

Business Plan 2014

Transport for London's plans into the next decade

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Republished in January 2015
to amend incorrect dates in
Table 6.

Message from the Mayor



London's population will soon be higher than ever before, surpassing its 1939 peak of 8.6 million. The city's contribution to the UK's economy has also never been greater. It contributes £34bn a year more to the Exchequer than it gets back and the supply chain for our transport network alone generates 45,700 UK jobs outside the Capital.

Central to London's success are our increasingly efficient, safe and reliable transport networks that each year carry rapidly growing numbers of people. So this is not the moment to slacken the pace of investment or limit ambition for our great city.

By 2030 there will be nearly 10 million Londoners. And, by the middle of the next decade, our net contribution to the Exchequer will be more than £100bn. The renaissance both of our country's other great cities and our high-tech manufacturing base relies

fundamentally on the continued success of the Capital. But we must never forget that economic success, while vital, is not enough. London must remain a great place in which to live and work and to visit. It needs more affordable homes, cleaner air and high-quality public services to enable Londoners to go about their lives.

This Business Plan shows how transport will contribute to meeting those challenges and achieve the goals set out in my Transport Strategy.

2015 will be a great year for transport in London. The reliability and capacity of the Tube will continue to improve. We will build on our successful control of London Overground by increasing its capacity by 25 per cent and expanding the network when we take over the West Anglia inner suburban routes, and the first of the routes that will form the eventual Crossrail line across London. Capacity will also increase on the Docklands Light Railway (DLR) and Croydon's tram system.

Accessibility will also improve. More than £250m is being invested to make vital interchanges step-free, including Bond Street, Tottenham Court Road and Victoria stations. And, a new and innovative £75m fund will speed up the rate at which the network is made more accessible, enabling the installation of lifts at around 12 stations.

Central to this Business Plan is an expansion of the bus network. More than 500 extra

buses will help meet rising demand and carry almost three million more passenger journeys a week, while £200m will also be spent on boosting bus reliability.

In addition, an unparalleled £4bn is being invested in our roads as part of the Road Modernisation Plan. This year we will begin construction at Elephant and Castle and soon, following public consultation, transformational projects in Wandsworth town centre, Croydon Fiveways, Euston Road, Old Street and Vauxhall Cross will begin.

The cycling revolution will continue apace with new substantially segregated Cycle Superhighways, Quietways and the roll-out of the Central London Cycling Grid. The first Quietway routes will be in place in 2015 and by 2016 four new Cycle Superhighways will open, subject to public consultation. This includes the East-West route, which will be one of the longest substantially segregated continuous cycle routes of any European city.

The Business Plan sees an increase in investment in environment and air quality measures. This underlines my commitment to positioning London to benefit from the new ultra low emission vehicle sector which will bring jobs and growth to the Capital while improving the quality of residents' lives.

Our offer to customers will also improve. From September, the Tube will run 24 hours a day on Fridays and Saturdays on some lines, greatly enhancing our night-time economy. More staff will be visible and available to help our customers. Our world-leading use of the Oyster card and contactless payment will continue to make journeys easier. Our commitment to free open data will ensure that we enlist the help of many partners to rise to the challenges facing a modern city.

The expansion of our network also steps up a gear. Crossrail tunnelling will be completed next year and the task of fitting out the new, fully accessible railway begins in earnest. We will start work on the Northern line

extension and a host of other projects both big and small.

We are not just planning for this Business Plan, but also further into the future. We are putting together the funding package and establishing the necessary powers to build Crossrail 2. We are developing our plans for the Bakerloo line extension and a new mega-interchange at Old Oak in West London. We are also supporting the Government in getting the right HS2 for London and the North, and expanding our networks into new housing areas, such as the Barking Riverside extension. Our successful growth fund will be expanded, targeting transport improvement in areas where there is potential to unlock new homes and jobs.

We can achieve all of this while bearing down on fares through a relentless focus on efficiency. We have already secured £12.5bn in savings as part of a £16bn programme. Our efficiencies mean that we can continue to run more and better services and invest in the future while respecting the needs of hard-working Londoners. As a result, I have been able to protect and improve fare concessions and provide a better deal for the city's army of part-time workers.

