

Transport for London Budget 2019/20



MAYOR OF LONDON

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 central 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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Commissioner's foreword

We are determined to meet the challenging targets we have set ourselves.

This Budget sets out in detail how we will keep London moving, working and growing. It is aligned with our overarching objectives in the Mayor's Transport Strategy and builds on the proposals set out in our five-year Business Plan.

This is set to be a very busy year. In April, we will introduce the new Ultra Low Emission Zone in central London, marking a major step forward in cleaning up London's air. By April 2020, 8,350 buses in our fleet will meet, or exceed, the ultra-clean Euro VI standard. We are significantly increasing our capital investment in Healthy Streets, including further expansion of the London-wide cycle network.

We expect to complete major safety and improvement works at Highbury Corner junction, start construction on the Silvertown Tunnel, and begin the reconfiguration of the bus network to better match demand and enable capacity uplifts in outer London.

We will make eight more Underground stations step-free this year, meaning our network will be more accessible than ever. We will continue to implement the new signalling system on the Circle, District, Hammersmith & City and Metropolitan lines and continue work to extend the Northern line from Kennington to Battersea via Nine Elms. Alongside all of this, we remain committed to the Mayor's freeze on our fares, which is helping to keep travel in London an affordable option for everyone.

We are confident that we can deliver all this despite the difficult financial conditions we are facing. Our recent Business Plan described these pressures, which include the loss of £700m every year in government grant, a subdued economy affecting demand for our services, and the impact of the delay to the opening of the Elizabeth line. It also details how we are responding to them, through prudent investment, a wide-ranging savings programme and steps to increase other sources of revenue. That programme will continue this year, with work already under way to identify further efficiencies and reduce our back and middle office costs by 30 per cent.

Over the last three years we have made unprecedented progress in reducing our year-on-year, like-for-like operating costs. We also made some difficult decisions in our Business Plan. We put some vital programmes on hold until we have confirmation of capital funding beyond March 202I, including new signalling for the Piccadilly line

Our services

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and the upgrade of Camden Town Underground station. It is critical that we secure long-term funding certainty to provide the steady and sustained investment London needs.

We will measure our delivery against our scorecard, which is approved by the TfL Board. I am determined that we will run the safest and most reliable services possible, deliver new housing and infrastructure that supports London's growth, and make real strides towards our organisation becoming truly representative of the people we serve.

The targets in our scorecard are challenging, which is the way it should be. I look forward to working with our people, trade unions, suppliers and stakeholders to deliver them over the year ahead.

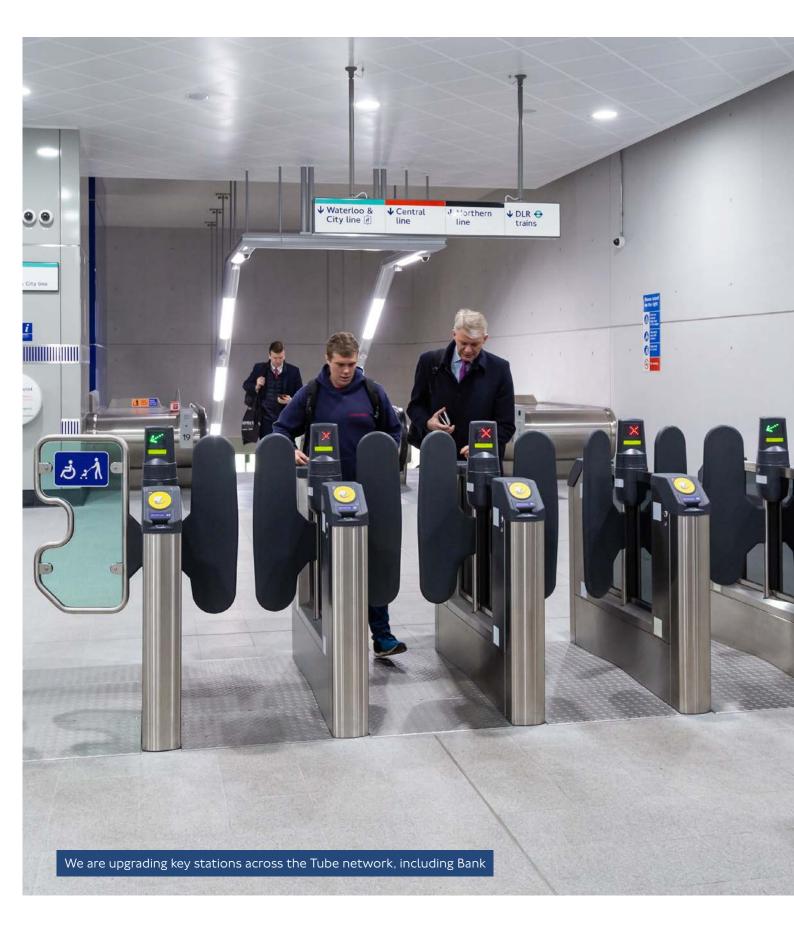


Mike Brown MVO Commissioner Transport for London

How we measure success Measuring success

A balanced budget

Budget 2019/20



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Measuring success

Our scorecard, approved by the TfL Board, focuses on critical targets for the year ahead.

The scorecard captures the key outcomes that we will deliver over the next year to achieve the Mayor's goals.

Approved by the Board, the scorecard details our key priorities, providing an objective method for tracking performance. We use 20 measures, which have been developed to provide a clear link between the long-term vision of the Mayor's Transport Strategy, the five-year Business Plan and this one-year Budget. We regularly report our results to the TfL Board through financial and quarterly reports, which are all publicly available.

The measures are aligned with the three key themes of the Mayor's Transport Strategy – Healthy Streets and healthy people, a good public transport experience, and new homes and jobs. They keep us focused on the overall objective for 80 per cent of journeys to be made by walking, cycling or public transport by 2041.

They are grouped into four key areas of Safety and operations, Customers, People, and Financial, with each carrying an equal weighting of 25 per cent. Our forecasts for 2018/19 show we have made good progress since last year by reducing the number of customer and workforce injuries, and reducing the time to make step-free journeys. Our net operating surplus is also forecast well ahead of target as we have reduced our operating costs. We have increased the number of Euro VI compliant buses, improved Tube reliability, maintained average bus speeds and increased the number of cycling trips. The percentage of people who agree we care about our customers has also increased.

These forecast results also show where we need to improve. We have reduced the number of people killed or seriously injured on or by London buses, but we must reduce this figure across the wider transport network as we work towards achieving Vision Zero. We must also do better in meeting our diversity and workforce engagement targets.

This year, we have again set ourselves challenging targets. We have developed some measures since last year and introduced new ones, which will give us the most relevant information to drive our performance. We will work hard to achieve them as we keep transport in London affordable, reliable and safe and encourage more people to switch to sustainable travel options.

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The weighting of each theme and category is shown in brackets in the scorecard

Long-term objectives	2019/20 scorecard	2018/19	2019/20	Category	
Outcome	Measure	Forecast	Target		
Healthy Streets and hea	althy people (12.5%)				
London's transport system will be safe and secure	Reduction in people killed or seriously injured on the roads from 2005-09 baseline (%)	39.8	42.3		
	Reduction in people killed or seriously injured involving buses from 2005-09 baseline (%)	57.4	58.7		
London's streets will be clean and green	Number of London buses that are Euro VI compliant	6,600	8,350		
London's streets will be used more efficiently and have less traffic	Traffic signal changes to support Healthy Streets (person hours per day)	17,500	15,000		
More people will travel actively in London	Healthy Streets check for designers (average % uplift)	10	10	Safety and operations (25%)	
A good public transport	t experience (30%)			(2070)	
Public transport will be accessible to all	Reduction in customers and workforce killed and seriously injured ^I (%)	New	56 fewer people killed or seriously injured (2.5% reduction)		
	Additional time to make step-free journeys (minutes)	9	8.3		
Journeys by public transport will be	Tube excess journey time (minutes) [,]	4.52	4.52		
fast and reliable	Weighted bus customer journey time (minutes)	32.5	33.5		
	Customer satisfaction – percentage of Londoners who agree we care about our customers (%)	49	50	Customer	
The public transport network will meet	Deliver key investment milestones (%)	81	90	Customers (25%)	
the needs of a growing London	Key Elizabeth line delivery milestone ²	TBC	ТВС		

2 Suitable milestone and target date to be identified from the delivery programme once this has been confirmed. This will be agreed with the Chair of the Finance Committee

¹ The 2019/20 target will be set at the 2018/19 year end actual, which is currently forecast at 4.52 minutes

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Long-term objectives	2019/20 scorecard	2018/19	2019/20		
Outcome	Measure	Forecast	Target	Category	
New homes and jobs (2.5%)					
Transport investment will unlock the delivery of new homes and jobs	The cumulative percentage of affordable homes on TfL land with planning applications submitted – post May 2016 (%)	New	50	Customers	
Mode share (5%)					
80% of journeys will be made by sustainable	Public transport trips (millions)	4,011	3,967		
modes in 2041	Average kilometres cycled per day (thousands) ³	525	540		
People (25%)					
A capable and engaged workforce representative of London	Workforce representativeness⁴ - all staff (%) - director/band 5 (%)	70.1 41.9	+1 +0.5	People (25%)	
	Inclusion index (%)	43	46		
	Total engagement (%)	56	57		
Financial (25%)					
We are prudent and	Net operating surplus (£m)⁵	359	191	Financial (25%)	
cover our costs	Investment programme (£)	22% under Budget	Budget	(ZJ /0)	

- 3 Cycling trips in central London only
- 4 Percentage point improvement from 2018/19 end-of-year position
- 5 Net operating surplus is the net cost of operations before renewals and financing costs

Budget 2019/20

What we will deliver

Activities, resources and investment in 2019/20 are directed to the outcomes of the Mayor's Transport Strategy.

The 2018 Business Plan set out the direction of our investment programme for the next five years to support the Mayor's vision for active, affordable, efficient and sustainable transport, and to make huge improvements to the transport system.

How we measure success

What we will deliver

This Budget is our balanced, detailed plan for the 2019/20 financial year. It explains how we will deliver the three core themes of the Mayor's Transport Strategy, with its central goal that, by 2041, 80 per cent of trips will be made on foot, by cycle or using public transport.

Healthy Streets and healthy people

We will invest in streets and the public domain to enhance people's experience of the places where they live, work, go to school and spend time. Reducing traffic dominance and prioritising walking, cycling and public transport use will help Londoners live active, healthy lives and create a city that works for all.





Emission Zone in April 2019



15,000

hours a day saved for people walking, cycling and using public transport through traffic light retiming



B major new cycling routes to start construction, subject to consultation



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A good public transport experience

The right investment will ensure public transport becomes an increasingly attractive alternative to using a car. Planning for the whole journey will help integrate street-level and public

transport investment. Making sure the right services are available where people need them, reducing overcrowding and keeping fares affordable will help to reduce people's dependency on cars.



new London Overground trains, adding capacity to the network

Elizabeth line More

bus services for outer London

Work with Crossrail Ltd

to complete the



New homes and jobs

Transport improvements are vital to the creation of new homes and jobs, and can ensure that London grows sustainably. Our investment will help to create communities where local

amenities are within walking and cycling distance and public transport is available for longer journeys, protecting the environment and improving quality of life.

10,000 new homes to have a delivery







5.00 homes to have planning applications submitted, half of which will be affordable



Delivering a balanced budget

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CFO foreword

Our Budget, the first year of our five-year plan, builds on the strong performance over the past three years.

We have reduced our like-for-like costs year-on-year since 2016/17, something that TfL has never achieved before. In 2018/19, we expect our net cost of operations to be £468m better than the 2018/19 Budget, despite the delays to the opening of the Elizabeth line. We will successfully absorb the impact of the loss in operating grant, delivering an underlying improvement from last year. This has been achieved through the organisation focusing on its cost base, including maintenance savings, contract renegotiations and recruitment controls.

Our net cost of operations in 2018/19 will be one third of what it was in 2015/16, if the operating grant is excluded. This consistently strong performance shows we are on the right trajectory to deliver a surplus on net cost of operations by 2022/23.

Our 2019/20 Budget reflects the performance achieved in 2018/19 and our net cost of operations is projected to be \pounds 742m, which is \pounds 155m better than the Business Plan.

Our assumptions on the Elizabeth line remain largely unchanged from the Business Plan, except for small phasing changes. We are assuming we will take over services from Paddington to Reading in 2019 and that, over the life of our Business Plan, the revenue impact of the delay to opening the Elizabeth line will remain around $\pounds600m$ lower than originally anticipated. Our assumptions on the additional Crossrail construction costs remain unchanged and will be met through the agreement reached with Government and the Greater London Authority in December 2018.

This Budget is written in the context of a very uncertain economic environment. The latest data from the Office for National Statistics and the Bank of England show the British economy had the worst performance in the last quarter since the financial crisis. Growth is likely to remain subdued as businesses and households hold off investment and consumption until the uncertainty over the UK's exit from the European Union lifts.

We have, therefore, maintained our cautious view on passenger demand, assuming the improving trend of Quarter 4 will not continue into 2019/20. On the London Underground and buses, we maintain the cautious assumptions we used for our Business Plan, while Rail has been revised downwards, owing to continued economic uncertainty.

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Excluding the impact of the Elizabeth line delay, increased spend on renewals and financing costs, our net cost of operations in 2019/20 is forecast to remain broadly in line with 2018/19.

The Business Plan announced the next stage of our organisational change and our challenge to collectively achieve a surplus on net cost of operations by 2022/23. This Budget sets out the first year's plans to achieve those targets, including progressing work to:

- Double the operating surplus on London Underground to cover the cost of future renewals
- Cap the combined subsidy of buses and streets at £850m
- Break even on Rail and our Other operations
- Achieve a £300m surplus on our other revenue-generating activities – Property, Media and our new Applied solutions function
- Ensure our capital plan is affordable, with sufficient renewals
- Reduce our back and middle office costs by 30 per cent

We have no long-term funding certainty beyond 2020/2I. This clearly poses challenges when planning the pipeline of investment London requires, and we continue to work with our stakeholders to secure the necessary funding.



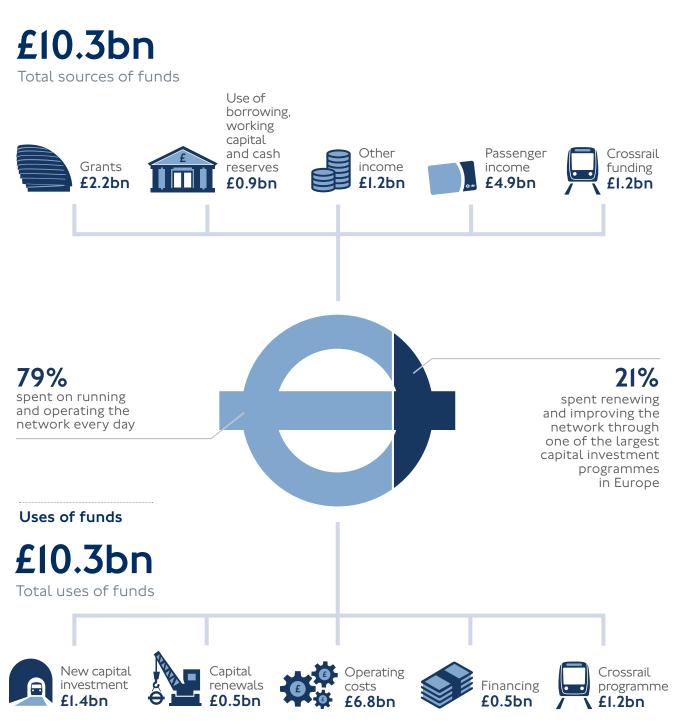
London is a vital driver of the UK economy. Steady investment in infrastructure, in line with the National Infrastructure Commission recommendations, must be sustained if London is to continue growing, attracting investment and talent, and competing as a global city.

Simon Kilonback Chief Finance Officer Transport for London

A balanced budget Budget at a glance Budget 2019/20

Budget at a glance

Sources of funds



These figures have all been rounded

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8,350 Euro VI buses (hybrid and diesel) in the fleet by the end of 2019/20 (from 6,600 in 2018/19)



More than **1/3** of the Tube network will be step-free by 2020





985

trains running on our network as the Elizabeth line comes into service (from 950 in 2018/19)

We will operate



of Rail and Underground routes in 2019/20 (from 720km in 2018/19)



Doubling capital investment

in Healthy Streets

Launch first phase of 4G on London Underground

Extend

the weekly cap on Oyster cards to include Tube and rail services



Budget 2019/20

Meeting our challenges

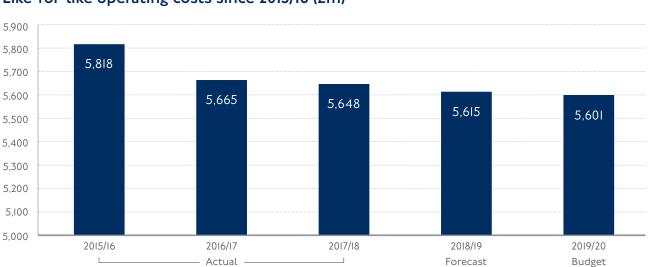
We will improve and expand our services while controlling costs – doing more with less.

In our Business Plan, we said in order to achieve a financial surplus, we will need to continue our huge programme to reduce costs, increase revenue and become more efficient, while maintaining safety, frontline services and vital investment.

Through our savings programme, we mitigate inflationary pressures every year, reducing like-for-like operating costs. This means we only increase costs to grow our business and generate further income.

Our savings programme

The initial phase of our change programme started in 2015/16 and delivered annualised savings of £542m by the end of 2017/18. We are forecasting to save a further £165m in 2018/19. This has contributed to a reduction in our year-on-year, like-for-like operating costs for the third consecutive year, as shown in the graph below.



Like-for-like operating costs since 2015/16 (£m)*

* Like-for-like operating costs exclude Elizabeth line, investment project costs in the operating account, one-offs and growth

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These savings have been achieved through changes to our operating model, reducing and relocating head office accommodation based on our three-hub strategy, contract savings and London Underground maintenance modernisation savings.

Going further to break even

To achieve financial sustainability, we must go further. Our change programme is entering a new phase, focused on driving further efficiencies through end-to-end process re-engineering and further integration in our back and middle office functions, while modernising the Underground and reshaping the bus network.

In 2019/20, we are planning to make £211m in year-on-year savings. Key workstreams are already under way, including:

- Merging some Human Resources and Finance functions and driving efficiencies through standardisation of common processes
- Merging specialists from across the organisation into a single Investment Delivery Planning team
- Modernising London Underground maintenance, including new supply chain improvements
- Reshaping the bus network within inner London to refocus the network in outer London and growing demand



3 years of like-for-like operating cost reductions

How we measure success

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Efficiency trends

Controlling our costs, while improving and expanding our services, is essential if we are to break even on net cost of operations by 2022/23, while continuing to provide the transport that a growing London requires. We have made considerable progress in achieving this over recent years.

Over the past decade, our scope has widened considerably as we have enhanced the service we provide. This includes taking over suburban rail services through London Overground and TfL Rail, extending the DLR and Santander Cycles networks, and launching the Emirates Air Line, contactless payment and the Night Tube.

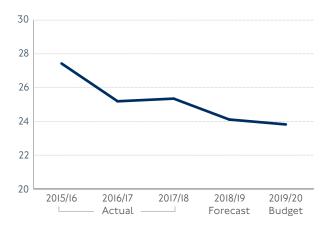
This will continue in 2019/20 as we launch the Ultra Low Emission Zone (ULEZ) and Crossrail Limited ramp up testing and preparations for the Elizabeth line. The expansion of our activities have meant that the overall cost to operate TfL has risen, particularly between 2011 and 2016. Since 2016, our operating costs have fallen, with us fully absorbing the impact of higher inflation while still lowering costs. We have achieved this by comprehensively reorganising our business to drive efficiency.

On London Underground, operated kilometres in 2019/20 will be 19 per cent higher than in 2011/12, reflecting the line upgrades and timetable enhancements we have delivered. Over the same period, the Underground's operating cost as a whole has only increased by four per cent, meaning the cost per operated kilometre has declined by I3 per cent, before accounting for inflation. We have achieved this by streamlining operations, reducing management layers and improving the performance of our assets. We have also brought down the cost per operated kilometre on London Overground and the DLR.

On the bus network, we are driving higher standards of air quality, safety and customer service while keeping the cost of operating each kilometre of service mostly flat in constant prices. This has been achieved by improving how we tender, reducing excess capacity in congested parts of central London to better match demand, and committing strongly to cleaner bus technologies, giving the market certainty and driving down the premium we pay for these.

