's affordable housing pledge. | £705m               |



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