London has shown the way for the UK's other great cities. With further devolution of fiscal powers and the right delivery structures we can continue to improve services and create jobs and economic growth in a way that is affordable and sustainable. I commend this Business Plan not just for London but for every city driving the success of our great country.

A handwritten signature in black ink, appearing to read 'Boris Johnson'.

Boris Johnson
Mayor of London

Commissioner's foreword



Our purpose is to keep London working, growing and to make it a better place in which to live. Our customers and users want us to demonstrate that Every Journey Matters.

Every penny we receive from fares, government grant and commercial activity is reinvested in running and improving transport for our customers. And this, of course, brings very extensive economic benefits to London and the entire country.

This Business Plan sets out the detail of how, over the next decade, we will continue to play our full part in the delivery of a bigger, better and even more successful London.

The needs of our customers will remain at the centre of all this work. Despite rapid technological innovation, transport is, and always will be, a people business, with our staff becoming ever more visible and equipped to provide high-quality customer service.

Delivery: our plans and our promises

A reliable and safe transport network is the core of what we do. We must get people to work, school and leisure opportunities, and provide access to public services.

That is why we strive to complete improvement projects on time and to budget, and work tirelessly to run a safe, reliable, clean, sustainable and accessible service every day.

Over the course of this Plan, we will continue to deliver one of the largest infrastructure programmes in the world, boosting rail and road capacity and reliability.

Our rail networks carry more daily journeys than the rest of the country's networks combined.

The Tube, London Overground and DLR services are among the most frequent and reliable anywhere in the world, despite their age. They will improve still further, supporting rapid growth in our population and stimulating more housing and jobs.

The modernisation of vitally important stations including Bank, Bond Street, Finsbury Park, Tottenham Court Road, Vauxhall and Victoria will be completed, new signalling will mean more frequent services and even more new walk-through trains will be introduced.

We will carry on improving and expanding the bus network, introducing more and cleaner vehicles. The bus service remains one of the workhorses of our networks, carrying 2.4 billion passenger journeys every year. It is also our most flexible and agile service, capable of being deployed quickly to unlock economic growth and housing development.

Our roads continue to support the majority of all journeys in the Capital. A £4bn investment programme will transform our streets and places and ensure that bridges and other infrastructure are maintained and

made even safer. This work will recognise the complementary demands of motorists, pedestrians, cyclists and the freight and logistics sector, while improving air quality and the public realm.

Safety remains a top priority. We are committed to delivering a road network on which there are no deaths or serious injuries. And all road users will increasingly benefit from the kind of real-time travel information that our rail and bus passengers now routinely expect.

Customer service

Our aim is to take out as much of the hassle of making journeys as possible. Integrated ticketing and personalised real-time information are central to this. So we will continue to harness new technology and ideas to improve customer service and make travel in London even more straightforward.

We have made major advances in delivering contactless payment as a convenient further option for moving around London. This removes the need for customers to buy a ticket at all and in future will enable much greater flexibility for us to integrate payment for all our services. We will also ensure that Oyster users receive the same level of benefits.

We will continue to make our real-time information feeds freely and openly available to developers and will add even more data sets to those we currently offer. This will bring even more new customer information products to market quickly.

But technology alone is not enough. Our customers are at the centre of TfL, whether they are regular commuters, occasional passengers or visitors to the Capital. We will invest so that we continue to deliver an increasingly personalised and human service. That is why we are making our staff even more visible and available to our customers where and when they need them at our Tube and Overground stations.

The ultimate test of this commitment, however, is how we provide for our customers who need most support. The Plan describes a rolling programme of improvement to the accessibility of our networks that focuses not only on physical accessibility such as step-free facilities, but also the information and customer care required to give people greater confidence to use public transport.

Our people

Our staff, and those of our contractors, are highly trained, skilled and knowledgeable. They are proud to serve London and are the human face of our organisation.

They keep our customers and users safe, help them navigate our network and are central to managing disruption. We will continue to invest in our staff through better training and ensure they have the modern equipment they need to offer an even better service to customers. We will continue extensive investment in skills development and will offer a whole range of people – from apprentices to graduates

– the opportunity to forge fulfilling careers with incredible prospects.

Value: getting more for less

We work to get the best possible value for money for fare and taxpayers.

Our ambitious £1.6bn efficiencies programme continues. We have cut waste, improved procurement and driven efficiencies across our entire organisation and in those of our contractors. We have also developed new partnerships for sharing services and functions across London government.