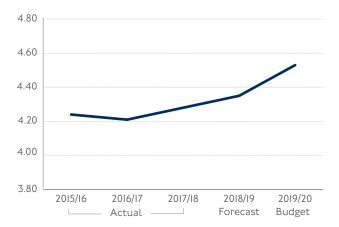
In our corporate functions, our change programme has released substantial savings. Over the course of our Business Plan, we will go further by reducing back and middle office costs by an additional 30 per cent. We are reviewing all areas of activity and benchmarking our performance against relevant comparators to understand where we can consolidate and reduce costs. This will enable us to focus our activities on providing the best possible service to our customers.





Cost per operated kilometre will continue to fall this year, with our ongoing modernisation programme enabling us to absorb the impact of inflation. Improving use of our assets and better working practices have enabled us to lower it by I3 per cent since 2015/16.

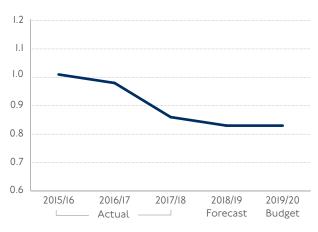
Buses (£)*



Over recent years, cost per operated kilometre has risen broadly in line with inflation. We are working with our operators and improving how we tender contracts in order to control costs while improving the bus fleet.

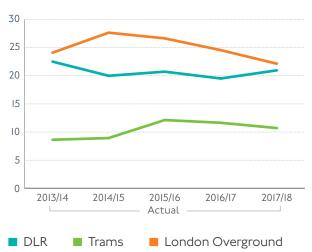
* Kilometres operated in 2019/20, subject to consultation

Streets (£m)



Operating costs have reduced as a result of our difficult decision to postpone proactive road maintenance in light of a lack of dedicated roads funding. Operated kilometres refer to the length of the road network that we operate.

Rail (£)



In recent years, costs have generally been reducing, with some variation reflecting operating conditions, including the aftermath of the Sandilands tragedy. Future operating kilometres are dependent on performance by our operators, so we only compare historic data. How we measure success

A balanced budget Meeting our challenges Budget 2019/20

Diversifying our income base

Growing our commercial income is a key part of our plan to achieve a surplus on net cost of operations by 2022/23. We will use our assets and skills, as well as our property and advertising estates, to generate long-term revenues to reinvest back into our network. A more diverse range of income also supports our financial security, as we will be less dependent on the UK and London economy.

As one of London's largest landowners, our landholdings play a vital role in meeting the Mayor's priorities to build the affordable homes that the Capital needs. We have an extensive pipeline of sites that we plan to develop in the long term to deliver 10,000 homes across more than 300 acres.

Retailers across London can take advantage of our exciting retail spaces, including railway arches, while our commercial properties provide ideal locations for small businesses.

Our advertising estate is one of the most valuable in the world and we continue to invest in transforming it to make it even more attractive to advertisers. This includes the use of digital infrastructure and a deeper understanding of our customers via anonymised, aggregatelevel data. We partner with cities, regions, consultancies and transport operators around the world to deploy our unique, specialist expertise. This also enables us to develop sustainable answers to transport challenges.

Activities within our growth business include starting construction of 350 homes in Waltham Forest (of which, 50 per cent will be affordable), enhancing digital Tube advertising, developing a public cellular network on the Underground and providing our engineering expertise to metros in Oslo and San Francisco.

Each of these activities will have dedicated resource, clear financial targets, the right leadership and appropriate governance. This sets us up to make the most of the commercial opportunities, improving our financial resilience. **Our services**

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Budget 2019/20

Approach to forecasting

Our forecasting remains cautious given the challenges of the external environment.

Our Business Plan outlined our comprehensive approach to forecasting, which affects projected revenue and cost. We have continued to update these forecasts based on our latest view of the external environment. These amendments have been embedded into our 2019/20 Budget and full-year forecast for 2018/19.

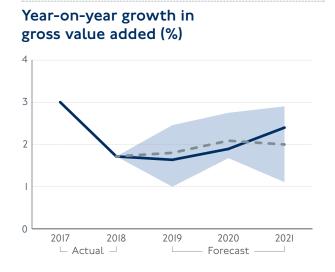
Forecasts for the London economy come from GLA Economics, which provides us with a range of scenarios to enable us to consider different outcomes.

The graphs opposite illustrate the latest forecasts for four of the main economic drivers that we look at – London's gross value added, household consumption, employment and UK inflation.

We have seen minor movements in the economic indicators since publishing our 2018 Business Plan, which continue to reflect the continuing uncertainty in the economy. We maintain a cautious view of passenger income, which is heavily influenced by economic factors beyond our control, as well as internal factors, such as new timetables or services.

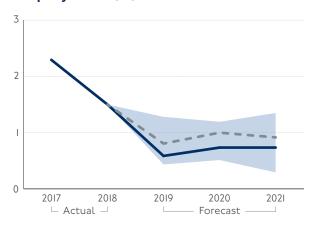
While there has been some recovery in demand in the last quarter of 2018/19, the uncertainty surrounding the UK's exit from the European Union makes it unwise, in our view, to take a materially more optimistic demand assumption going into 2019/20. Our passenger income forecast for 2018/19 and our budget for 2019/20 is only slightly higher than in the Business Plan, owing to better than expected demand growth in recent months.

Our approach to forecasting includes actively monitoring emerging risks and opportunities, which assess how external forces may affect the organisation. While our forecast has not built in an assumption of a disruptive no-deal departure from the European Union as part of this Budget, we have contingency action plans if we need to re-evaluate our operating and capital cost base.

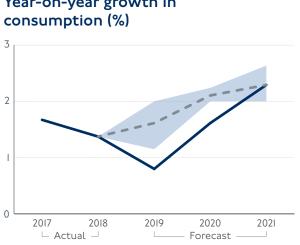


Growth in gross value added in London is a measure of the value of all goods and services produced in London.

Year-on-year growth in employment (%)



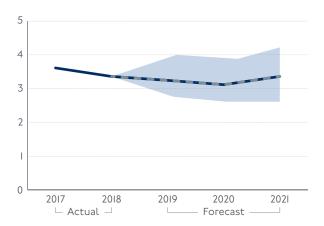
Growth in employment in London is defined as the total number of skilled and unskilled jobs available in London.



Growth in consumption in London is the extent to which goods or services are used, and reflective of the portion of household income spent, not saved.

- Historic actuals and forecast used
- Average of external forecast
- Range of external forecast

Retail price index inflation (%)



Growth in UK retail price index inflation reflects the change in cost of retail goods and services across the UK.

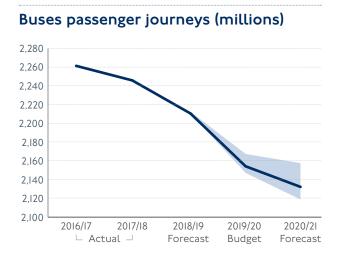
Source: Office for National Statistics, Experian Economics, the Bank of England, Greater London Authority Economics modelling, Greater London Authority Economics forecasts and HM Treasury Summary of Independent forecasts

Year-on-year growth in

How we measure success

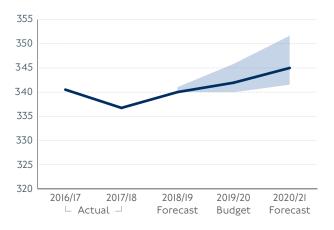
A balanced budget Approach to forecasting Budget 2019/20

These graphs represent the forecast range of passenger journeys under different economic scenarios, driven from the data shown on page 27. The highest point in the range shows the most positive outcome, based on more favourable economic performance, while the lowest point factors in poorer economic conditions. These forecasts include revised assumptions on passenger movements in light of the Elizabeth line delay.



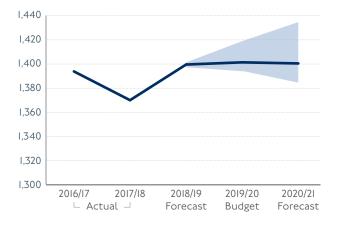
Bus passenger journeys are expected to continue to decline in 2019/20 and 2020/21.

Rail passenger journeys (millions)



The upwards trend in 2018/19 will continue throughout 2019/20 and into 2020/21.

London Underground passenger journeys (millions)



Passengers journeys on London Underground are expected to continue the positive trend witnessed in 2018/19, although we remain cautious.

Historic actuals and forecast used

Range of internal modelling scenarios

Buses

Bus operated kilometres and speeds are two of the main internal drivers of demand. Subject to the outcome of the central London bus service review, the total number of operated kilometres may reduce in 2019/20, although the decrease is less than we stated in our Business Plan, as we reshape services in central and inner London to better match demand. Our assumptions on speeds remain unchanged.

The trend in declining passenger numbers since 2015 is consistent with survey data showing a decline in bus trip rates over the same period by low income households, who represent the majority of bus users. This suggests that constrained household incomes are linked to falling bus demand.

We have seen the biggest declines in journey numbers during school holidays, when leisure trips by families tend to comprise a greater proportion of overall journeys. We have also seen weekend bus demand fall more than weekday.

Rail

Internal factors that affect rail demand include planned engineering closures, new train deployments and service frequency changes.

Rail demand fell in 2017/18, which was broadly consistent with a decline in overall rail demand across London and the South East, although we forecast this to recover in 2018/19. In 2019/20, we expect DLR and London Trams journeys to remain static, while we will see a small increase in London Overground, owing to an increase in the number of services and the introduction of new trains between Gospel Oak and Barking. However, the delay in these new trains coming into service results in a corresponding delay to the increase in demand stated in our Business Plan.

London Underground

Underground journeys were in decline in late 2017 and most of 2018, before growth returned in the last quarter of 2018. The number of journeys outside Zone I has been in decline over the last two years, which likely reflects a reduction in discretionary journeys, probably caused by a continued squeeze on household incomes. Continued employment growth is contributing to robust commuter demand.

The most significant internal factors affecting London Underground demand include service improvements, reliability and asset upgrades. The assumptions built into the Business Plan included a small number of service improvements and station upgrades that increase demand, which remain unchanged.

London Underground has experienced higher than forecast journeys since the publication of the Business Plan. While this demand recovery is a positive sign, we remain cautious in the uncertain economic climate. **A balanced budget** Managing risk Budget 2019/20

Managing risk

We must be prepared for external changes that could affect safety, operations and finances.

We take an enterprise-wide approach to risk management and use an Enterprise Risk Management framework to identify, analyse, manage and report risks to strategic and tactical objectives, including the delivery of the Mayor's Transport Strategy and our corporate strategy. We manage a wide range of risks, including potential impacts and benefits to our customers and stakeholders, health, safety and the environment, our finances and our stakeholders' confidence in us.

Our success, as measured through delivery of complex infrastructure projects, and running a safe and reliable transport network in the most efficient and effective manner, means we must be flexible and innovative in our approach to risk mitigation. Our enterprise-wide approach provides opportunities to review, monitor and enhance strategies depending on changing conditions and challenges.

Safety is our top priority. We are working towards the Vision Zero goal of eliminating all deaths and serious injuries on roads and public transport. We face a range of threats to safety and security, including terrorism and road danger. We will work with the police, boroughs and other partners to prevent and reduce harm to our staff and customers and improve safety on London's roads and public transport. There is a risk that a challenging macroeconomic environment and other financial challenges may result in an inability to pay for and deliver services and invest affordably. In this Budget, we maintain a cautious view on passenger demand and income forecasts. We are working on developing alternative revenue streams and we are continuing to deliver greater efficiencies through our extensive savings programme. Through these actions, we are taking decisive steps to building financial resilience to be able to respond to changes in the external environment.

Our capital programme is £1.9bn in 2019/20, including renewals. Any major infrastructure project is subject to a range of risks, which we manage by working closely with suppliers, applying our governance process and controls to deliver key milestones. We also work with our supply chain to identify opportunities for efficiencies and savings.

We receive funding from the Greater London Authority as part of local authority devolved arrangements. The Mayor retains a share of London's business rates and then allocates a proportion of this to us. In 2019/20, we will receive £1.9bn of business rates and around £300m in grants from the Mayor and the Government for

Spotlight

Preparing for Brexit

We have been preparing for all possible outcomes related to the UK leaving the European Union. Although such an event would pose challenges for us, as for many other organisations, we are confident the mitigation plans we have been developing would enable us to continue to serve our customers in all scenarios. The risks include:

Operations

We are preparing an operational plan and working closely with partners to manage any disruptions related to Brexit. We are working with the London Resilience Forum and our operators to ensure sufficient resources are in place to maintain our services regardless of the outcome. This includes maintaining sufficient levels of stock of critical spares to enable uninterrupted maintenance activities.

Commercial and finance

We are managing supply chain risks, including sub-contractors, to ensure contracts can continue. Where necessary, we are hedging to reduce exchange rate risk and placing orders for critical supplies at fixed prices. We are working with lenders to manage interest rate risks and seeking to increase certainty by fixing borrowing rates in advance. This Budget has not built in an assumption of a disruptive no-deal departure from the European Union, but if this changes, we will revisit our financial projections.

People

We are supporting our non-UK EU citizens staff by providing guidance on applying for Settled Status. We are engaging through our Human Resources team and internal communications.

various schemes. We no longer receive any operational grant from the Government to offset the cost of day-to-day services, and we operate the only part of the UK's strategic road network that receives no routine funding from the Government. The Business Rate Retention scheme is a pilot and there is no certainty of our capital or operating funding after 2020/21. We will continue to make the case for greater long-term funding certainty as part of this year's Comprehensive Spending Review. By continually monitoring our operational risks and using our Enterprise Risk Management framework to evaluate our strategic risks and approach to managing them, we have systems and governance processes in place to alert us to emerging risks and opportunities, giving us early warning if we need to take action. We are committed to improving the way strategic risks are identified, managed and reported, and we will continue to provide input to the Audit and Assurance Committee and other committees and panels. The risks we are managing can be seen in the Appendix.



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Budget 2019/20 Financial summary

Financial summary

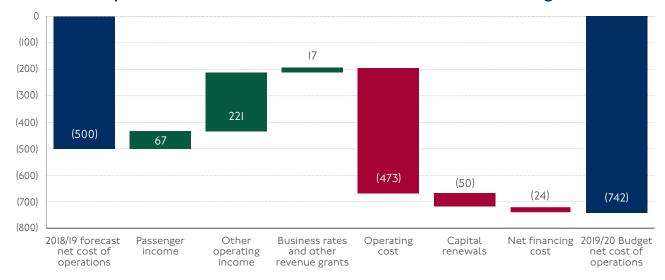
This Budget sets out in detail how we will deliver the first year of our five-year Business Plan.

Operating account

TfL Group (£m)	2019/20 Budget	2019/20 Business Plan	Variance to Business Plan	2018/19 Forecast	2019/20 variance to 2018/19 forecast
Passenger income	4,856	4,821	35	4,789	67
Other operating income	1,050	1,128	(78)	829	221
Total operating income	5,906	5,949	(43)	5,618	288
Business rates	954	954	-	948	6
Other revenue grants	111	49	62	100	11
Total income	6,971	6,952	19	6,666	305
Operating cost	(6,780)	(6,909)	129	(6,307)	(473)
Net operating surplus	191	43	148	359	(168)
Capital renewals*	(459)	(456)	(3)	(409)	(50)
Net cost of operations before financing	(268)	(413)	145	(50)	(218)
Net financing costs	(474)	(484)	10	(450)	(24)
Net cost of operations	(742)	(897)	155	(500)	(242)

We start 2019/20 in a stronger position than set out in our 2018 Business Plan. Our budgeted net cost of operations is now £742m, which is an improvement of £155m against the Business Plan. This is partly due to the favourable demand we have seen in the latter part of 2018/19, and the realisation of further savings, which have reduced our operating cost base.

* Capital renewals are shown net of third party contributions



Net cost of operations movement from 2018/19 forecast to 2019/20 Budget (£m)

Favourable movement

Adverse movement

Passenger income

The passenger income budget in 2019/20 is £4,856m. This is an increase of £67m compared to our latest 2018/19 forecast, which reflects the rebasing of our plan on a slightly more favourable outcome for 2018/19, and an improvement of £35m compared to the Business Plan.

We introduced weekly Oyster capping on our tram and bus services last year and will extend this to customers using London Underground and rail services this year. We have updated our assumptions on the impact of the delay to the opening of the Elizabeth line, which includes its effect on passenger numbers on the Underground, buses and rail networks.

Other operating income

Our other operating income includes the Congestion Charge, enforcement income and revenue generated through commercial activities, such as advertising, property rental and our newly launched consultancy arm. From April 2019, it will also include charges from the ULEZ. This new charge is the main driver of the increase in our other operating income, taking it from £829m as per our latest forecast for 2018/19 to £1,050m in 2019/20.

There is a £78m net decrease in other operating income since the 2018 Business Plan. This includes an adjustment of around £150m from regulatory income for operating the Elizabeth line, which will not be received in 2019/20. This is partially offset by other movements, including an increase in income expected from the ULEZ. A balanced budget

Budget 2019/20 Financial summary

Business rates

The Mayor has allocated an additional £83m over two years as part of his 2019/20 Budget to fund three Mayoral priorities. with £60m to be received in 2019/20.

A £48m combined scheme will help scrap older vans for the Capital's microbusinesses and help lowincome Londoners scrap older cars.

There will be £24m to increase the size of the enhanced taxi delicensing scheme in response to very high demand from the taxi trade.

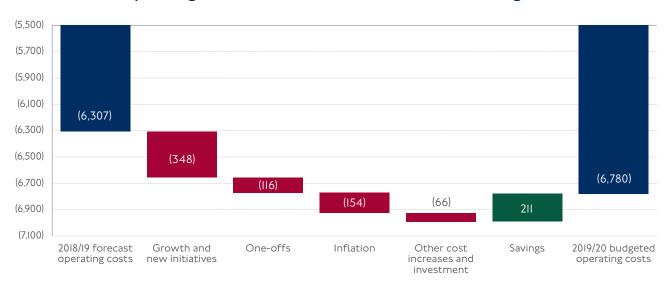
There will also be £5m for buses, £5m for London Overground and £1m for a Car Free Day in September 2019.

Operating costs

Our budgeted operating costs for 2019/20 are £6,780m, a reduction of £129m against the 2018 Business Plan.

We are mitigating inflation and other cost increases on a like-for-like basis, which means our operating costs are broadly in line with 2018/19 in real terms. However, total operating costs are increasing by £473m in 2019/20 from a combination of new services, one-offs and restructuring cost increases as explained in the graph below. These are:

• £348m from the introduction of new services, such as the ULEZ, new trains and increased frequency on London Overground, and increased costs from testing and preparations for the



Movement on operating costs from 2018/19 forecast to 2019/20 Budget (£m)

Favourable movement

Adverse movement

Our services

Appendices

- opening of the Elizabeth line. Our plans also reflect the cost of delivering new initiatives funded through additional Mayoral funding
- £II6m increases from one-off items. This includes some cost upsides in 2018/19 that will not repeat and increased restructuring costs for our savings programme
- £154m of inflation, including contract inflation, increased energy prices and wage inflation
- £66m increase in project spend, reflected in operating costs, such as installing new exhaust systems in buses and smaller increases across business areas, fully offset by planned savings

 £2IIm of planned savings through the change programme for our back and middle offices, progressing London Underground maintenance modernisation, improving efficiency in our supply chain, and reviewing and retendering our bus contracts

Capital expenditure

The Budget reflects the latest work schedules, with some timing differences to the Business Plan, which reduce the 2019/20 investment by £88m as works are phased to later years. New capital investment in 2019/20 will be £1.4bn.

Our assumptions on Crossrail capital spend and funding will be reviewed once a final delivery timetable and spend profile is confirmed by Crossrail Limited.

TfL Group (£m)	2019/20 Budget	2019/20 Business Plan	Variance to Business Plan	2018/19 forecast	2019/20 variance to 2018/19 forecast
New capital investment*	(1,429)	(1,517)	88	(1,252)	(177)
Crossrail programme	(1,196)	(1,196)	-	(1,416)	220
Total capital expenditure	(2,625)	(2,713)	88	(2,668)	43
Financed by:					
Business rates	893	893	-	976	(83)
Property and asset receipts	155	211	(56)	667	(512)
Borrowing	845	800	45	728	117
Crossrail funding sources	1,216	1,004	212	757	459
Other capital grants	250	275	(25)	213	37
Total	3,359	3,183	176	3,341	18
Net capital account	734	470	264	673	61

Capital account

* New capital investment is shown net of third party contributions

A balanced budget

Budget 2019/20 Financial summary

2019/20 priorities

As part of our Business Plan, we reviewed our capital programme, prioritising investment based on the funding available. Our investment decisions are geared to the Mayor's Transport Strategy goals of improving transport to support London's growth and enhancing people's lives through continued investment in Healthy Streets.

Our programme of Healthy Streets works ramps up this year, as we double the investment compared to last year. Our major infrastructure projects will increase capacity on the network, support thousands of jobs, and make areas of London more accessible for people to travel to, live and work in. These infrastructure projects are vital to the future of London to ensure we keep the city working and growing. We will continue to make the case that London needs steady and sustained investment to do this.

Healthy Streets

We will reduce barriers to walking, cycling and using public transport. At Old Street and Waterloo, we will create transformational schemes that improve safety, infrastructure and the urban environment. We will support the boroughs in delivering Liveable Neighbourhoods and significantly expand the London-wide cycle network, delivering Quietways, Mini-Hollands and starting construction of eight major new routes. By 2020, more than I00km of additional protected cycle infrastructure will have been delivered compared to 2016, or will be in construction.

In pursuit of the Mayor's ambitious Vision Zero target, we will deliver 20 more Safer Junctions schemes, including Highbury Corner, Euston Road, Baker Street and Holloway Road. All our roads within the Congestion Charge zone will have a 20mph speed limit, subject to consultation.

Air quality and the environment

We will launch the ULEZ on 8 April 2019 in central London and will have delivered I2 Low Emission Bus Zones by the end of 2019. We are supporting the change to low emission and electric vehicles by continuing to retrofit our bus fleet to meet Euro VI standards. By 2020, we will have installed 300 rapid charging points.

Surface public transport

We will improve the capacity on London Overground and complete an upgrade of White Hart Lane station, which will also provide step-free access. We will develop plans for the DLR and tram networks to meet demand from London's growth areas. Our programme of renewal works will continue on trams, London Overground and DLR infrastructure, to ensure safety and reliability.

Surface assets

In 2019/20, design work will start for major renewals of Rotherhithe Tunnel, the Westway and Vauxhall Bridge. We will complete delivery of bus driver facilities on 42 routes.

Our services

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Deep Tube Upgrade programme

This programme will increase capacity and bring new trains to the Piccadilly line. We awarded the contract to build 94 new state-of-the-art trains in November 2018. In 2019/20, we will progress the design of these trains, which are due to start being delivered in 2023 and coming into service from 2024.

Northern Line Extension

We are creating an extension from Kennington to Battersea Power Station, via a new station at Nine Elms. This will be a catalyst for the regeneration of the Vauxhall Nine Elms Battersea Opportunity Area. In 2019/20, we will complete the installation of the track and power system and continue work on the new stations at Battersea and Nine Elms.

Major stations upgrades

We will continue work to upgrade Bank station. This will increase capacity and relieve congestion.

Circle, District, Hammersmith & City and Metropolitan lines

In 2019/20, we will continue the modernisation work on these four lines, with upgrades to train depots and associated infrastructure, and the introduction of new modern signalling. Once fully installed in the early 2020s, customers will benefit from a 33 per cent increase in capacity on these four lines. More than **IOOkm**

additional protected cycle infrastructure delivered or in construction by 2020



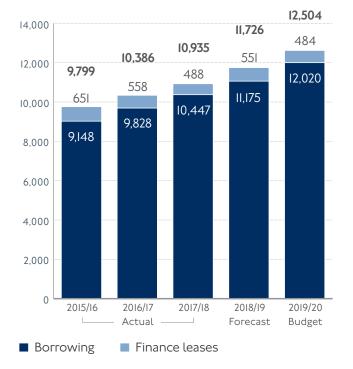
Bus driver facilities installed on

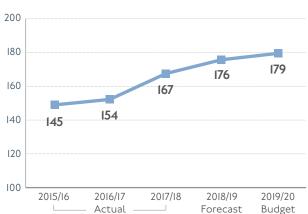
42 routes 目目目

Budget 2019/20 Debt and cash

Debt and cash

Total value of debt (£m)





Debt (% of total income)*

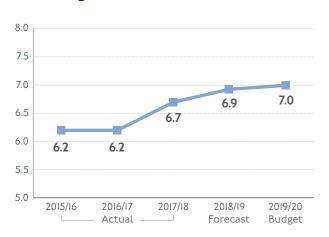
This is expected to reach 179 per cent by the end of 2019/20, reflecting a gradual rise in borrowing (within Government limits) and reduction in grant.

* Debt includes borrowing and finance leases

** Financing costs include interest costs for borrowing and finance leases

The total value of our debt, which includes borrowing and finance leases, must always remain within our Authorised Limit for external debt. The affordability of our debt is linked to both recurring annual income and cash available to pay financing costs.

By 3I March 2020, our borrowing is expected to grow by up to £845m, within the limits agreed with the Government. This includes an assumption of £300m borrowing under the Crossrail contingency loan facility from Government, which is unchanged from our Business Plan. Borrowing will finance capital investment, including Tube and rail line upgrades, and new DLR trains.

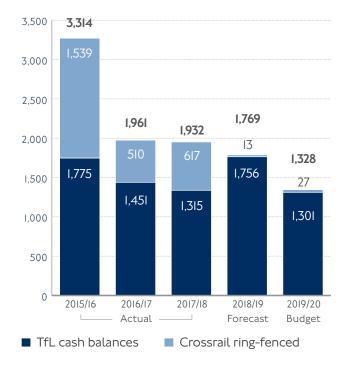


Financing costs (% of total income)**

This ratio has increased moderately over the past few years. Interest costs and debt repayments form part of the balanced budget that we are legally required to deliver each year.

40 Debt and cash

Appendices



Cash balances (£m)

Liquidity

We maintain a prudent minimum level of cash for exceptional circumstances, as well as to retain a high credit rating with our investors, in line with our liquidity policy approved by the TfL Board. This minimum level of cash is driven by the size of our operating costs and the level of our debt.

Total cash balances are expected to close at £1.3bn at the end of 2019/20, with minimal Crossrail cash balances as the project nears completion.

TfL cash balances will reduce in 2019/20, as we continue to fund our asset programme. We will close 2018/19 higher than 2017/18, owing to a cash receipt from an asset sale at the end of the financial year, in line with the forecast in our 2018 Business Plan.

Credit ratings	
Moody's	Aa3 stable outlook
Standard & Poor's	AA- negative outlook
Fitch	AA- rating watch negative

Strong credit ratings reflect our strategic importance as the main public transport provider in London, strong demand for our services and our institutional framework. Our ratings also reflect our link to government and may change if the rating of the UK Sovereign changes.

Financial trends

Total income (£m)

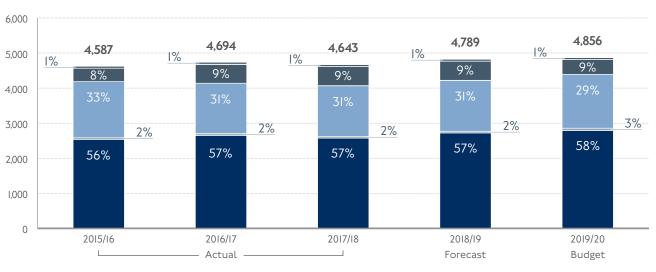


Passenger incomeOther income

Grants

5% A over 2018/19

Total income increases by £305m, largely driven by increases in other operating income from the introduction of the ULEZ in April 2019.



Total passenger income (£m)

London Underground

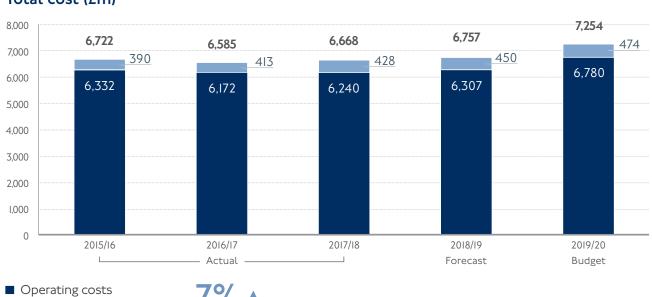
- Elizabeth line
- Buses
- 🔳 Rail
- Other operations

over 2018/19

Passenger income growth is driven by improvements in yield, which is the passenger income per journey, on non-Mayoral controlled fares.

Our services

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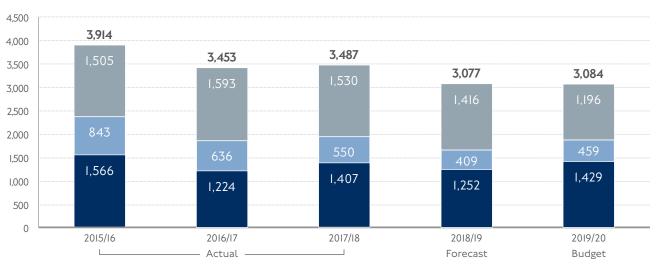


Total cost (£m)

Operating costsNet financing costs

7% A over 2018/19

The increase in operating costs relates to the Elizabeth line and inflation in line with current projections.



Total capital expenditure (£m)

New capital investment

Capital renewals

Crossrail programme

14% in new capital investment and renewals over 2018/19

This increases by £7m, owing to an increase of £228m in our Investment programme, partly offset by a reduction in Crossrail capital expenditure.

A balanced budget

Budget 2019/20 Operational trends

Operational trends

Total journeys

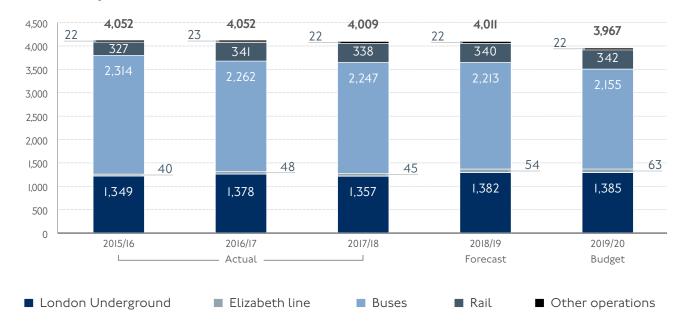
3,967m 2019/20 Budget

4,011 2018/19 forecast 2018/19 forecast

London Underground 1,385m 0.2% 2018/19 forecast
Buses 2,1555m 2,6% 2018/19 forecast



* TfL Rail will become part of the Elizabeth line once the full service is open through central London



Passenger journeys (millions) Over five years

Passenger journeys on London Underground are expected to increase by three million owing to continued improvements and modernisation. This will create higher passenger demand with improved timetabled services across the Central, Circle, District, Hammersmith & City and Metropolitan lines.

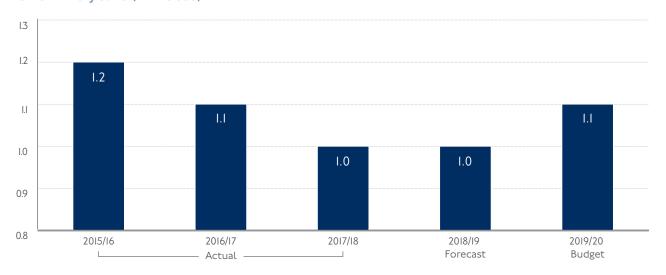
We assume passenger journeys on the Elizabeth line will increase by 16.7 per cent, largely owing to the start of services between Paddington and Reading.

We expect a 2.6 per cent reduction in bus passenger journeys in 2019/20, owing to changes in economic activity and travel habits. We continue to develop and implement plans to ensure the network is as efficient and attractive as possible. This includes prioritising resources where they are most needed, and during 2019/20 we will re-balance our services, from central and inner London to outer London, where appropriate and subject to the outcome of the central London bus service review.

The introduction of new trains and services on London Overground is expected to increase the number of passenger journeys later in the year, with no change forecast for DLR and trams.

A one per cent increase in passenger journeys is expected on London River Services, including the Woolwich Ferry. This is associated with the new, larger Woolwich Ferry vessels. The Emirates Air Line and Santander Cycles are forecast to remain unchanged.

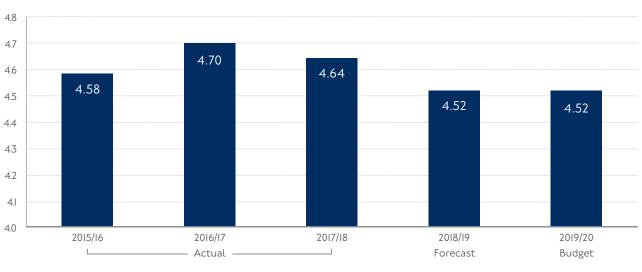
Bus reliability – excess wait time Over five years (minutes)



1.1 minutes in 2019/20

Excess wait time has improved to record levels over the past two years. A slight increase is forecast for 2019/20, owing to increased construction activity on the road network.

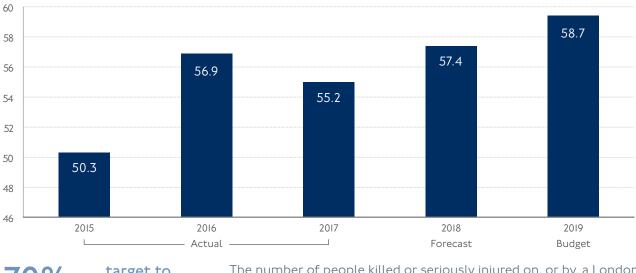
London Underground - excess journey time



Over five years (minutes)*

0% change from 2018/19 Our aim for 2019/20 is to maintain Tube reliability at current levels. We will look to make improvements as part of renewing and maintaining our key assets, while tackling risks to performance, such as customer incidents and delivery of key upgrades.

* The 2019/20 target will be set at the 2018/19 year end actual, which is currently forecast at 4.52 minutes



Buses and coaches – people killed or seriously injured Reduction against 2005-09 baseline (%)**

70% target to reduce total numbers by 2022

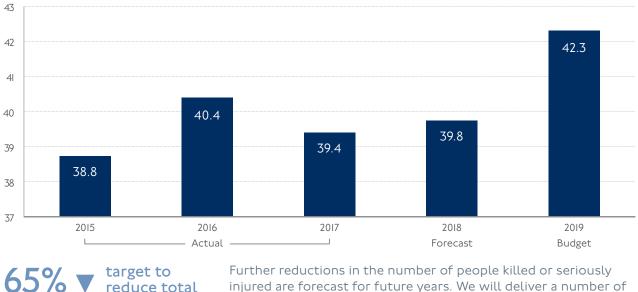
The number of people killed or seriously injured on, or by, a London Bus is provisionally forecast to decrease to its lowest recorded level in 2019/20, as we deliver initiatives, including new bus driver safety training, Intelligent Speed Assistance and the rollout of new buses designed to higher safety specifications.

Streets – people killed or seriously injured Reduction against 2005-09 baseline (%)**

reduce total

numbers

by 2022



injured are forecast for future years. We will deliver a number of programmes designed to reduce road danger, such as lowering speed limits in central London, delivering the Direct Vision Standard and improving safety at key junctions.

** Data rebaselined in 2018. Further rebaselining may be needed, owing to more self-reporting of injuries





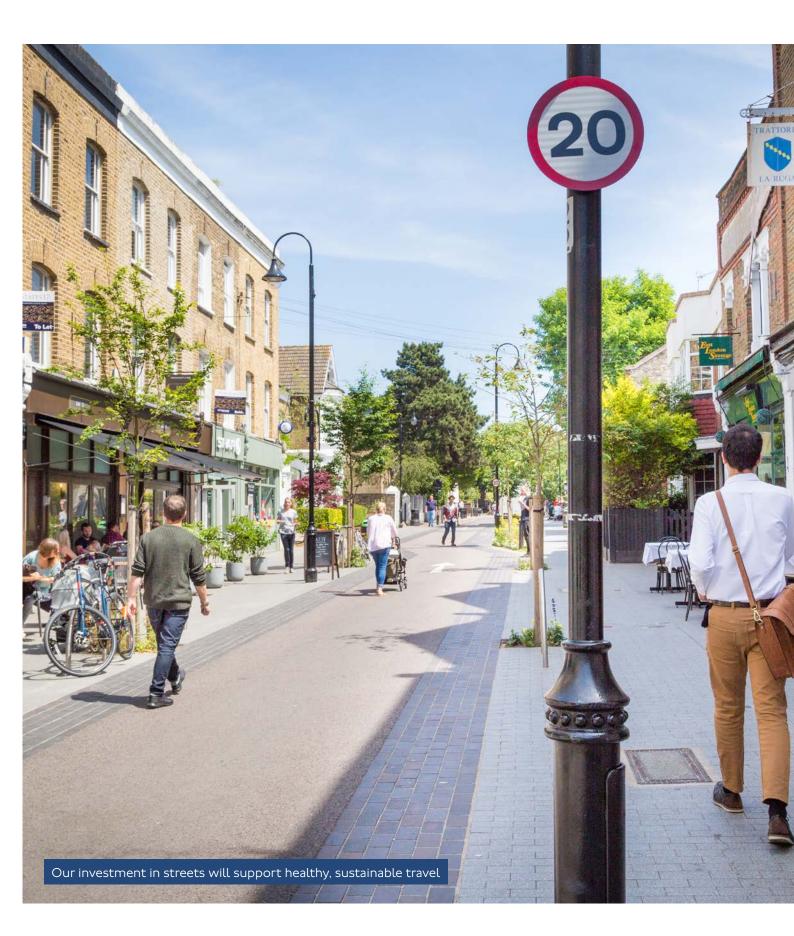
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- ll6 Media
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How we measure success

A balanced budget

Budget 2019/20



Our services Streets

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Streets 🛪 🚲 🛤 🕈 🕞 🍂 🗥

Our work will promote the Mayor's ambition for Healthy Streets, where people are encouraged to walk, cycle and spend time.

Financial summary

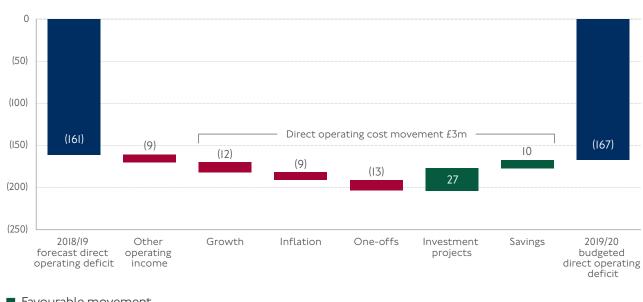
Investment in Healthy Streets has increased, supporting initiatives to reduce road danger, improve walking, cycling and access to public transport, and ensure that the network is maintained on both TfL and borough roads.

Streets (£m)	2019/20 Budget	2019/20 Business Plan	Variance to Business Plan	2018/19 Forecast	-
Other operating income	312	314	(2)	321	(9)
Direct operating cost	(479)	(494)	15	(482)	3
Direct operating deficit	(167)	(180)	13	(161)	(6)
Capital renewals	(51)	(49)	(2)	(40)	(11)
New capital investment	(178)	(208)	30	(83)	(95)
Net capital investment	(229)	(257)	28	(123)	(106)

The budgeted operating deficit of £167m is an improvement of £13m from the Business Plan. This is driven by changes in assumptions around timing of spend. Operating income is marginally lower than the Business Plan, owing to lower Congestion Charge zone income, as drivers will avoid the new ULEZ. This is positive as it reduces the number of polluting vehicles in central London.

Despite our focus on reducing our operating deficit since 2017/18, the many challenges in the macro-economic environment mean we need to continue to seek new funding sources for our road network. Investment in Streets almost doubles in 2019/20, compared to the previous year, as we accelerate our investment in cycling and walking. This is the highest level of investment in London's streets since 2015/16 and testament to our commitment to make our streets healthier and safer places. The new capital investment budget is £30m lower than the 2018 Business Plan, with these costs moved to later years of the plan.

Appendices



Streets Movement on direct operating deficit from 2018/19 forecast to 2019/20 Budget (£m)

Favourable movement

Adverse movement

The operating deficit will increase by £6m from 2018/19. Overall, the income we expect to receive from the Congestion Charge and its enforcement is forecast to drop by £9m in 2019/20.

Total operating costs will reduce by £3m in 2019/20. Operating costs incurred to support new services are estimated to be £12m and mainly relate to the removal of private hire vehicle exemption.

We will have £9m of inflation and around £13m of one-offs. These cost increases are offset by reductions of £27m from timing of operating cost related to investment projects and £10m of planned savings.

Volume analysis

Over five years

	Actual			Forecast	Budget
	2015/16	2016/17	2017/18	2018/19	2019/20
Congestion Charge volumes (millions)	17.1	16.6	15.3	14.0	13.3
Congestion Charge and enforcement income (£m)	258	250	230	231	221
Average Congestion Charge including enforcement income (£)	15.20	15.03	15.04	16.51	16.62
Average kilometres cycled per day in central London	480,190	500,423	497,867	524,716	540,458

Currently, around 50 per cent of the vehicles entering the Congestion Charge zone during charging hours are liable to pay the full charge. These are termed 'chargeable entries' and this figure has declined in recent years.