We are generating increased commercial income from TfL's property portfolios, with mixed-use development schemes on high-value land and convenient new services such as 'Click & Collect' shopping at stations.

I am confident that we will deliver this ambitious Business Plan. But it will not be easy and many challenges lie ahead.

Our bus network is under considerable pressure. Investment in bus services is not glamorous, but its role as a generator of economic and social value is equal to our other services. London's success has in no small part been down to higher bus patronage and the steps we have taken to improve the frequency and reach of the service. With the Capital's population booming, we must maintain and grow this vital network, particularly in outer London where buses are sometimes the only form of public transport.

Next year will see a General Election and another Government Spending Review in a continuing period of austerity. Unlike other cities such as Paris, we do not have long-term certainty over all our funding or the city's ability to retain the proceeds of growth to fund yet more growth.

The current public debate about the economic importance of cities, the value of transport connectivity and the devolution of political and fiscal decision making to cities is vitally important as we plan for the future. So is the notion that every city in the UK deserves to make its full economic contribution. London is no exception, and is indeed the most productive of all.

As we go about delivering everything in this Plan for London, we will play our part in moving that national debate forward.



Sir Peter Hendy CBE
Commissioner



London 2014

A modern dynamic city deserves a safe, reliable and high-quality transport network, to enable economic growth and job creation

This Business Plan is structured around the four pillars of our strategy: Customer, Delivery, People and Value. We explicitly link the objectives and work of our staff to these pillars and provide a clear connection to TfL's priorities and the Mayor's Transport Strategy goals.





Customers: the heart of our business

Our customers are at the centre of everything we do

We are one of the world's largest integrated transport authorities. Our purpose is to keep London working and growing, and to make life in the Capital better. This Business Plan explains how we will deliver day-to-day services for all those who rely on us, and plan for the Capital's future.

Every penny of our revenue is invested in running and improving London's transport, supporting and promoting growth and delivering economic and environmental benefits.

We plan both for today and for tomorrow. More than 30 million journeys are made on our network every day and demand is constantly rising. The city's population of 8.4 million is expected to grow to nearly 10 million by 2030. This is approximately the equivalent to a Tube train full of people arriving in London every three days.

Every journey matters and has a purpose for all our customers and users – the daily commute, a hospital appointment, a visit to friends or a shopping trip.

We deliver constant improvements, and take actions to make life easier for our customers and users, by whatever means they choose to travel. We do this by listening to and acting upon what they tell us.

King's Cross St. Pancras station

We listen to our customers and take action to provide safe and reliable transport services.



What we do

We are responsible for the London Underground, London Buses, the Docklands Light Railway (DLR), London Overground, London Tramlink, London River Services, London Dial-a-Ride, Victoria Coach Station, Barclays Cycle Hire and the Emirates Air Line.

We regulate taxis and the private hire trade, run the Congestion Charging scheme, manage the 580km red route network of the city's key strategic roads, manage road safety and operate all 6,200 of London's traffic signals. As well as improving and ensuring a safe network for pedestrians and cyclists.

Transport is central to driving economic growth, jobs and housing. In partnership with more than 14,000 organisations, we work to improve life in the Capital.

We are delivering one of the world's largest programmes of transport capital investment, which includes building Crossrail, renewing, upgrading and extending the Tube network and modernising roads to make them safer.

We are global pioneers in transport ticketing technology and Oyster is the world's most popular smartcard. We are also leading the way by introducing contactless payments across our network. This means that our customers can pay for travel directly with their debit or credit cards, removing the need to queue for tickets.

We are leaders in the provision of free, open data and make an enormous amount of information publicly available. This powers numerous travel apps and other services which allow our customers to obtain information in the way that best suits them.

We will be conducting a public consultation on our approach to transparency to launch in early December. This will ask customers and stakeholders about other information they would like from us.

Improving transport services

The core element in delivering for our customers and users is the provision of a reliable and safe service day in, day out.

Sustained investment over the past decade has led to underlying improvements in reliability across the Tube, London Overground, DLR and buses. We work tirelessly to make further improvements.

We are making the largest ever investment in the Capital's roads, streets and urban realm – more than £4bn to 2021/22 – to make our city better. We will continue to work in partnership with London's boroughs and with private developers to transform our streets and urban areas.