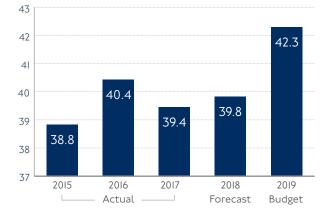
Further falls in chargeable entries are expected in 2019/20, in part due to the launch of the new ULEZ. Despite this, average delays to journeys within the Congestion Charge zone have increased over time. To help reduce this congestion, the discount for private hire vehicles will be withdrawn in 2019/20. The latest cycling data shows that a daily average of 573,646km, or an estimated 188,000 journeys, were made in central London during Quarter 3 2018. This is the highest level of cycling since measurement began in 2014 and marks a considerable increase in growth since 2017.

The warm and dry summer in 2018 may have contributed to this, with increases on all cycle routes, particularly between Elephant and Castle and King's Cross, and along Victoria Embankment.

Central London cycling levels are forecast to rise further in 2019, as we expand our cycle schemes.

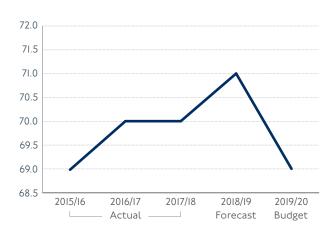
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Safety People killed or seriously injured – reduction from 2005-09 baseline (%)* **



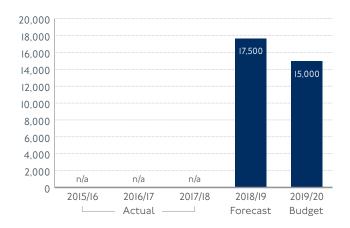
In the calendar year of 2018, provisional results show there have been 3,854 deaths or serious injuries on London's streets. The Mayor's aim is a 65 per cent reduction by 2022.

Customer Road user satisfaction score (%)



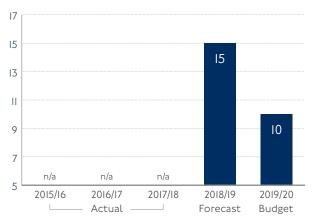
Customer satisfaction is forecast to decline as government funding has been withdrawn, which has necessitated a pause in non safety-critical renewal and maintenance activities.

Reliability Operational improvements to sustainable travel (hours)



As the network becomes more constrained, it will be more challenging to realise time savings for people walking, cyclists and bus passengers. The target for 2019/20 is a daily saving of 15,000 hours.

Average road journey time disruption – within % of previous year



This is performing better than expected, owing to delays and deferrals of major works, and will not reach the I5 per cent ceiling set for 2018/19. A 10 per cent ceiling is proposed for 2019/20.

- * The data was rebaselined in 2018, however, further rebaselining may be needed to account for the increase in online self-reporting of injuries. Killed or seriously injured is defined as fatal and serious personal injury from road traffic collisions occurring on the public highway and reported to police
- ** Change in method of recording from this date. Earlier years' figures have been adapted to reflect this

Budget 2019/20

2019/20 priorities

Safety

The Mayor's Transport Strategy makes a commitment to a Vision Zero approach, eliminating all deaths and serious injuries on London's transport network by 204I. This includes programmes designed to reduce road danger, such as lowering speed limits in central London and reducing risk at key junctions.

We are working closely with the London boroughs and Metropolitan Police Service to support the Vision Zero ambition. Our jointly-funded Roads and Transport Policing Command is the largest policing command in the UK, with more than 2,000 uniformed officers. They are working on reducing road danger, through an intensified focus on the most dangerous drivers, including widespread high visibility roadside operations.

We are also working with the Metropolitan Police Service to increase road safety through the use of enforcement cameras. This involves using fixed cameras as well as expanding the use of mobile speed enforcement equipment, including mobile speed vans, speed guns and tripods.

Healthy Streets

The Mayor's Healthy Streets Approach aims to create far-reaching improvements on London's roads, in collaboration with our borough partners. This includes improving safety, increasing walking, cycling and public transport use, and creating pleasant environments. In 2018/19, feasibility funding was awarded for the first phase of the Liveable Neighbourhoods programme. This is designed to transform local streets and neighbourhoods and encourage more people to walk, cycle or take public transport, and reduce private car use. The first seven proposals included creating a new public space and segregated cycle lanes in Crouch End, removing the Greenwich town centre gyratory and reallocating space to people walking or cycling, and improving Romford town centre by making the busy ring road easier to cross on foot and by bike.

The second phase of funding was launched in February 2019. We received 22 bids from across London, II of which will be awarded feasibility funding and are due to start development work in April 2019. The programme continues to attract a high level of interest and ambition among London's boroughs.

More than 20 Healthy Streets schemes will begin in 2019/20, including road safety improvements at Clifton's Roundabout in Greenwich, new pedestrian crossings at Philips Lane in Haringey, Warwick Road in Kensington and Chelsea, and Stirling Corner in Barnet. We will also create a safer and more pleasant environment for cyclists and people walking at the A21 Tweedy Road in Bromley, implementing direct crossings with new traffic signals for cyclists.

Our services Streets

Appendices

Cycling

Our vision is to make London a byword for urban cycling around the world. Enabling more people to cycle will improve people's health and quality of life and support London's continued growth and success. Furthermore, a mode switch to cycling from cars will help support the Mayor's targets for air quality. For people to feel confident in choosing cycling over other competing travel modes, our streets must be safe, attractive and appealing.

In December 2018, we published our Cycling Action Plan, setting out our comprehensive strategy for making London the world's best big city for cycling. This includes an ambitious delivery programme to build a new single unified cycling network.

In support of this plan, we will continue to invest heavily in cycling and Healthy Streets throughout 2019/20. Subject to consultation, construction is planned to start on eight major new routes, including Brentford to Olympia, Tottenham to Camden and Hackney to Isle of Dogs. In addition to these, and the seven existing cycle routes, work is under way on a continuous pipeline of future routes. We plan to run public consultations on a number of these in 2019, including a route between Greenwich and Woolwich. In partnership with the boroughs, construction of the Mini-Hollands schemes will continue in Waltham Forest, Enfield and Kingston. This is alongside delivery of Quietway routes, which provide vital backstreet connections for London's growing cycle network.

We will also introduce new cycle lane quality criteria, ensuring that the standard of facilities on our cycle network continues to improve.

By 2020, more than 100km of additional new, high quality, protected cycle infrastructure will have been created, or will be in construction, tripling the total length since 2016.

Transformational schemes

We have a programme of transformational schemes, designed to deliver large-scale improvements to highways and the public realm to make London safer, greener, healthier and more prosperous.

Work to transform Highbury Corner will be completed in summer 2019, making it safer for cyclists, improving crossings and transforming the public space, connecting with the arboretum.

Work continues at Old Street Roundabout to remove the roundabout, provide segregated cycle lanes and create a large public space, with a new station entrance at its heart.

How we measure success

A balanced budget

Budget 2019/20

In 2019/20, we will appoint 'design and build' contractors for Fiveways in Croydon, Waterloo and Vauxhall. This will take us closer to making these trafficdominated junctions safer for people walking, cycling or using public transport.

Working with the boroughs, we will continue to support regeneration at locations such as Nine Elms in Battersea, Wandsworth, Tolworth and Bow, through improvements to bus, walking and cycling routes.

Safer Junctions and lower speed limits

We will deliver 20 more Safer Junctions by May 2020, increasing the total number to 41. This will complete 56 per cent of the Safer Junctions programme, which supports the Vision Zero ambition. Junctions targeted for improvement in 2019/20 include Baker Street/Marylebone Road, Highbury Corner, Camberwell Green, Edgware Road and Holloway Road.

By May 2020, we will introduce a 20mph speed limit on all our roads within the Congestion Charge zone, subject to consultation. This aims to reduce the frequency and severity of collisions in central London, as part of our commitment to Vision Zero.

Bridges and tunnels

In 2019/20, we will complete the complex bridge replacements at Ardleigh Green and Power Road. We will also progress preliminary design work for renewals of Rotherhithe Tunnel, Vauxhall Bridge and Westway structures. This will enable us to plan construction work in future years on a prioritised basis.

We are also developing a new river crossing between Rotherhithe and Canary Wharf for people walking or cycling. This will provide an alternative to the Jubilee line, support employment and population growth, and offer a more direct and attractive route between south and east London. We will submit a Transport and Works Order Act application for the powers to build and operate the new crossing in 2019/20.

Asset capital programme

Our investment in maintenance and renewals aims to ensure network safety and keep all street and non-rail assets, including bus stations and stops, piers, carriageways, footways, traffic signals, bridges, tunnels, street lighting, drainage, and trees in a state of good repair. Our current income sources do not cover the cost of operating, maintaining and renewing the road network. This means we will pause proactive capital renewals for a second year in 2019/20, which will lead to a decline in asset condition, although safety will be unaffected. It is essential that we find a long-term funding source for our roads.

Our services Streets

Appendices

Reliability of the network

Our 24/7 control centre will continue to monitor the road network and intervene quickly to respond to disruption. Using police and TfL on-street enforcement teams and other resources, including cameras and signals, our control centre will prevent and respond to issues disrupting the network.

We continue to work with utility companies, and the London boroughs, to coordinate road works effectively. However, we anticipate increased disruption for road users, owing to increased traffic volumes and road works associated with major infrastructure projects. We will also need to apply operational restrictions to some key assets, which will increase disruption. This includes vehicle restrictions at Rotherhithe Tunnel, which are needed for safety reasons. This is a result of a riskbased approach to maintenance, which is essential to keep the network safe with the reductions in government funding for London's roads.

The annual traffic signal review programme will save 15,000 daily hours of travel time at targeted locations for people using sustainable modes. This will reduce wait times for people walking and delays to bus passengers and cyclists. 200%

increase in the length of protected cycle infrastructure by 2020, since May 2016



by I,200 traffic light timings to be reviewed this year A balanced budget

Budget 2019/20



Our services Buses



Appendices

Buses 🛢

We will ensure that London Buses continue to provide a safe, reliable and sustainable service. We will deliver bus driver safety training, launch low emission zones and improve facilities for bus drivers.

Financial summary

The operating deficit on buses will be \pounds 722m in 2019/20, which is the highest bus subsidy in our history. We will ensure the investment in the bus network is deployed where it is needed most.

Buses (£m)	2019/20 Budget	2019/20 Business Plan	Variance to Business Plan	2018/19 forecast	2019/20 variance to 2018/19 forecast
Passenger income	1,422	1,415	7	1,460	(38)
Other operating income	11	13	(2)	12	(1)
Total operating income	1,433	1,428	5	1,472	(39)
Direct operating cost	(2,155)	(2,142)	(13)	(2,112)	(43)
Direct operating deficit	(722)	(714)	(8)	(640)	(82)
Capital renewals	(5)	(6)	1	(1)	(4)
New capital investment	(21)	(20)	(1)	(21)	-
Net capital investment	(26)	(26)	-	(22)	(4)

Passenger demand is forecast to continue to fall, a pattern that has emerged over the last four years. The increase in operating costs in 2019/20 compared to the Business Plan is due to the emerging response to the central London bus consultation, including mitigations to service reductions on some central London routes and expediting enhancements in outer London.

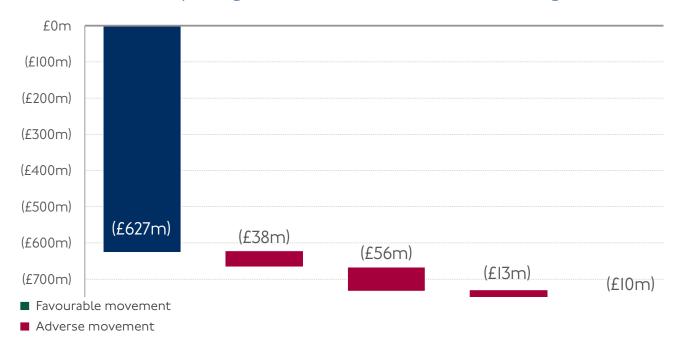
While it is necessary to subsidise bus services in London, we recognise that this level of growth in subsidy is unsustainable. We continue to drive efficiencies in the contracting process and monitor changes in demand to ensure we are offering the service that London needs. Since 2018, all new double-deck buses in our fleet must be either hybrid or zero emission. From 2020, we will go further by only procuring new zero emission single-deck buses.

We are also investing in the migration of our analogue bus radio system to a new digital mobile network and developing plans for iBus2 to replace our current bus tracking, performance management and passenger information systems.

Our services Buses

Appendices

Buses Movement on direct operating deficit from 2018/19 forecast to 2019/20 Budget (£m)



The operating deficit in buses will increase by £82m in 2019/20, with £38m of this due to lower demand.

Overall, operating costs increase by £43m from £2,II2m in 2018/19 to £2,I55m in 2019/20. Our costs grow by £8m to support new services, as we roll out hybrid and electric buses for the launch of the ULEZ. We estimate contractual inflation will drive a cost increase of £56m. Our bus contracts are uplifted annually for inflation based on a combination of indices, with the largest weighting on national average weekly earnings. Our spend on installing buses with new bespoke exhaust systems to reduce nitrogen oxides and particulate matter will increase by £17m in 2019/20. While the reduction in revenue, coupled with the inflationary nature of our cost base, results in a financial impact that is difficult to mitigate fully through costsavings, we have identified a number of efficiency targets within our contracting activities. We will also reduce the cost and impact of fare evasion and ticket fraud, so more revenue is available to invest in our services. Our planned savings amount to £37m, offsetting around half of next year's cost increases.

Passenger journey analysis Over five years

	Actual			Forecast	Budget
	2015/16	2016/17	2017/18	2018/19	2019/20
Number of passenger journeys (millions)	2,314	2,262	2,247	2,213	2,155
Average yield per passenger journey (£)	0.66	0.65	0.65	0.66	0.66
Operating cost per journey (£)	(0.90)	(0.92)	(0.94)	(0.95)	(1.00)

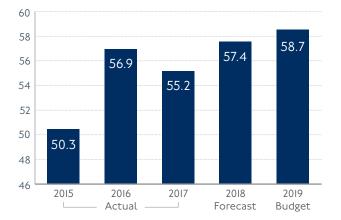
Economic activity and population are key factors in bus demand. The continuing and unprecedented squeeze on incomes, lower growth in the number of younger adults in London and wider changes in consumer behaviour are likely to continue to reduce demand in the short to medium term. This is despite bus reliability being at historically high levels.

The average yield is forecast to increase by one penny in 2018/19, mainly due to the increase in Travelcard prices, which is set by the Government. All TfL fares remain frozen. In 2019/20, the average yield is forecast to be flat, as the impact of the annual Travelcard price increase is expected to be offset by the introduction of a weekly (Monday – Sunday) cap for Oyster cards, bringing them in line with contactless payments. Overall, bus operating costs are forecast to increase year-on-year owing to the annual contracted price increase within the bus operators' contracts. This, combined with the decrease in passenger journeys, means that the operating cost per journey is forecast to increase.

In response to changing travel habits, we are reviewing and revising the bus network to best meet London's needs in the future. We will continue to seek the most efficient and attractive network possible, which will be achieved by prioritising resources where they are most needed.

Appendices

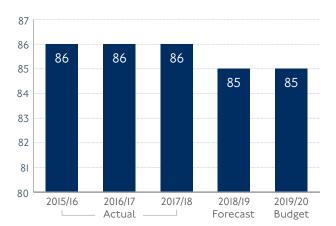
Safety People killed or seriously injured on/by a bus/coach – from 2005-09 baseline (%)*



In the 2018 calendar year, provisional results show there have been 250 deaths and serious injuries. The Mayor's aim is a 70 per cent reduction by 2022.

Reliability

Customer Customer satisfaction score (%)

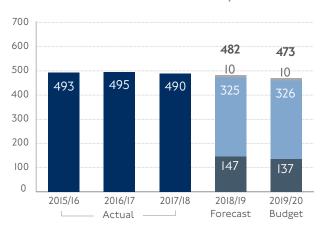


Lower satisfaction is mainly due to the warm summer, which reduced satisfaction with the bus temperature in Quarter I and Quarter 2, 2018/19.



The average speed of buses in London is expected to deteriorate slightly in 2019/20, while we deliver major transformational road schemes. The impact of this will be minimised by our programme of bus priority and signal re-timing reviews.

Service volume (million km operated)**



Total km operated prior to categorisation

- Outside the Greater London Authority boundary
- Outer London Inner London

We will increase services in outer London, while reducing volumes in central and inner London, subject to the outcome of the central London bus service review.

- Data rebaselined in 2018. Further rebaselining may be needed, owing to more self-reporting of injuries Categorising the kilometres operated between inner and outer London is a new way of reporting the
- service volume metric. The figures for 2019/20 are pending the outcome of consultation

A balanced budget

Budget 2019/20

2019/20 priorities

Safety and security

We want to reduce the number people killed or seriously injured on, or by, a bus by 70 per cent by 2022 (against 2005-09 levels), with all deaths in or by a bus eliminated by 2030. Our world-leading Bus Safety Standard will be incorporated into new bus operator contracts throughout 2019/20. This sets out design features and technologies required of new buses, to minimise the risk of injuries.

By April 2019, Intelligent Speed Assistance, which prevents vehicles from exceeding the speed limit, will have been installed on 700 buses. We are also working with operators to upgrade mirrors to give a wider field of vision and minimise blindspots. We are introducing an Acoustic Vehicle Alerting System, to make quiet electric buses identifiable to people walking and vulnerable road users.

A one-day driver training course will be rolled out to all 25,000 London bus drivers in 2019 to improve their standard of driving. This will ensure journeys are as safe as possible for passengers and other road users, and will form part of the bus driver Certificate of Professional Competence training requirement.

We continue to fund and work with the Metropolitan Police Roads and Transport Policing Command to prevent crime, anti-social behaviour and fare evasion.

We will prioritise action to protect our customers and staff from hate crime. We will focus on eradicating sexual offences and keep our network free from all weapons. Working with the operators, we will prevent staff assaults and support staff who have been the victim of crime.

Bus priority

Bus priority schemes will improve the efficiency and reliability of the network, including small-scale interventions that provide an immediate benefit and can be delivered quickly, such as minor changes to road layouts, extensions of bus lane operating hours and enforcement activities. Larger interventions such as junction improvements at A406 Madley Road, will save buses up to seven minutes at peak times.

Each year we review 20 per cent of the 6,000 traffic lights in our network, to optimise green signal times for people choosing sustainable travel modes. The bus priority programme has funded 300 of these I,200 reviews in 2018/19, resulting in reduced delays, mostly to bus passengers but also for people walking or cycling. This totalled 5,000 hours every day. In 2019/20, 400 more reviews will be funded by the bus priority programme.

Customer experience

Bus operators will be incentivised to deliver excellent customer service via a new bonus scheme, which will reward operators who deliver sustained improvements in their 'mystery shopper' customer experience survey scores. The scheme will launch in April 2019 and help improve passenger journeys and make our services more attractive to new customers.

Measuring the customer experience

The new bus customer journey time measure captures the key components of a customer's experience. It includes wait time, travel time, interchange, crowding and journey time variability, combined with demand and additional weightings.

Our services Buses

Appendices

Analysis suggests that, taking into account planned service changes and declining bus speeds, the overall change in the bus customer experience in 2019/20 will be one additional 'weighted' minute. We expect slight increases in passenger wait times, travel times and in the variability of journey times. However, we do not expect crowding levels to worsen or for it to take significantly longer for passengers to change between services.

The measure will help to minimise negative customer impacts from future bus network changes, as we work to provide efficient and reliable bus journeys for our customers.

Reducing air pollution

By April 2019 all our buses operating in central London – both double-deck and single-deck – will meet ultra-clean Euro VI emission standards. All our doubledeck buses operating in central London will also have hybrid engines. In 2020, all our single-deck buses operating in central London will become zero emission.

We will reduce bus emissions by introducing new buses with the cleanest engines and upgrading the engines of buses currently in the fleet. By the end of 2019/20, we will have implemented 12 Low Emission Bus Zones. All our buses operating in these zones will comply with Euro VI emissions standards.

Bus driver facilities

By July 2019, we plan to improve driver facilities on 42 priority routes. We are working with planning authorities to install these with minimal disruption and with regards to the views and needs of residents.

25,000

bus drivers will complete a driver training course in 2019 to improve standards



700 buses fitted with Intelligent Speed Assistance by April 2019

B	
B	

3,000+ buses retrofitted to meet Euro VI emission standards by March 2020



Budget 2019/20



Our services Rail





Appendices

Rail 🗛 🖗 🏟

Across the DLR, London Overground and London Trams, our investment will ensure a safe, reliable and efficient service.

Budget 2019/20

Financial summary

Service enhancements on the London Overground, including increased frequencies and reliability improvements, will increase operating costs in 2019/20, compared with 2018/19. Demand, and therefore revenue, will rise, but this will lag behind the cost increase, leading to a higher short-term net operating deficit.

Rail (£m)	2019/20 Budget	2019/20 Business Plan	Variance to Business Plan	2018/19 forecast	2019/20 variance to 2018/19 forecast
Passenger income	436	442	(6)	428	8
Other operating income	21	9	12	36	(15)
Total operating income	457	451	6	464	(7)
Direct operating cost	(506)	(504)	(2)	(454)	(52)
Direct operating surplus/(deficit)	(49)	(53)	4	10	(59)
Capital renewals	(38)	(43)	5	(30)	(8)
New capital investment	(34)	(28)	(6)	(45)	11
Net capital investment	(72)	(71)	(1)	(75)	3

Operating deficit is budgeted at £49m, a £4m improvement on our Business Plan.

Rail passenger income is expected to reduce by £6m from the Business Plan as we have reviewed our growth assumptions based on updated information. Demand across rail modes levelled off towards the end of 2018, owing to continued uncertainty in the economy. New trains and services on London Overground are expected to lift journeys in the second half of 2019. Other operating income is £12m higher than the Business Plan as we review our assumptions around the delivery of new trains, and the receipt of one-off payments from the late delivery of trains in 2019/20.

New capital investment in 2019/20 includes the completion of White Hart Lane station.

Our Major projects division is delivering a number of key projects, including the Barking Riverside Extension and new rolling stock for the DLR.

Rail Movement on direct operating surplus/(deficit) from 2018/19 forecast to 2019/20 Budget (£m)



Rail will move to an operating deficit next year as we introduce new, enhanced services on London Overground. The year-on-year movement is £59m.

Passenger income increases by £8m in 2019/20, owing to enhanced services on the London Overground. However, these services are being implemented later than we originally planned.

Other income reduces by £15m in 2019/20, owing to one-off payments received from the supplier of our new London Overground trains because of delayed delivery, which will finish in the early part of 2019/20.

Overall, our operating costs will increase by £52m in 2019/20 driven by service enhancements.

Enhanced services will increase costs by £27m in 2019/20, of which £22m is from a more frequent London Overground service, provided by new trains and reliability improvements, and around £5m from activities matched by grant funding. Contractual inflation and access costs account for £18m in increases in 2019/20, with other cost increases, including one-offs, expected to add another £17m. We expect to save £10m from concession costs covering fleet leasing and maintenance next year.

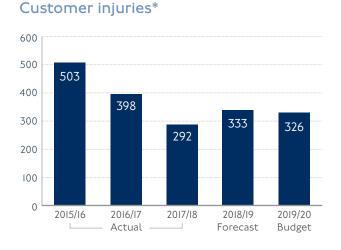
Passenger journey analysis Over five years

Passenger journey analysis over		Actual		Forecast	Budget
five years	2015/16	2016/17	2017/18	2018/19	2019/20
London Overground					
Number of passenger journeys (millions)	183	189	190	190	191
Average yield per passenger journey (£)	1.18	1.17	1.18	1.22	1.24
Operating cost per journ	(1.59)	(1.51)	(1.39)	(1.49)	(1.69)
DLR					
Number of passenger journeys (millions)	117	122	120	122	122
Average yield per passenger journey (£)	1.35	1.36	1.41	1.41	1.43
Operating cost per journ	(1.14)	(1.03)	(1.06)	(1.03)	(1.07)
London Trams					
Number of passenger journeys (millions)	27	30	29	29	29
Average yield per passenger journey (£)	0.85	0.86	0.80	0.82	0.82
Operating cost per journey (£)	(1.39)	(1.31)	(1.24)	(1.19)	(1.29)

Between 2015 and 2017, passenger journeys on London Overground and the DLR rose significantly, owing to the introduction of five-car trains on the London Overground and robust economic growth. Overall demand in 2017/18 dipped, owing to a wider economic slowdown and DLR journeys were also impacted by a 48-hour strike in March 2018. Demand across these modes has levelled off, owing to continuing uncertainty in some parts of the economy and is likely to remain flat in 2019/20. The delay in the opening of the Elizabeth line has been reflected in slightly stronger DLR demand. The introduction of new trains and services is expected to lift London Overground journeys in the second half of 2019/20. From late 2019, demand for trams is expected to be negatively impacted by Croydon town centre works.

Appendices

Safety



We have safety initiatives and campaigns planned for 2019/20 aimed at reducing injuries. These include infrastructure changes and encouraging customer safety when boarding and alighting trains and travelling on escalators.

Reliability

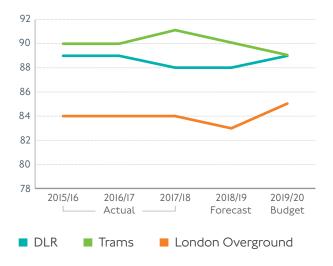
DLR and London Trams scheduled services operation (%)



The DLR continues to maintain a high level of reliability while passenger journey numbers are broadly stable. Reliability on London Trams is improving, following the introduction of a new timetable in February 2018.

* Does not include assaults

Customer Customer satisfaction score (%)



A delay in new trains for the London Overground has negatively impacted our scores in the short term. We expect this to rise later in 2019/20 once the fleet has been fully delivered.

London Overground public performance measure moving annual average (%)



London Overground

Reliability remains largely stable, although Network Rail's infrastructure maintenance and incident response times can impact performance. We will continue to work with Network Rail and train operators to improve reliability. A balanced budget

Budget 2019/20

2019/20 priorities

Safety and security

In 2019/20, alongside the Office of Rail and Road and the wider UK tram industry, we will continue implementing the recommendations set out by the Rail Accident Investigations Branch following the tragic overturning of a tram at Sandilands in 2016. Before the end of 2018/19, the whole tram fleet will be fitted with stronger window glazing. We will also introduce the UK's first automatic braking system for trams by December 2019, which will bring a moving tram to a controlled stop if it exceeds the speed limit at certain locations.

We will work in partnership with DLR and tram operators to prepare for the Department for Transport's new Light Rail Security Programme. We will bring the security of our operations, stations and depots into full compliance by 2020. London Overground is already regulated – under the National Rail Security Programme – and we are progressing a plan to achieve and sustain full compliance with these national regulations.

We are committed to providing a safe environment for customers and staff. We will continue to work with our operators and British Transport Police to tackle crime, antisocial behaviour and fare evasion. The British Transport Police will also continue to promote its crime reporting text service. This less intrusive reporting tool encourages customers to report offences, such as unwanted sexual behaviour or hate crime, which in previous years would have gone unreported. For this reason, we expect to see an increase in reported crime in 2019/20.

London Overground

New, four-car electric trains will be introduced between Gospel Oak and Barking this year. This will double capacity on that section and contribute to our commitment to tackle poor air quality. The new trains will offer considerable improvements in passenger comfort and accessibility, including walkthough carriages, air-conditioning, realtime information, customer Wi-Fi and USB ports.

Work continues at key stations to increase capacity, relieve congestion and improve accessibility. This includes a full upgrade of White Hart Lane station, which is expected to open in summer 2019. This will support the increased demand associated with the opening of Tottenham Hotspur Football Club's new stadium and the regeneration of the area. The project will create a new larger ticket hall with entrances on Love Lane and Penshurst Road, step-free access and an underpass to both platforms, alongside the creation of a new public space.

DLR

New staff training on improved door operating procedures will reduce the risk of customer accidents when boarding and alighting trains. We aim to reduce the number of customer slipping incidents and will introduce a new inspection regime to improve our understanding and help prevent recurrences. In addition, we will trial a new on-board obstacle detection system, which will help the driverless trains spot any obstructions on the track and improve the overall safety and reliability of the network.

Our services Rail

Appendices

In 2019/20, construction will continue on the capacity enhancement project at Custom House station. This will provide an improved interchange with the new Elizabeth line station.

London Trams

In 2019/20, we will investigate and review a number of opportunities to improve capacity and reliability and support significant future growth in Croydon and south London.



43

new walk-through DLR trains to be introduced, with the contract for design and build placed in 2019

Jpgraded step-free station at White Hart Lane



Budget 2019/20



Our services London Underground





London Underground A

We will continue to improve step-free access, modernise the network and ensure a safe and reliable service.

Financial summary

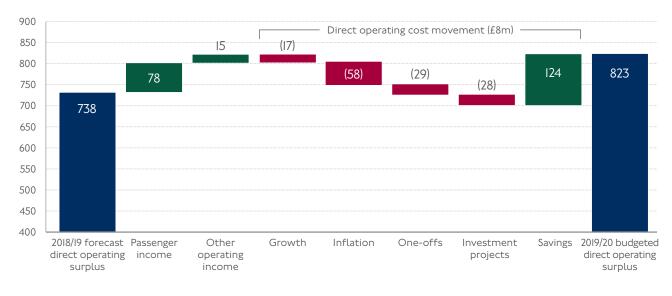
Direct operating surplus is to increase by I2 per cent on 2018/19, reflecting better revenue expectations and real-term operating cost reductions. Capital expenditure will rise marginally from spending on track renewal, step-free access, signalling and stations, as well as completing work carried forward from 2018/19.

London Underground (£m)	2019/20 Budget	2019/20 Business Plan	Variance to Business Plan	2018/19 forecast	2019/20 variance to 2018/19 forecast
Passenger income	2,817	2,772	45	2,739	78
Other operating income	47	33	14	32	15
Total operating income	2,864	2,805	59	2,771	93
Direct operating cost	(2,041)	(2,113)	72	(2,033)	(8)
Direct operating surplus	823	692	131	738	85
Capital renewals	(289)	(303)	14	(260)	(29)
New capital investment	(80)	(69)	(11)	(42)	(38)
Net capital investment	(369)	(372)	3	(302)	(67)

Despite record-breaking demand at the end of 2018, the current economic climate causes caution in our income estimates, and as a result moderate growth is forecast.

Modernising the way we work will continue to improve our efficiency and deliver better services for our customers. We have reviewed our Business Plan assumptions to reflect the excellent performance in 2018/19 and our challenge to maintain our operating costs at the level of prior years, while delivering improvements to our core services and absorbing inflation. Our long-term strategy is for operating surpluses from the Underground to cover the cash costs of capital renewals and the financing cost of the capital invested to increase capacity on the network, as well as its fair share of the group overhead, which supports the running of the Tube. Despite a subdued economic environment, we continue our ambitious asset upgrade and capacity increase programme on the Underground, an investment of around £0.7bn per annum, funded largely through debt, which will be repaid from future surpluses.

London Underground Movement on direct operating surplus from 2018/19 forecast to 2019/20 Budget (£m)



Favourable movement

Adverse movement

London Underground operating surplus is expected to increase by £85m, from £738m in 2018/19 to £823m in 2019/20. This is driven by increases in passenger revenue and other income, while cost increases are fully offset by planned savings.

Passenger income growth in 2019/20 is driven by fare increases on Travelcards, while Mayoral controlled fares will remain frozen.

We expect cost increases of £17m from increased train frequency from new timetables on the Central, Northern and Victoria lines, as well as maintenance for new station assets to support upgrade works and new capital investment on the Circle, District, Hammersmith & City, Metropolitan and Northern lines. Operating costs will increase by £58m from inflation, including wage inflation, contract and energy price increases. We expect £29m of cost increases from one-offs and restructuring costs next year, and we will increase our spend on maintenance and renewal activities by £28m.

Our savings plans are focused on maintenance modernisation and procurement efficiencies. We are looking at how we can become more efficient in our back and middle office organisation. Overall, we expect to achieve incremental savings of £124m, offseting cost increases and maintaining our operating cost broadly flat on the prior year.

Passenger journey analysis Over five years

		Actual	Forecast	Budget	
	2015/16	2016/17	2017/18	2018/19	2019/20
Number of passenger journeys (millions)	1,349	1,378	1,357	1,382	1,385
Average yield per passenger journey (£)	1.90	1.94	1.94	1.98	2.04
Operating cost per journey (£)	(1.67)	(1.52)	(1.57)	(1.47)	(1.47)

In 2018/19, demand for Tube services recovered from the drop in 2017/18. In December 2018, there were more than five million journeys completed on the busiest day and more than 30 million journeys in a week – the busiest day and week ever. This exceeded our expectations at the start of last year but we remain cautious about 2019/20, owing to the uncertain economic landscape.

Safety and security

London Underground is one of the safest metros in the world. The provision of a safe travelling environment for our customers and a safe place to work for our staff is our top priority. Our plans support the Mayor's vision to eliminate fatalities and major injuries on the network, with customer safety activities focusing on accidents relating to escalators, stairs and boarding and exiting trains. Our initiatives to reduce the risk of staff injuries include tackling accidents relating to slips, trips and falls, manual handling, working with electricity and contact injuries.

Reliability

Alongside safety, reliability is the bedrock of the Underground. The key measure that we use to monitor reliability is excess journey time. This is the time spent over and above the expected time to complete an average journey – from entering to exiting a station.

Our plans focus on all aspects of journeys and potential delays, including issues caused by purchasing tickets, the time taken to enter, interchange or exit stations, how long it takes to wait for a train and service delays. Our operating model also sets out clear accountabilities for these services so that we can drive improvements and react quickly and effectively to any issues.

Customers

We will enable more people than ever to use the Underground by adding eight new step-free stations. We will also make improvements to signage and continue to provide open data to app developers to keep customers updated so they can make informed decisions, such as sharing the number of steps at stations.

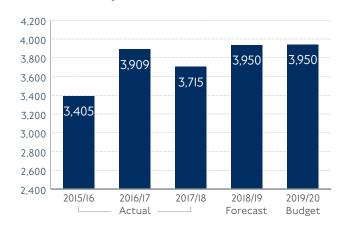
We know that it is critically important to provide customers with accurate information and support from our staff when things go wrong. We will make improvements to the breadth and quality of information made available to our staff, on our website and via open data to app developers.

Appendices

Our services London Underground

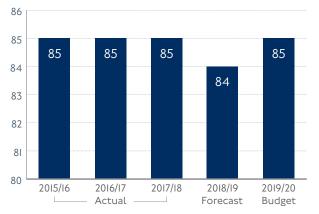
Safety

Customer injuries



Our plans to reduce the number of injuries this year include infrastructure changes to eliminate or reduce risks associated with the gaps between trains and platforms, and work to give train operators a better view of people getting on and off. We will also use marketing campaigns to encourage safe customer behaviour.

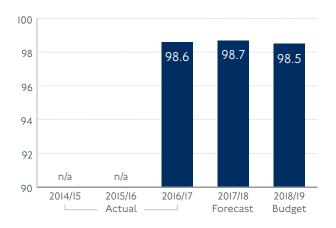
Customer Customer satisfaction score (%)



We expect customer satisfaction to return to the record high score of 85 as in previous years. The dip in satisfaction in 2018/19 was due to the high temperatures on the trains during the summer of 2018.

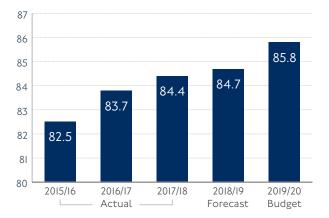
Reliability

Step-free access availability (%)



We try to ensure our customers can use our step-free routes. We have set ourselves a target of 98.5 per cent and continually monitor the performance of our accessibility support assets, with plans in place to respond quickly to issues. This measure was introduced in 2016/17.

Scheduled services (million kilometres operated)



We expect to operate more kilometres in 2019/20, with the greatest contribution coming from additional services on the Central and subsurface lines.

Budget 2019/20

2019/20 priorities

Renewing our network

Our primary focus is the general upkeep and renewal of our network. Every day we operate and manage 270 stations, more than 600 trains, with more than 500 running during the busiest part of the day, more than I,000km of track, more than 400 lifts and escalators, a vast array of signalling equipment and more than I6,000 bridges and structures. Making sure our infrastructure and equipment are in good condition is essential to providing a safe and reliable service.

Specific areas where we are renewing assets this year include 22 lifts and escalators, and completion of life extension works to the Bakerloo and Jubilee line trains, installation of more than seven kilometres of new track and key junction work, and the renewal of key signalling equipment, including the interim Piccadilly line signalling control system.

Station and accessibility improvements

Our step-free access programme will introduce eight new step-free stations in 2019/20, while work will be under way at a further seven, which are due to complete later in 2020. Further accessibility improvements will also be made via the completion of the refurbishment of the Jubilee line trains, which include enhancement to handrails, the inclusion of additional wheelchair space and improved information. Alongside the upgrade of Bank station, we are also making enhancements to Tottenham Hale station, which will see a new entrance and concourse open this year, and the start of works at Knightsbridge and South Kensington stations which will help to alleviate congestion once completed.

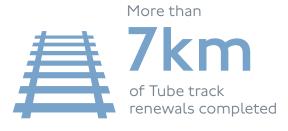
Reducing our energy and carbon footprint

Our primary focus for this year will be around solar energy, with a large-scale installation of solar panels at our Acton Railway Engineering Works site, which is the start of a wider rollout of solar generation on our buildings.

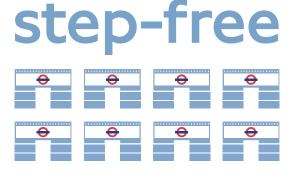
We will also carry out feasibility studies into energy initiatives to identify future projects that can deliver financial savings and significant reductions in our carbon emissions.

Our services London Underground

Appendices



8 more stations will become



22 lifts and escalators will be renewed or replaced

Budget 2019/20



Our services Elizabeth line





Elizabeth line 🗏

Despite the disappointing delay to the opening, our focus remains on launching the full service from Reading and Heathrow to Shenfield and Abbey Wood as soon as possible.

Financial summary

The Elizabeth line will redefine how people move around London, adding 10 per cent to central London's rail capacity once fully completed.

Elizabeth line (£m)	2019/20 Budget	2019/20 Business Plan	Variance to Business Plan	2018/19 forecast	2019/20 variance to 2018/19 forecast
Passenger income	129	140	(11)	101	28
Other operating income	10	12	(2)	38	(28)
Central section regulatory income	22	169	(147)	2	20
Total operating income	161	321	(160)	141	20
Direct operating cost	(406)	(432)	26	(263)	(143)
Central section regulatory cost	(22)	(169)	147	(2)	(20)
Direct operating deficit	(267)	(280)	13	(124)	(143)
New capital investment	(59)	(68)	9	(262)	203
Crossrail construction costs	(1,196)	(1,196)	-	(1,416)	220
Net capital investment	(1,255)	(1,264)	9	(1,678)	423

The operating deficit is forecast to be £I3m better than our expectation from the Business Plan, as we have updated our assumptions and made small phasing changes. We continue to work hard to reduce the financial and customer impact of the delayed opening of the central section, with confirmation of the opening timetable expected from Crossrail Limited by the end of April 2019. This Budget assumes that we will start running surface-level services from Paddington to Reading in the last quarter of 2019/20. The variances in operating income and costs against the Business Plan represent changes in assumptions for central section regulatory income and costs that will not be received in 2019/20. The net impact of these charges on the Elizabeth line operating deficit is nil. Underlying operating costs, excluding central section regulatory charges, will be lower than we assumed in November, with further savings to be realised from opening delays. (28)

(100)

(150)



(53)





Favourable movement

Adverse movement

(124)

The overall Elizabeth line operating deficit will increase by \pounds I43m in 2019/20 as we prepare for asset handover.

28

Passenger income is forecast to increase by $\pounds 28m$, mainly owing to the start of services between Paddington and Reading, offset by other operating income decrease of $\pounds 28m$ from lower third-party contributions.

Direct operating costs will increase by £143m, owing to financing costs along with costs relating to the central section, which will be nonfare generating in 2019/20. Of the operating cost increases, £53m are from the lease charge on the rolling stock transaction, planned to complete in March 2019. Next year, we will also pay increased maintenance costs of £14m and concession costs of £32m, which includes the preparation and testing of central section operations, along with the costs of Paddington to Reading services. Other operating costs include £35m of funding for Network Rail work.

Our key focus in 2019/20 will be to control mobilisation costs, owing to the opening delays as Crossrail Limited works to deliver the central section of the line as safely and quickly as possible.