We already have one of the most technologically sophisticated traffic management systems in the world. Our investment will ensure it can evolve so we can get the most out of London's road network.

Bus reliability and customer satisfaction are at record highs. We continuously review the operation of the bus network to account for changes to London and are renewing the bus fleet. This includes the introduction of 800 New Routemasters – 200 more than previously planned – and by investing in customer-focused training for drivers and other staff.

On the Tube, we will complete the Northern line upgrade later this year. By the end of the year, there will be a 20 per cent increase in capacity at peak times which will allow us to carry 11,000 more passengers every hour. A new automatic signalling system on our sub-surface lines plus new, more spacious trains will increase capacity on the Circle and Hammersmith & City lines by 65 per cent, the District line by 24 per cent and the Metropolitan line by 27 per cent.

On the Piccadilly, Central, Bakerloo and Waterloo & City lines new Tube trains will be introduced which, with modern signalling technology, will provide extra capacity and be more reliable. They will be 'walk-through', air-conditioned and energy efficient.

The construction of Crossrail is now more than halfway complete, on schedule and within budget. It will add 10 per cent to London's rail capacity.

TfL Rail services, which will be operated by MTR, will start running between Liverpool Street and Shenfield from May 2015. At the same time, we will take control of the Greater Anglia rail franchise inner suburban routes, leading to service and station improvements.

On Tramlink, we will increase capacity by 50 per cent on the Wimbledon route through doubling sections of track, adding new vehicles and carrying out platform works.



Night Tube

In September 2015 we will be introducing the Night Tube, with trains running through the night on Friday and Saturday on core sections of the Jubilee, Northern, Piccadilly, Central and Victoria lines. This will not only vastly help our customers, but also support London's vibrant night-time economy, boosting business and jobs.

With an average 78 per cent increase in demand for Tube services on Friday and Saturday nights after 23:00 between 2003 and 2012, the initial Night Tube network has been designed to cover areas where there is the highest known demand. We expect to expand night-time services to include other lines across the London Rail and Underground network in subsequent years.

Our vision for the future of the Tube

From 2015, we are proposing to change the way our Underground stations are operated and improve the service we provide.

Our customers want staff visible and available to help, so we'll move them from underused ticket offices and back areas to public parts of the station such as ticket halls and platforms. Every Tube station will continue to be staffed from first train to last and we will sell tickets from our machines directly to passengers. We'll equip our employees with the latest mobile technology so they can get the information needed to help customers on the move.

Listening to our customers

Our staff understand the impact on customers when things go wrong. We are setting aside money to fix more local issues that people tell us have a negative impact on their journeys.

Our staff want to fix customers' problems quickly using their experience, common sense and their understanding of the whole transport network. We will continue to do this as efficiently as possible by giving our people the technology and training to provide the best customer service they can.



Helpful and available staff

We will move our staff from underused ticket offices and back areas to public parts of stations such as ticket halls.

We will also be investing in further support and training for bus staff. The BTEC qualification for new drivers is undergoing its usual five-yearly review and update, which provides an opportunity to significantly enhance the customer care training of new and existing drivers, supervisors and controllers.

We strive to treat every complaint with empathy and common sense, ensuring that the right remedy is provided, whether that's as simple as saying sorry, or providing a refund. We aim to get it right first time, but in instances where this does not happen we will take steps to prevent it happening again.

For those people choosing to contact us by telephone, we have moved to local rate telephone numbers for all our contact centres, significantly lowering the cost to customers.

As a further element in providing excellent face-to-face customer service, our TfL Travel Ambassador programme, a legacy from the London 2012 Olympic and Paralympic Games, continues to go from strength to strength. Ambassadors are office-based staff who are trained and equipped to support our operational employees during major events. More than 800 licensed and 1,360 non-licensed Ambassadors are regularly deployed on the network as required.



Improving the customer experience through technology

Information and online services

Providing high quality real-time information to help people move around is a core part of what we do.

Advances in technology are enabling us to serve our customers better. We know they want personalised travel information and for us to be easy to do business with. This includes enabling them to use one login to access our online products covering Oyster, contactless payments, Congestion Charging

and cycle hire. By embracing innovation we will provide prioritised information and save our customers valuable time.