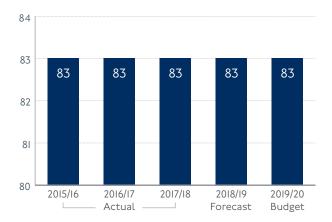
Passenger journey analysis Over five years

		Actual	Forecast	Budget	
	2015/16	2016/17	2017/18	2018/19	2019/20
Number of passenger journeys (millions)	40	48	45	54	63
Average yield per passenger journey (£)	1.76	1.73	1.89	1.89	2.06
Operating cost per journey (£)	(2.79)	(2.72)	(3.24)	(4.94)	(6.81)

Passenger journeys increase mainly because of the start of services between Paddington and Reading. These services also drive an increase in yield per journey. The cost per journey increases in 2019/20 because of pre-opening costs for the central section and financing costs.



Customer Customer satisfaction score (%)



Plans are in place to improve performance, including continued replacement of inherited legacy rolling stock with new Class 345 train units.

2017/18

2018/19

Forecast

2019/20

Budget

We expect to maintain our customer satisfaction scores this year.

93.5

93.0

92.5

2015/16

2016/17

Actual ·

Our services Elizabeth line

Appendices

2019/20 priorities

The hugely complex Elizabeth line project brings together multiple elements, including stations, tunnels, new trains and three different signalling systems. The Elizabeth line will boost the economy by an estimated £42bn.

The IO new stations being built in central London are progressing. Escalators, lifts and architectural features are being installed. Work will also continue to complete upgrades to the existing National Rail network. This is being carried out by Network Rail between Paddington and Heathrow/Reading, Liverpool Street and Shenfield, and at Abbey Wood.

In August 2018, Crossrail Limited announced that the opening of the central section between Paddington and Abbey Wood, which was due to open in December 2018, would be delayed. The revised schedule is needed to complete the final infrastructure and extensive testing required to ensure the Elizabeth line is safe and reliable. The delayed opening is disappointing, but ensuring the Elizabeth line is safe and reliable for our customers from day one is of paramount importance. We will continue to work closely with Crossrail Limited on the remaining infrastructure work and testing needed to deliver the new railway.

As one of the two joint sponsors, we have been working with the Department for Transport and Crossrail Limited to strengthen the senior leadership and governance of the project. Together, we have already brought new expertise to the Crossrail Board and executive team, as well as an enhanced focus on systems integration. Over the next year, we will continue this work, including fully implementing the recommendations of a recent review by KPMG.

The focus remains on opening the full Elizabeth line, from Reading and Heathrow in the west to Shenfield and Abbey Wood in the east, as soon after the central tunnels open as possible. How we measure success

A balanced budget

Budget 2019/20



Our services Other operations

Appendices



Other operations 🛱 🛳 🚘 🖆

We provide Dial-a-Ride, river, cycle hire and Emirates Air Line services, manage Victoria Coach Station, regulate London's taxi and private hire industry, and will launch the central London ULEZ in April 2019.

Financial summary

The direct operating deficit forecast in 2018/19 is budgeted to become a surplus in 2019/20 as the ULEZ charge is launched in central London to improve air quality.

Other operations (£m)	2019/20 Budget	2019/20 Business Plan	Variance to Business Plan	2018/19 forecast	2019/20 variance to 2018/19 forecast
Passenger income	6	7	(1)	6	-
Other operating income	280	238	42	65	215
Total operating income	286	245	41	71	215
Direct operating cost	(277)	(194)	(83)	(147)	(130)
Direct operating surplus/(deficit)	9	51	(42)	(76)	85
Capital renewals	(28)	(22)	(6)	(33)	5
New capital investment	(49)	(30)	(19)	(32)	(17)
Net capital investment	(77)	(52)	(25)	(65)	(12)

We will launch the ULEZ in central London in April 2019. Most vehicles will need to meet new, tighter exhaust emission standards or pay a daily charge to travel within the zone. This is a key initiative to ensure we improve air quality in London.

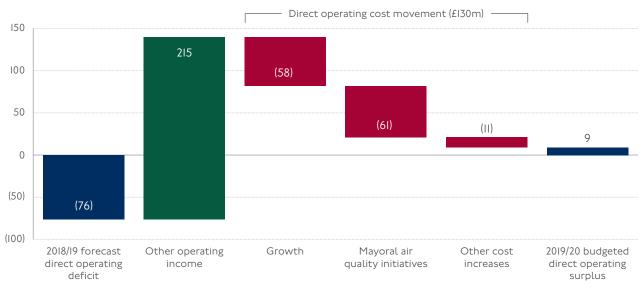
Changes from the Business Plan are due to additional investment through the air quality portfolio to support the introduction of the ULEZ, including the diesel scrappage scheme and the enhanced taxi delicensing scheme. The ULEZ is not a new funding source for London's roads. It is designed to change behaviours, which will result in improved air quality. As compliance improves, income from the ULEZ will reduce. Any surplus generated through the scheme will be invested in our fleet compliance and other air quality improvements.

We are continuing to invest in our services, including Victoria Coach Station and Santander Cycles, and we will complete the roll-out of our low emission Dial-a-Ride fleet. Alongside these key areas, we continue to invest in further improving London's air quality, by strengthening our Low Emission Zone and expanding the ULEZ to the North and South Circular Roads from 2021.

Our services Other operations

Other operations

Movement on direct operating (deficit)/surplus from 2018/19 forecast to 2019/20 Budget (£m)



■ Favourable movement

Adverse movement

Other operations moves from a deficit of £76m in 2018/19 to an operating surplus of £9m.

Operating income increases by £215m largely from the ULEZ. We estimate costs will increase by £58m from the implementation of ULEZ. Cost increases next year include £61m from air quality initiatives, such as the diesel scrappage schemes and the enhanced taxi delicencing scheme, funded through grant income, therefore net cost neutral for the group.

Other operating costs increase by £llm, driven by timing changes.

Volume analysis

Over five years

	Actual			Forecast	Budget
	2015/16	2016/17	2017/18	2018/19	2019/20
Emirates Air Line					
Number of passenger journeys (millions)	1.5	1.5	1.4	1.3	1.3
Average yield per passenger journey (£)	3.86	4.07	4.15	4.50	4.68
Operating cost per journey* (£)	(3.91)	(4.48)	(4.33)	(4.46)	(4.49)
Santander Cycles					
Number of cycle hires (millions)	9.9	10.5	10.2	10.6	10.6
Average income per hire (£)	1.12	1.08	1.09	1.09	1.09
Operating cost per hire (£)	(2.69)	(2.08)	(2.09)	(2.13)	(2.08)
London River Services					
Number of passenger journeys (millions)	8.6	8.8	8.2	8.2	8.3
Average yield per passenger journey (£)	0.21	0.32	0.34	0.29	0.35
Operating cost per journey (£)	(0.41)	(0.39)	(0.42)	(0.39)	(0.35)
Woolwich Ferry					
Number of passenger journeys (millions)	1.7	1.9	1.8	1.8	1.9
Operating cost per journey (£)	(4.56)	(4.24)	(4.32)	(4.82)	(3.32)

* Costs of Emirates Air Line are shown net of sponsorship income

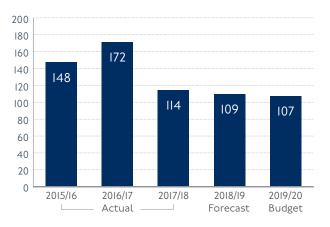
In 2018, a record 10.57 million hires were made on Santander Cycles, with 1.5 million being made through our app, an increase of more than a quarter. In the last year, we have upgraded the payment terminals, meaning customers can now use contactless cards.

New champagne flights on the Emirates Air Line have led to an improved yield. However, journey numbers have fallen for the second consecutive year, though these are expected to stabilise in 2019/20. A decline in ridership on London River Services since 2017/18 has negatively impacted year-on-year yields, but we expect a gradual increase in passenger journey numbers over 2019/20. New vessels introduced on the Woolwich Ferry are expected to keep passenger journeys stable.

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Our services Other operations

Safety Customer injuries*



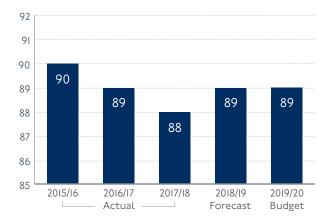
We expect customer injuries to continue to reduce across our other operations modes next year, in line with the overall Vision Zero target for our road-based operations.

Customer Dial-a-Ride customer satisfaction score (%)



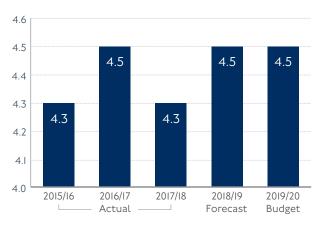
Most customer satisfaction indicators remained stable in 2018/19. The main exception related to punctuality, which is expected to improve in 2019/20. As a consequence, the customer satisfaction score is expected to begin to return to its exceptionally high performance.

Reliability Dial-a-Ride trip requests scheduled (%)



Improvements to scheduling efficiency have helped Dial-a-Ride reliability meet the 89 per cent target since November 2017. Service reliability is expected to be maintained at the same level in 2019/20.

Santander Cycles – number of casual hires (millions)



Cycle Hire has seen steady growth in the number of casual trips over the last year, in part due to the warm spring and summer weather in 2018. A balanced budget

Budget 2019/20

2019/20 priorities

Safety and security

Implementing local security plans to reduce the risk from terrorism and other hostile events, under the framework of the TfL Security Plan, will be a key focus in 2019/20.

Taxi and private hire regulations

We have implemented a range of regulatory changes to improve safety and raise standards in the private hire industry. These include requirements for private hire operators to provide telephone details, give accurate fare estimates and provide driver and vehicle details in advance of journeys. Further measures will be considered in 2019/20 to enhance safety.

We made a significant contribution to the Department for Transport's taxi and private hire Task and Finish Group. The group published a report containing 34 recommendations to enhance regulation and safety standards across the taxi and private hire industry in September 2018. In response, the Government set out its intention to progress national minimum standards, increase enforcement powers and support the regulation of pedicabs.

The Government also said it would explore a start or finish requirement for taxi and private hire journeys to address the issue of cross border hiring. We welcome this, but recommend greater urgency to ensure passenger safety. The Government rejected proposals to introduce a statutory definition of plying for hire, which would make clear the distinction between the two tier system, and proposals to introduce a cap on the number of private hire drivers and vehicles which is disappointing.

We continue to work closely with the Metropolitan Police Service and the City of London Police to tackle taxi and private hire journey-related sexual offences and improve victims' confidence in reporting offences so that robust action can be taken.

Zero emission capable taxis

We continue to assist taxi drivers to transition to zero emission capable vehicles, which are the only type of new vehicle that can now be licensed. Grants, part funded by us, are available to those wishing to buy a zero emission capable taxi. We are also providing incentives for de-licensing older, more polluting taxis, and supporting a limited number of liquid petroleum gas conversions. The total funds available for taxi delicensing and conversions is £42m.

To further tackle pollution, we are consulting on proposals to reduce the maximum age for taxis to I2 years by 2022.

ULEZ

To improve air quality across London, the ULEZ will be introduced from 8 April 2019. This will be the toughest air quality standard of any world city. All petrol or diesel vehicles – including cars, motorcycles and vans – driven within the Congestion Charge zone in central London, will need to meet new, tighter emissions standards, or pay a daily charge. The infrastructure and operating systems necessary to support this measure are nearly complete.

Our services Other operations

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To ensure London's public transport fleet becomes low emission, only new hybrid or zero emission double-deck buses are now entering the fleet, and only zero emission capable taxis are being licensed. From 2020, only new, zero emission single-deck buses will be procured.

Rapid charging points

To support the growing number of zero emission capable taxis and electric vehicles, 300 rapid charging points will be installed across London by 2020, of which 165 have already been installed.

Accessible services

Dial-a-Ride provides fully accessible, step-free transport for people with disabilities and older people who have difficulty accessing the public transport network. We will purchase an additional 50 new vehicles for delivery in 2019. They will provide a better quality of service and a safer staff working environment, while also being cleaner and more fuel efficient, enabling operation in the ULEZ. We will also invest in new technology, including a booking and scheduling system, to improve operational efficiency and customer satisfaction.

Victoria Coach Station

We will continue with essential asset renewal works at Victoria Coach Station to support a safe operating environment, including fire system upgrades, roadway repairs and improved toilet facilities.



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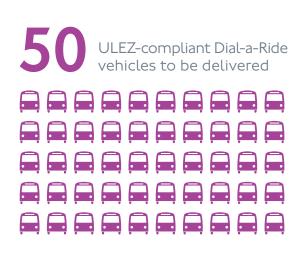
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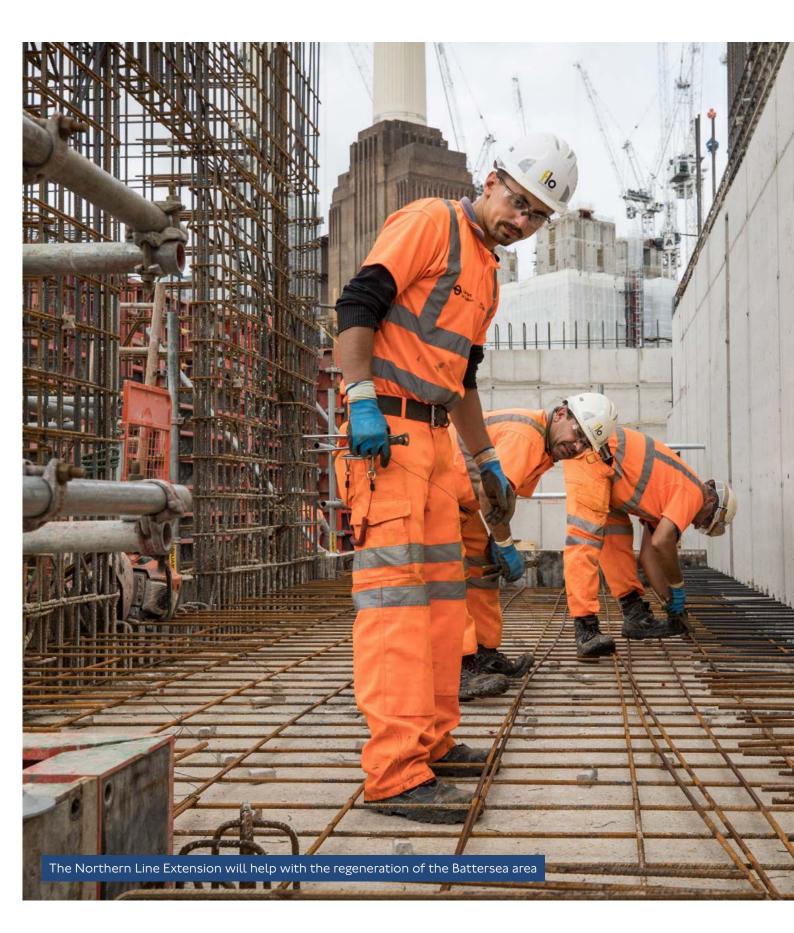
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A balanced budget

Budget 2019/20



Our services Major projects

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Major projects 🟛

Our work brings together a range of complex and highprofile projects on the London Underground and surface networks under one directorate.

Financial summary

In 2019/20, we will increase our capital investment in Major Projects by 20 per cent, as we continue to work to support London's growth by increasing capacity on the network through line extensions, capacity upgrades and systems modernisation.

Major projects (£m)	2019/20 Budget	2019/20 Business Plan	2019/20 Variance to Business Plan	2018/19 forecast	2019/20 variance to 2018/19 forecast
Four Lines Modernisation	(279)	(283)	4	(373)	94
Deep Tube Upgrade programme	(75)	(87)	12	(29)	(46)
Northern Line Extension	(215)	(213)	(2)	(116)	(99)
Major station upgrades	(100)	(97)	(3)	(110)	10
Barking Riverside Extension	(37)	(29)	(8)	8	(45)
Silvertown Tunnel*	1	2	(1)	(13)	14
DLR rolling stock	(48)	(67)	19	(7)	(41)
World Class Capacity	(34)	(33)	(1)	(15)	(19)
Net capital investment	(787)	(807)	20	(655)	(132)

* The historical costs for Silvertown Tunnel will be largely reimbursed in 2019/20 through third party contributions

Capital expenditure will increase as several major projects ramp up during 2019/20. Our DLR rolling stock renewal project will purchase land for the depot extension and commence the rolling stock design.

We will progress design of the new modern trains for our Deep Tube Upgrade project, which are planned to enter service from 2024 onwards. On the Northern Line Extension, works will enter into the system integration phase. This includes completing track installation and associated power requirements to start system testing and continuing construction at the new stations at Battersea and Nine Elms.

Construction will start on the Barking Riverside Extension in 2019/20 as we work to create the 4.5km line extension to the Barking Riverside housing development in east London.

Our services Major projects

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2019/20 priorities

Safety and security

Health, safety and working environment are central to all that we do. We believe that a safe organisation is an efficient organisation and that all our employees and suppliers can expect to remain free from harm while working on our projects.

We have seen great achievements in 2018/19, including a reduction in major injuries compared to last year, improved engagement and collaboration with our suppliers and the embedment of our 'making safety personal' campaign.

We remain committed to our strategy by further reducing injuries, empowering staff and suppliers to take action. We continue to focus on the potential outcomes for people's day-to-day lives to ensure they engage with our safer way of working and commit personally to health, safety and environment priorities.

Northern Line Extension

Running from Battersea Power Station to Kensington via Nine Elms, the extension will bring Battersea and the surrounding area within 15 minutes of the City and the West End, supporting the creation of around 25,000 jobs and more than 20,000 new homes. In 2019/20, we will complete the installation of the track and power system through the new extension, which will enable system testing to start. We will also continue the construction of new stations at Battersea and Nine Elms. The extension is expected to open in 2021.

Barking Riverside Extension

Construction on the London Overground extension between Gospel Oak and Barking to serve a new station at Barking Riverside will start in early 2019. Morgan Sindall and Volker Fitzpatrick have been appointed as the joint main works contractor for this 4.5km line extension. Barking Riverside is the largest housing development in east London, with planning permission for up to 10,800 new homes. Train services are expected to start from Barking Riverside station in late 2021.

Silvertown Tunnel

In May 2018, the Secretary of State granted approval for a Silvertown Tunnel 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 improve cross-river bus links. Construction is expected to begin in late 2019, with the new crossing open in 2024.

Major stations

The upgrade to Bank station will improve access, circulation and interchange, increasing capacity by 45 per cent. In 2019/20, we will start construction of a new triple escalator tunnel to serve the DLR. We also plan to issue an invitation to tender for a design and build contract for the capacity upgrade of Holborn station in early 2020. A balanced budget

Budget 2019/20

DLR rolling stock renewal

In 2019, we will place the contract for the design and build of 43 new walkthrough DLR trains, which will start entering service from 2023 and will increase capacity by 30 per cent across the network.

We have successfully secured funding from the Government's Housing and Infrastructure Fund to provide a new station at Thames Wharf, which will support additional house-building in the area. The fund enables us to purchase I4 additional trains and the land to stable them. In 2019/20, we will purchase land for the depot extension and start design work.

World Class Capacity

We will continue to upgrade the Jubilee and Northern lines. This will enable us to provide 3I trains per hour in the peak on the Morden branch of the Northern line from late 2020, and 32 trains per hour in the peak on the Jubilee line by the end of 202I. The Northern line improvement also supports new services once the Northern Line Extension is completed.

Four Lines Modernisation

We are transforming some of the world's oldest underground lines into a highperforming, modern railway. Following the introduction of I92 new, larger, walkthrough trains across the Circle, District, Hammersmith & City and Metropolitan lines, we are in the process of replacing and improving outdated signalling, power and depot assets, with the first sections of the new signalling system going live later in 2019. Capacity on these lines will increase by 33 per cent once the upgrade is complete in 2023.

Deep Tube Upgrade programme

This year, we will continue our plans to introduce new trains on the Piccadilly line. Working with our supplier, Siemens, we will progress the design of the trains in preparation for the construction of the new fleet, enabling them to enter service from 2024. We will also consider future funding options to provide modern signalling on the Piccadilly line, which alongside the new trains would add 60 per cent new capacity to the line once completed.

25,00

jobs supported by the

Northern Line Extension

trains per hour on the Northern line when the upgrade is complete in 2020



4.5km extension being developed between Gospel Oak and Barking

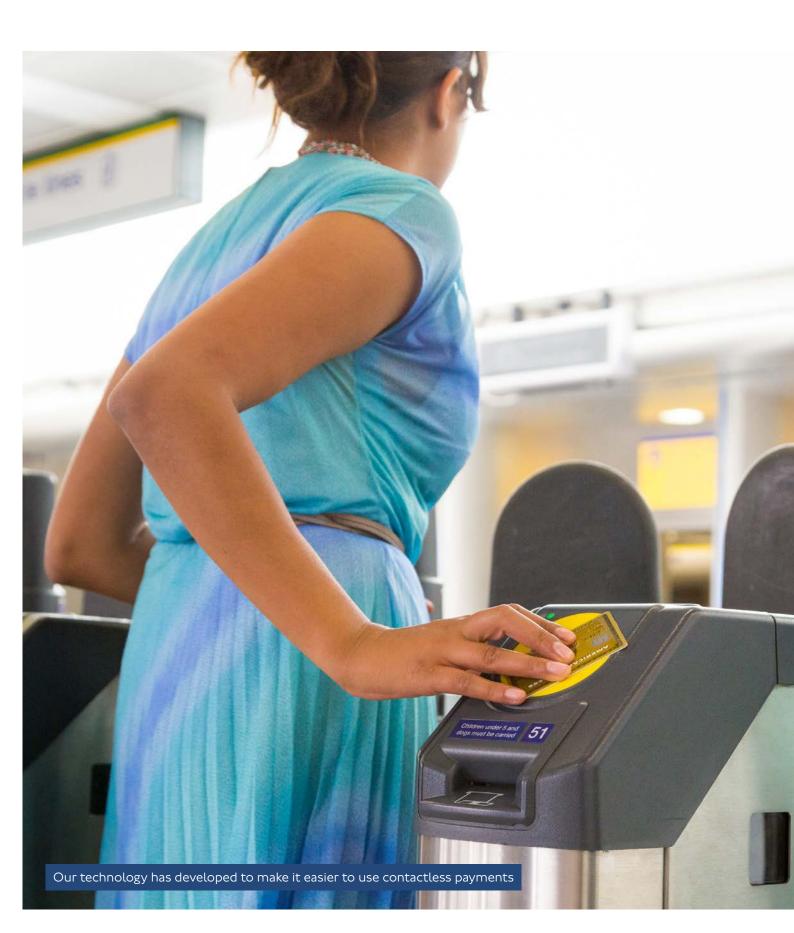
102 Major projects

Our services Major projects

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Budget 2019/20



Our services Professional services

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Professional services O

Our services cover all back and middle office functions and we will continue to deliver the service and innovation London requires, while improving efficiency.

Financial summary

Our direct operating costs will increase to £620m. This is driven by one-off expenditure required to deliver our savings programmes and feasibility projects, such as the Bakerloo Line Extension. New capital investment is due to increase as we invest in our payments system and our internal IT systems.

Professional services (£m)	2019/20 Budget	2019/20 Business Plan	Variance to Business Plan	2018/19 forecast	2019/20 variance to 2018/19 forecast
Other operating income	60	57	3	68	(8)
Direct operating cost	(620)	(638)	18	(603)	(17)
Direct operating deficit	(560)	(581)	21	(535)	(25)
Operational costs for infrastructure projects	(33)	(33)	-	(32)	(1)
Capital renewals	(22)	(12)	(10)	(17)	(5)
New capital investment	(101)	(105)	4	(57)	(44)
Property receipts	101	8	93	8	93
Net capital investment	(22)	(109)	87	(66)	44

Our ongoing financial challenge is to reduce our operating costs, to offset the impacts of the financial headwinds the organisation is facing, as well as ensuring we maximise the proportion of our income that is used to maintain and improve the transport network.

We have committed to reducing the cost of our back and middle office functions by 30 per cent by 2021/22, which will be a key focus throughout 2019/20.

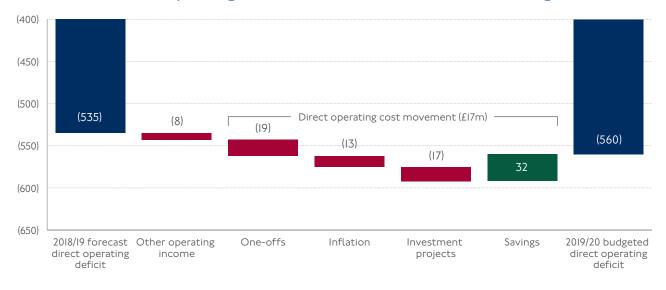
Having initially focused on examining individual business areas, our focus for cost reduction has now moved on to looking at streamlining end-to-end processes, standardising reporting and looking for further structural integration opportunities across the organisation.

We have already created a new single Business Services function, which has brought together transactional activity previously within Human Resources and Finance.

We will continue to refresh and invest in our internal systems infrastructure as well as developing new technology to ensure smoother journeys for our customers. Property receipts are expected to be around £101m, generated from the targeted disposal of buildings, which are surplus to operational requirements. **Appendices**

Professional services

Movement on direct operating deficit from 2018/19 forecast to 2019/20 Budget (£m)



Favourable movement

Adverse movement

Professional services direct operating deficit is budgeted to increase by £25m.

The increase is driven by a number of one-off activities, in both 2018/19 and 2019/20, which have negatively impacted Professional services, year-on-year movements.

In 2018/19, £8m of one-off income, relating principally to licensing deals for major cities to use our Oyster technology, will not repeat in 2019/20.

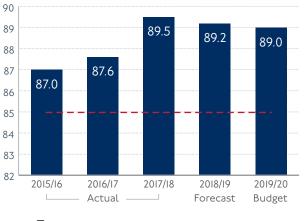
Operating costs will increase by £19m from one-off items. We reviewed our corporate property portfolio in 2018/19, which generated a one-off saving of £9m. In 2019/20, Professional services restructuring costs will increase by £10m as our change programme enters a new phase, working towards the 30 per cent savings challenge.

Inflationary costs will increase by £I3m, primarily from technology contracts.

Investment projects will increase by £17m in 2019/20. These projects will help unlock future growth areas and future efficiencies in our cost base.

These cost increases are offset by £32m savings generated through our change programme and accomodation strategy.

Budget 2019/20

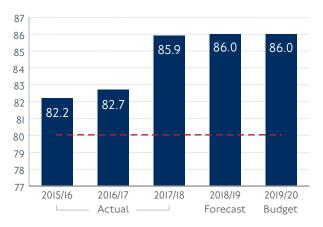


Contact centre performance Calls answered (%)

––– Target

This graph shows the combined service levels for all enquiries through our telephone channels. More than 80 per cent of all contact centre demand currently comes through this route. We aim to answer a minimum of 85 per cent of calls.

Written cases closed within target (%)



This encompasses all written correspondence, including web forms. We advise customers that enquiries will be responded to within 10 days. This gives us time to investigate any complaints. We aim to respond to a minimum of 80 per cent of all correspondence within three days.

2.5m calls received by our customer contact centre in 2018/19 by the second se

app since its launch



contactless payment journeys made every day

Our services Professional services

Appendices



A balanced budget

Budget 2019/20

2019/20 priorities

We will continue to invest in our ticketing system and mobile app, using new technologies to benefit customers and reduce our revenue collection costs.

We will continue to progress the development of the extension and upgrade on the Bakerloo line, using new trains and signalling to unlock significant housing growth. We will continue to develop proposals for the extension of the tram network between Sutton town centre and Merton.

We will launch the world's first Cycling Infrastructure Database, a comprehensive digital record of all cycling facilities on London's streets, which will lead to a step-change in the accuracy and quality of cycling data.

In partnership with operators and industry, we will publish London's Electric Vehicle Infrastructure Plan, with recommendations around how, when and where to increase London's electric vehicle infrastructure up until 2025. We will also study the feasibility and development of other schemes within the Mayor's Transport Strategy.

There will be continued investment in our internal tools to support a leaner, more efficient organisation, such as improved end user computing experiences and strengthening our data network and hosting capabilities. Our Smart Working project will continue, delivering new capabilities to give our people the skills and technology they need to work more flexibly, collaboratively and autonomously. This investment is a key enabler to meet our target of reducing desk space by 30 per cent.

We will continue to support the Government's national Emergency Services Mobile Communications Programme to replace the Airwave service, which is used by the UK emergency services, with an alternative solution based on a commercial 4G network. We have been working with this programme since 2015 to extend the Emergency Services Network service into underground areas of our estate. Over the next year, we plan to deliver the remaining cabling work within our tunnels and complete a further I0 per cent of cabling work required in our stations (50 per cent in total). The Home Office has agreed to this proposed scope and committed to funding in principle.

Our services Professional services

Appendices

Telecoms

We will make a substantial contribution to improving London's connectivity by bringing 4G and 5G to the London Underground. This will ensure better access to public sector property for digital infrastructure while delivering a new revenue stream for us.

We are using our tunnels, tracks and onstreet infrastructure to install fibre optic cables to bring 4G and 5G coverage to the Tube, and to improve connectivity above ground.

The fibre optic cable required to bring mobile coverage to the Tube also has the potential to support full fibre connections in homes and businesses across London.

We have started a competitive procurement process to identify a partner and expect to launch the first phase of 4G on London Underground in 2019/20. Trials have been successfully completed on the Jubilee and Waterloo & City lines and more than 250km of cabling has already been installed. We will deliver significant improvements to the digital infrastructure of London while creating a significant new revenue stream.

Estates

We will continue to reduce the cost of the office portfolio through targeted disposals and revenue generation from legacy assets. Our workplaces will support the wellbeing of our people in a smart working culture. We will continue to improve the environmental performance of our offices, reducing both carbon and water consumption.

We will extend the principles of good estate management to our wider estate and promote opportunities to improve operational performance, reduce costs, generate income or realise a capital receipt from surplus operational property assets.

Property

Financial summary

The direct operating surplus for 2019/20 is forecast to grow by £7m, which is an II per cent increase from 2018/19. Our ambition is to become London's leading operator of build-to-rent housing.

Property (£m)	2019/20 Budget	2019/20 Business Plan	Variance to Business Plan	2018/19 forecast	2019/20 variance to 2018/19 forecast
Property income	63	61	2	58	5
Retail income	43	43	-	39	4
Total income	106	104	2	97	9
Direct operating cost	(37)	(38)	1	(35)	(2)
Direct operating surplus	69	66	3	62	7
New capital investment	(139)	(203)	64	(47)	(92)
Property receipts	54	203	(149)	97	(43)
Crossrail over site development	115	98	17	175	(60)
Total capital expenditure	30	98	(68)	225	(195)

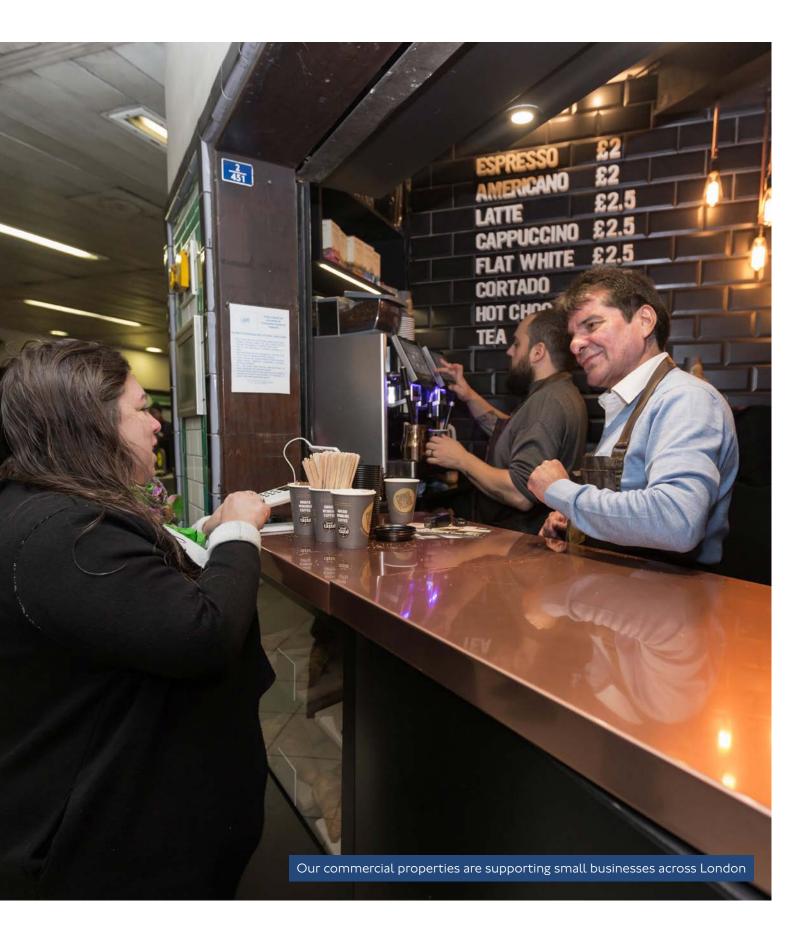
Property income is forecast to increase by £5m in 2019/20. This is driven by increased rental income, including through additional rental assets going live.

Retail income will increase by 10 per cent, from £39m in 2018/19 to £43m in 2019/20. We are progressing our plans to develop arches at Wood Lane, Latimer Road and Kingsland Road, as well as plans at major gateway stations such as South Kensington, Victoria and Liverpool Street, which will transform our retail environment. We will improve and renovate our existing locations to attract the best tenants and are creating temporary kiosk spaces for new business ideas across our network.

Since the Business Plan, there have been schedule updates on our property development activities and this Budget reflects the latest view on timing, which impacts both the capital investment expenditure and property receipts.

Our services Property

Appendices



A balanced budget

Budget 2019/20

2019/20 priorities

Housing

As one of London's largest landowners, we can provide places for people to live and work, creating thousands of new homes and improving connectivity across the Capital.

As outlined in our Business Plan, we will continue to develop 320 acres of land for housing and commercial space. By March 2021, we will have started on property development sites that will support 10,000 new homes and a million square feet of offices, shops and workspace. Across our portfolio, 50 per cent of the homes brought to market after May 2016 will be affordable.

Working with our development partners, we have already started engaging with communities in Harrow-on-the-Hill, South Kensington and Northwood ahead of submitting planning applications for new homes, retail space, public realm and transport improvements, including step-free access. In 2019/20, we will submit planning applications for more than 5,000 homes, half of which will be affordable.

Construction has started on more than 200 homes in Ealing and Lambeth and we expect to start building another 350 homes at Blackhorse Road in Waltham Forest in this financial year. We recognise that the construction industry is experiencing significant skills shortages, particularly in the housing sector, and are working hard to address this through our construction skills strategy. There will be more than 7,000 construction workers supporting our projects when the development is at its peak. We are keen to leverage the scale of our development and its longevity to ensure we bring new talent into the industry to help meet demand. We are establishing onsite learning facilities at the Olympic Park in partnership with the London Legacy Development Corporation, and in Lambeth in partnership with the borough.

We are creating a build-to-rent investment portfolio. This will enable us to deliver homes at pace, while retaining an interest in the future development and creating a long-term stable income stream. The first package of more than 3,000 homes is currently being marketed and has attracted strong interest, owing to the scale and location of the sites. We expect to bring forward thousands more homes for build to rent over the course of the Business Plan.

Retail

Our retail and commercial properties continue to provide ideal locations for London's small businesses to grow, while generating a sustainable income stream. We will expand our retail and commercial property estates to maximise the potential income, while supporting the Capital's growth.

Small businesses make up the vast majority of our commercial estate and we recognise the importance they play in supporting London's economy.

Our services Property

Appendices

We are committed to working closely with small businesses to enable them to thrive and grow. We launched our Statement of Support for small businesses in November 2018 and will continue to promote an open and transparent relationship with all of our tenants.

We continue to invest in our estate and have a programme to improve our existing properties, making the most of our unique asset base to enhance revenue. These ambitious plans will also see us repositioning to attract innovative new tenants that our customers will like.

We are also looking at ways to generate revenue from new spaces that are otherwise underused. We are working with Streetdots to give mobile businesses the opportunity to try their ideas at busy locations across London and will be looking at other new opportunities for temporary kiosks across our network. This provides small businesses with a simple, cost-effective opportunity and offers more choice for the millions of people that use our network every day. 90% of our tenants are small businesses





50% of new homes

brought to market in this Mayoral term will be affordable

350 homes will start being built in Waltham Forest in 2019

Media

Financial summary

Our ambition is to become the best partner to promote and understand business in London.

Media (£m)	2019/20 Budget	2019/20 Business Plan	Variance to Business Plan	2018/19 forecast	2019/20 variance to 2018/19 forecast
Other operating income	148	145	3	47	1
Direct operating cost	(3)	(4)	1	(3)	-
Direct operating surplus	145	141	4	144	1
Capital renewals	-	-	-	-	-
New capital investment	(6)	(5)	(1)	(34)	28
Total capital expenditure	(6)	(5)	(1)	(34)	28

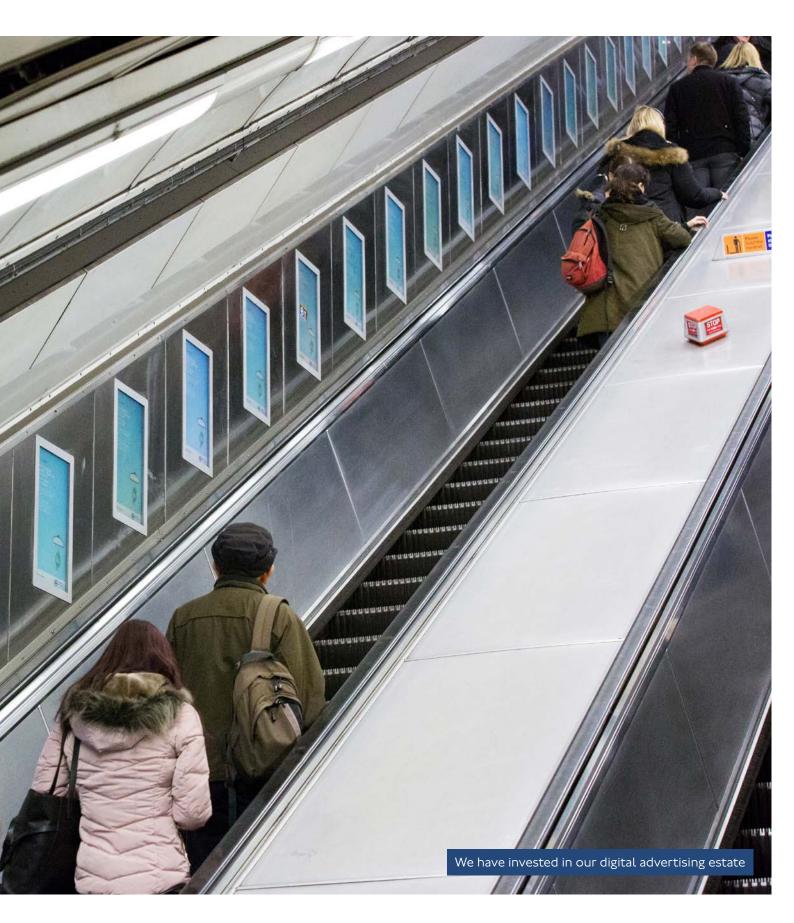
We are in the last year of our advertising asset modernisation programme, which doubles the digital estate and removes obsolete assets. New digital formats are being rolled out and, having completed our roadside underpass digital screens programme, we are now working to develop further sites.

Our operating income is forecast to increase by less than one per cent in 2019/20, reflecting the investment in digital assets, as well as a challenging out-of-home advertising market. This revenue growth is in the context of a market forecast to decline by one per cent next financial year. Operating costs are being tightly controlled to mitigate the impact of marginal income growth.

New capital investment tails off in 2019/20 as we complete our investment in new digital assets, with the total spend being around £80m since the start of the programme in early 2017.

Our services Media

Appendices



Budget 2019/20

2019/20 priorities

With an annual advertising audience of more than I.5 billion people, we aspire to be the best partner to promote and understand business in London. We continue to modernise our advertising infrastructure, introducing new and innovative formats. Coupled with a deeper understanding of our customers through our data, this enables us to improve their experience as they move around our network and continues to drive the revenue we need to invest back into transport.

Our advertising estate is already one of the most valuable out-of-home advertising estates in the world, displaying more than 16,000 advertisements last year. We are in the final year of our planned modernisation programme, which will see the number of digital assets across our estate double, with obsolete advertising units being replaced with bigger, bolder and brighter screens.

There are also new formats for digital advertising being rolled out across the estate, which will provide advertisers with an even richer and more innovative digital landscape. Our new full HD cross track projection, the larger 98" landscape screens and the digital escalator ribbons are now beginning to provide these industry leading opportunities. In total, 904 new assets will be installed across the Tube and rail network, with an additional 325 architecturally integrated digital assets being delivered across the Elizabeth line. This is an increase in digital capability of I46 per cent across the combined estate.

We continue to work with our partners to develop and install high quality roadside advertising, with phase one of our large format, underpass digital screens programme now complete and further sites being developed.

Our unique environment enables us to provide fully immersive advertising opportunities and partnerships. Supported by the strength of our globally recognised brand, businesses can have a physical and interactive presence on our estate, enabling them to craft a bespoke, immersive showcase for their brand, while also engaging and entertaining our customers.

Our services Media

Appendices



£80m investment to improve our digital advertising estate since 2017

146% increase in digital advertising capability across our estate



Budget 2019/20

Applied solutions

Financial summary

We plan to make £3m operating income in 2019/20 as we invest for the future and build a solid foundation for our new applied solutions function.

This function began operating in 2018/19, bidding on ten projects with an estimated contract value of £19m. Three bids were successful, which were transport planning advisory for Dublin Metropolitan Transport Authority, bus reform in Argentina for the World Bank and advisory services to the European Bank of Reconstruction and Development. We project a loss of £550k in 2018/19, as the team was established and started bidding on projects.

We have expanded the original remit, which signifies our great ambition in the long term. We will operate across the three pillars of advisory, intellectual property, and operations and maintenance contracts.

We plan to make an operating income of £3m in 2019/20 from projects in the pipeline and new work. Our direct operating cost is almost entirely headcount and is based on our best estimate of the requirement for the team needed to win, run and deliver projects. In addition, we will draw on existing resource and expertise from our organisation as required. We expect an operating surplus of £500k in 2019/20.



in engineering provided to Oslo and San Francisco metros Legible London

signage trialled in Hong Kong





Our services Applied solutions

Appendices

2019/20 priorities

This will be the year that we invest for the future, building our applied solutions function as a solid foundation.

We have the ambition and experience to make this new business a significant income source in the coming years. It will also grow the capability of our own people, by requiring them to solve challenges in new ways that in return will improve how we deliver for London.

Our new applied solutions function needs to make a profit but also deliver indirect financial value. We will use expertise from our existing resource, which will not only upskill our staff by building their consulting experience and encouraging a more commercial culture, but also enable us to draw on these skills to reduce our use of consultants, manage internal demand and create more intellectual property.

We have developed a pipeline of potential projects and are committed to doing this in the right way – working on projects that are aligned to our own goals – as set out in the Mayor's Transport Strategy. Our initial focus will be on advisory support, using our experience to support other cities in developing solutions to common problems.

We will also be taking a new approach to intellectual property, recognising that the innovations we have helped to bring to London can be adopted and adapted for other organisations, preventing them from needing to create new technology and solutions. Our existing partnership with Cubic for ticketing and fare collection services is an example of this. In the longer term, we will pursue opportunities to meet the Mayor's commitment to run local transport services in other cities, building on our experience of operating and maintaining the world's oldest metro.

Project successes to date include trialling Legible City wayfinding signage in Hong Kong and providing engineering expertise to metros in Oslo and San Francisco. We have also agreed to provide advisory services to a consortium bidding to run the Buenos Aires Metro.

While we continue to explore further opportunities, we will also focus on developing overarching management plans and making sure there are appropriate controls in place to help us determine which opportunities to pursue and whether they align positively with our existing operations in London.

By setting things up for long-term success, we remain confident the trading arm will contribute to commercial income, which can be reinvested to improve London's transport network.





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Financial tables

I. TfL Group balance sheet

Balance sheet	Actual	Forecast	Budget
(£m)	31 March 2018	31 March 2019	31 March 2020
Intangible assets	118	145	142
Property, plant and equipment	39,274	40,872	43,024
Investment properties	537	585	610
Investment in associate entities	319	329	338
Long-term derivatives	12	13	13
Long-term finance lease receivables	17	36	39
Long-term debtors	28	98	99
Long-term assets	40,305	42,078	44,265
Stocks	64	67	67
Short-term debtors	561	588	535
Assets held for sale	83	35	8
Short-term derivatives	6	7	7
Short-term finance lease receivables	8	16	16
Cash and short-term investments	1,932	1,769	1,328
Current assets	2,654	2,482	1,961
Short-term creditors	(2,348)	(2,038)	(1,749)
Short-term derivatives	(2)	(3)	(3)
Short-term borrowings	(846)	(716)	(716)
Short-term lease liabilities	(70)	(70)	(31)
Short-term provisions	(334)	(327)	(124)
Current liabilities	(3,600)	(3,154)	(2,623)
Long-term creditors	(66)	(68)	(129)
Long-term borrowings	(9,570)	(10,428)	(11,273)
Long-term lease liabilities	(418)	(482)	(454)
Long-term derivatives	(52)	(43)	(40)
Other provisions	(84)	(72)	(71)
Pension provision	(4,707)	(4,703)	(4,703)
Long-term liabilities	(14,897)	(15,796)	(16,670)
Total net assets	24,462	25,610	26,933
Capital and reserves			
Usable reserves	1,790	1,670	1,128
Unusable reserves	22,672	23,940	25,805
Total reserves	24,462	25,610	26,933

Our services

Appendices Financial tables



2. TfL Group financial summary tables

Operating account

TfL Group (£m)	2019/20 Budget	2019/20 Business Plan	Variance to Business Plan	2018/19 Forecast	2019/20 variance to 2018/19 forecast
Passenger income	4,856	4,821	35	4,789	67
Other operating income	1,050	1,128	(78)	829	221
Total operating income	5,906	5,949	(43)	5,618	288
Business rates	954	954	-	948	6
Other revenue grants	111	49	62	100	11
Total income	6,971	6,952	19	6,666	305
Operating cost	(6,780)	(6,909)	129	(6,307)	(473)
Net operating surplus	191	43	148	359	(168)
Capital renewals*	(459)	(456)	(3)	(409)	(50)
Net cost of operations before financing	(268)	(413)	145	(50)	(218)
Net financing costs	(474)	(484)	10	(450)	(24)
Net cost of operations	(742)	(897)	155	(500)	(242)

Appendices Financial tables

Capital account

TfL Group (£m)	2019/20 Budget	2019/20 Business Plan	Variance to Business Plan	2018/19 forecast	2019/20 variance to 2018/19 forecast
New capital investment*	(1,429)	(1,517)	88	(1,252)	(177)
Crossrail programme	(1,196)	(1,196)	-	(1,416)	220
Total capital expenditure	(2,625)	(2,713)	88	(2,668)	43
Financed by:					
Business rates	893	893	-	976	(83)
Property and asset receipts	155	211	(56)	667	(512)
Borrowing	845	800	45	728	117
Crossrail funding sources	1,216	1,004	212	757	459
Other capital grants	250	275	(25)	213	37
Total	3,359	3,183	176	3,341	18
Net capital account	734	470	264	673	61

* New capital investment and renewals are shown net of third party contributions

Cash flow movement

TfL Group (£m)	2019/20 Budget	2019/20 Business Plan	Variance to Business Plan	2018/19 recast	2019/20 variance to 2018/19 forecast
Net cost of operations	(742)	(897)	155	(500)	(242)
Net capital account	734	470	264	673	61
Working capital	(433)	53	(486)	(336)	(97)
Cashflow movement	(441)	(374)	(67)	(163)	(278)

Group comprehensive income and expenditure statement (£m)

		Budget 2019/20	
Year ending 31 March	Gross income	Gross expenditure	Net expenditure
Operating segment	·		
Streets	312	(479)	(167)
Buses	1,433	(2,155)	(722)
Rail	457	(506)	(49)
London Underground	2,864	(2,041)	823
Elizabeth line	161	(428)	(267)
Other operations	286	(277)	9
Professional services	60	(620)	(560)
Property and Media	254	(40)	214
Corporate overhead	79	(234)	(155)
Net cost of operations per internal management accounts	5,906	(6,780)	(874)
Depreciation and amortisation	-	(1,046)	(1,046)
Central items	2	(21)	(19)
Net cost of services	5,908	(7,847)	(1,939)
Loss on disposal of fixed assets			(101)
Financing and investment income			283
Financing and investment expenditure			(389)
Grant income			3,457
Surplus on the provision of services before tax			1,311
Taxation income			-
Surplus on the provision of services after tax			1,311
Recycling of derivative fair value gains and losses to profit and loss			12
Total Group comprehensive income and expenditure			1,323

Appendices

Financial tables

Reconciliation of the total Group comprehensive income and expenditure account to the net cost of services per operating account (£m)

	Budget 2019/20
	Net expenditure
Total Group comprehensive income and expenditure	1,323

Amounts included in the comprehensive income and expenditure account not reported in the operating account

	(1,606)
Other central items	19
Recycling of derivative fair value gains and losses to profit and loss	(12)
Capital grant funding**	(2,392)
Gain on disposal of investment properties*	(268)
Loss on disposal of fixed assets	101
Capitalised interest	(100)
Depreciation and amortisation	1,046

Amounts included in the operating account not reported in the comprehensive income and expenditure account

Capital renewals net of third party contributions	(459)
	(459)
Net cost of operations per the operating account	(742)

- * Gain on disposal of investment properties is included within financing and investment income in the Group comprehensive income and expenditure statement
- ** Grant income in the Group comprehensive income and expenditure statement includes funding allocated to capital in the capital account: business rates, Crossrail funding, other capital grants and third party contributions towards our capital expenditure

Budget 2019/20

Capital investment

London Underground

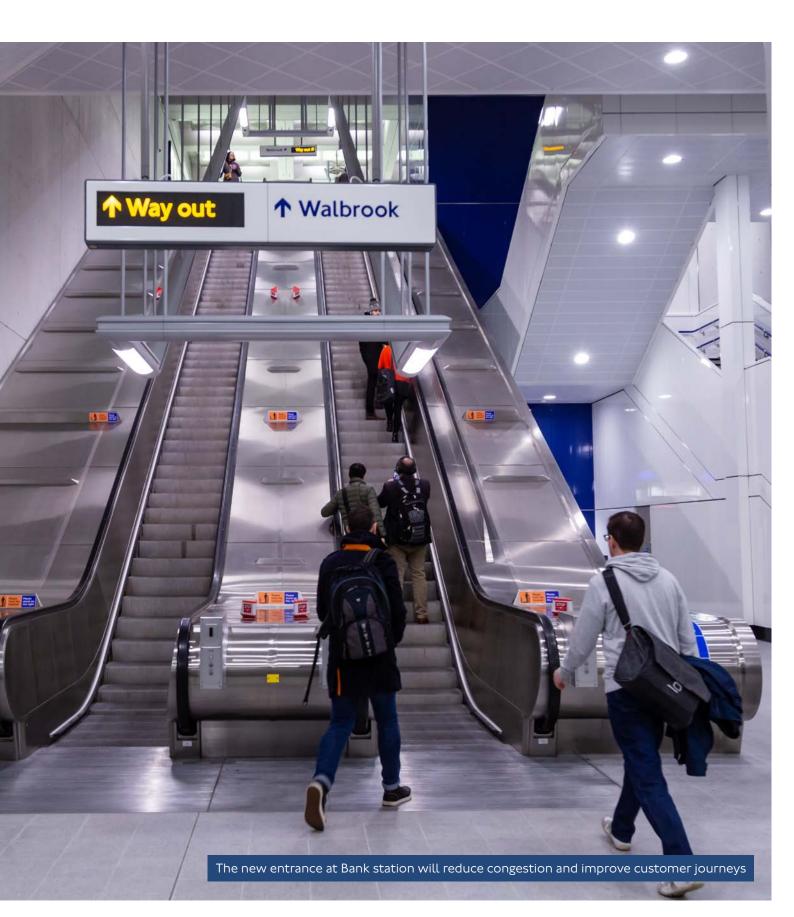
Project	Description	2019/20 £m
Step-free	Additional step-free access projects beyond those delivered through station capacity projects or Crossrail construction.	48
Fleet and signalling	Work to enable the existing train and signalling equipment to continue to operate ahead of renewal, Rail Vehicle Accessibility Regulations compliance works and other works.	97
Other renewals	Continuation of track and power cooling upgrade programmes and works to upgrade lifts and escalators	192
Other enhancements	Tube station works	32
Total		369

Elizabeth line

Project	Description	2019/20 £m
Elizabeth line enabling work	Various works paid for directly by us rather than through Crossrail Limited	59

Our services

Appendices Capital investment



Buses, Streets, Rail and Other operations

Project	Description	2019/20 £m
Healthy Streets	Work recognising the value of increasing walking, cycling and public transport, creating safer, cleaner and more efficient freight and servicing	177
Air quality	Capital funded schemes, infrastructure and initiatives that improve air quality. Additional schemes are also funded through the operating account	62
Public transport	Investment in infrastructure to support buses, Santander Cycles and other surface transport operations	93
Assets	Investment to ensure London's strategic roads infrastructure remains in a state of good repair	58
Bus technology	Investment to migrate our analogue bus radio system to a new digital mobile network and develop plans for iBus2 to replace our current bus tracking, performance management and passenger information systems	9
Other	Investment in various small projects	6
Total		405

Professional services

Project	Description	2019/20 £m
Customer experience	Various renewal and investment projects relating to revenue collection assets (for example, ticket vending machines and ticketing technologies), internal systems, IT infrastructure and cyber security	79
Emergency Services Network	Investment in the Emergency Services Network, which is funded by the Home Office	26
Estates and telecoms	Investment to separate 55 Broadway building from the operating railway services and equipment to enable disposal and investment in Commercial Telecoms assets	13
City Planning	Supporting the delivery of the Mayor's Transport Strategy through Growth Fund investment at Ilford station, Renwick Road and Walthamstow Central.	5
Total		123

Appendices

Capital investment

Major Projects

Project	Description	2019/20 £m
Four Lines Modernisation (Circle, District, Hammersmith & City and Metropolitan lines)	Upgrade of the signalling on the four lines will significantly increase capacity	279
Deep Tube Upgrade programme	Modernisation of the Piccadilly line (new trains and enabling works)	75
Northern Line Extension	Extension of the Northern line from Kennington to Battersea	215
Major station upgrades (including Bank station)	Station capacity projects that are already in progress or starting imminently	100
Barking Riverside	Extension of the London Overground between Gospel Oak and Barking to Barking Riverside, supporting new housing	37
Silvertown Tunnel	New road crossing at Silvertown via a tunnel under the Thames	(1)
DLR rolling stock	Asset renewals, capacity enhancements and supporting infrastructure for new trains	48
World Class Capacity	This will improve capacity on the Jubilee and Northern lines	34
Total		787

Property

Project	Description	2019/20 £m
Property	Developing and delivering our property portfolio, including delivering the Mayor's affordable housing pledge, and creating a significant build-to-rent portfolio, as well as developing retail and office space in prime London locations on the Elizabeth line	139

Media

Project	Description	2019/20 £m
Media	Investment in advertising assets	6

Budget 2019/20

Budget milestones

Major projects

Project	Description	Target date
Barking Riverside Extension	Main works start	April 2019
Four Lines Modernisation (Circle, District, Hammersmith & City and Metropolitan lines)	First customer services start on the new higher capacity moving block signalling system	April 2019
Northern Line Extension	Track installation complete	June 2019
Barking Riverside Extension	Signal and piling work in a I6-day Network Rail blockade to support a new viaduct complete	August 2019
Silvertown Tunnel	Contract to design, build, operate and maintain begins	October 2019
Four Lines Modernisation (Circle, District, Hammersmith & City and Metropolitan lines)	Use of the new, higher-capacity signalling system for customer service extends to the north side of the Circle line and to the other lines	January 2020
Deep Tube Upgrade programme	Concept design of new Piccadilly line trains complete	January 2020
Northern Line Extension	Essential power supplies available at all sites for testing and commissioning work to begin	March 2020
Bank station capacity upgrade	Start construction of the new triple escalator tunnel to serve DLR customers and relieve congestion	March 2020

Appendices Budget milestones

Buses, Streets and Rail

Project	Description	Target date
ULEZ	Launch of central London scheme	April 2019
Old Street Roundabout removal	Main works start	May 2019
Highbury Corner gyratory removal	Traffic switches to two-way system	July 2019
Trams – Blackhorse Lane	Demolition of Blackhorse Lane bridge begins	August 2019
Cycle route between Tower Bridge and Greenwich	Detailed design for Jamaica Road signed off	August 2019
Direct Vision Standard	System to enable heavy goods vehicle drivers to request Direct Vision Standard permits launches	October 2019
Retrofit bus to meet Euro VI standards	All buses in Low Emission Bus Zones are retrofitted with new bespoke exhaust systems to reduce nitrogen oxides and particulate matter	December 2019
Rotherhithe Tunnel	Concept design for the renewal of major assets starts	December 2019
Cycle route between Olympia and Brentford	Detailed design for Kew Bridge section complete	December 2019
London Overground – White Hart Lane station upgrade	Demolition of existing station entrance complete	March 2020
Bus driver facilities	Install permanent facilities on 42 routes	March 2020

London Underground

Project	Description	Target date
Victoria line fleet programme lift	First train enters production	July 2019
Piccadilly line interim signal control	Upgrade complete	January 2020
Jubilee line fleet mid-life refurbishment	Fleet refurbishment complete and all trains compliant with the Rail Vehicle Accessibility Regulations	January 2020
Energy strategy	First solar panels installed, marking the start of large-scale solar generation on our buildings	February 2020
Accessibility	Eight more London Underground stations become step-free	March 2020
Central line improvement project	Commence refurbishment and life extension work on first production train	March 2020
Lifts and escalators	22 lift and escalator replacement and refurbishments complete	March 2020
Tottenham Hale station	New station entrance and concourse opens to the public	March 2020
Track	Install 7.5km of new track	March 2020

Appendices Budget milestones

Professional services

Project	Description	Target date
Reading extension	Enable pay as you go to support the Elizabeth line extension to Reading	December 2019
Telecoms commercialisation project	Preferred bidder selected for rolling out a 4G network across London Underground and implementing other connectivity improvements across London	March 2020

Property

Project	Description	Target date
Build-to-rent programme	Finance Committee approval for preferred partner selection to start the build-to-rent programme	September 2019
55 Broadway	Complete works separating the building from the operating railway services and equipment to enable disposal of the complex via long lease.	December 2019
Blackhorse Road car park	Start the construction of a mixed usage development (homes and commercial)	March 2020

Budget 2019/20

Key strategic risks

The key strategic risks we are currently managing and the strategic objectives they relate to include:

Mayor's Transport Strategy – Healthy Streets and healthy people Achieving safety outcomes

An inability to achieve safety outcomes resulting in loss of life or serious injury to customers and staff.

Major cyber security incident

A significant cyber security incident may occur that overcomes our preparations and results in a major theft, loss of personal or other important data, financial theft or loss, interruption to key business systems.

Catastrophic event

An accidental or natural event, or deliberate act occurs that overwhelms our physical ability to respond due to resource availability, geographical location or lack of specific plan.

Our environmental impact

Failure to meet our objectives and legal requirements on environmental issues could result in reputational damage, legal or financial penalties, health impacts, reduced quality of life and a failure to meet statutory requirements.

Mayor's Transport Strategy – A good public transport experience Significant technology failure

A significant technology failure may occur that overcomes our preparations and results in interruption to key business systems, interference with operational activity, the materialisation of a safety hazard and/or regulatory fines.

Operational reliability

Not meeting operational targets and/or delivering less reliable and safe services for customers and other users.

Mayor's Transport Strategy – New homes and jobs

An inability to deliver predicted revenue growth, in line with forecast.

Ability to meet changing demand

Due to economic factors and changes to people's travel behaviours demand may be lower or higher than we forecast leading to lower income or insufficient investment to meet increased demand.

Delivering key investment programmes

Internal or external events that have the potential to impact projects may result in an inability to efficiently deliver the investment programme portfolio and achieve planned benefits

Opening Elizabeth line

Delay in the scheduled opening of the central section between Paddington and Abbey Wood

Our services

Appendices Key strategic risks

Corporate Strategy – People and stakeholders

Talent attraction and retention

We may not be able to attract, recruit, develop, engage and retain staff with the right competencies, behaviours and required level of skills.

Corporate Strategy – Finance Financial sustainability

Challenging macro-economic environment and other financial challenges may result in our inability to pay for and deliver services and invest affordably.

All Mayor's Transport Strategy outcomes

Governance and controls suitability These may not be fit for purpose, and/ or not provide adequate support to meet the changing demands on us and expectations of our stakeholders.

Technological or market developments

Changes in technology and the market, customer preferences, and new supply chains may outpace our ability to adapt. This leads to operational impacts, loss of revenue and failure to deliver the required transport services to keep London competitive in the future.

Loss of external stakeholder trust

Loss of credibility and sympathy leading to lack of political support and potential impact on funding.

Resilience to climate change and extreme weather

This includes flooding, extreme heat, supply chain disruption or invasive species and could result in reduced customer experience and reputational damage, reduced quality of life, increases in operational and capital spend.

We are committed to improving the way strategic risks are identified, managed and reported, and we will continue to provide input to the Executive Committee, Audit and Assurance Committee and other committees and panels as appropriate.

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