Technology is also improving our ability to communicate with our customers and provide real-time information. With around three-quarters of Londoners now using the internet on mobile devices on the move, our real-time information service will keep pace with the way in which customers choose to access travel advice on all our services.

Better travel information

Our award-winning website, tfl.gov.uk, receives 250 million visits every year.

We are also investing in mobile technology through the provision of WiFi. We have partnered with Virgin Media for Tube stations and The Cloud for London Overground stations, and have WiFi access at more than 170 stations. By the end of 2014, all stations below ground will have WiFi, excluding those undergoing major construction which will have it on completion. This will allow millions of commuters and visitors to get online and find their way around London with up-to-the-minute travel information.

Our award-winning website, tfl.gov.uk, receives 250 million visits every year. Following a major upgrade in 2014 to make it more accessible to people using mobile devices, we will work with customers to evolve it to provide the services they want.

We will further develop and refine our contact database, which we use to advise people of planned service changes and events that might have an impact on their journeys. Communications include a weekly email,

which gives a roundup of service status for the coming weekend, or more detailed emails showing changes and improvements at specific locations.

We are expanding our use of social media and now have around 1.8 million followers across a range of social media channels. We are increasingly using them to provide helpful information about products such as Oyster and contactless payment.

Using information to give customers with accessibility needs greater confidence to use public transport is a priority for us. A new Twitter feed (@TfLAccess) has been launched to help, which outlines alterations to lifts, escalators or stations.

We are also improving the information for road users, by publishing detailed updates ahead of major events and large-scale engineering works.

We work closely with other transport operators to provide a consistent and joined-up view of transport options in London. It has led to a more coordinated approach when advising customers about events such as the Tour de France and the closure of part of Network Rail's London Bridge station in August 2014.

Simpler ticketing

We have now launched contactless payment on the Tube, London Overground, DLR, Tramlink, and National Rail routes where Oyster pay as you go is accepted. This means that customers can use contactless payment cards in the same way for 'pay as you go' journeys on Oyster across most of our network.

Contactless payment means that the need to 'top up' Oyster balances has been removed as the fare is charged to the customer's payment card account. People can keep track of their travel history by registering for an online account and can see their daily travel charges clearly identified on their payment card statement.

Customers using contactless payment can take advantage of Monday to Sunday capping at the same price as weekly Travelcards. We are now developing the Oyster system to mirror the benefits we have been able to introduce on contactless cards.

Our ticketing services are being expanded and integrated across London and beyond. For instance, river services will accept Oyster and contactless by mid-2016. We are also working with a number of train operating companies with a view to extending the availability of Oyster and the acceptance of contactless payment.



Simpler ticketing

Customers can use contactless payment cards across most of our network.



Safe and secure network

The rate of crime on our network is lower than ever.

A safe and secure network

Our customers deserve safe and secure transport and we are proud that the rate of crime on our network is lower than ever. We fund more than 2,500 dedicated transport police officers and Police Community Support Officers and work with the British Transport Police (BTP), City of London Police, Transport Policing Command and the Metropolitan Police Service (MPS) to ensure this remains the case.

We will create a dedicated 24-hour police function within the new MPS Roads and Transport Policing Command capable of responding to all incidents that have the potential to seriously disrupt the road network.

We have seen a long-term downward trend in road casualties and are on track to meet our 2020 target of reducing the number of people killed or seriously injured on London's roads by 40 per cent. Our focus on making our streets safe for all who use them is part of a wider road safety programme that brings together our policing partners, borough councils and the private sector.

We are rebuilding many of the Capital's junctions and are working with the boroughs to help manage speed, with more 20mph zones and limits as well as upgraded speed cameras.

Supporting road users is vital to improving safety. Work in this area starts early with a range of projects to encourage safe and

active travel to school, involving primary and secondary schools. In partnership with the police, Operation Safeway has proved a highly visible and effective way of clamping down on dangerous behaviours, and encouraging all road users to look out for each other.

This action is supported by innovative customer information campaigns such as 'Share the Road'. These use press and poster advertisements, digital media, TV and cinema commercials.

We are developing further innovative solutions for London. Trials took place and evaluation is now under way on technology that helps bus drivers detect cyclists near their vehicles. We will soon be testing Pedestrian SCOOT (Split Cycle Offset Optimisation Technique) in Wandsworth which intelligently detects groups of people waiting at pedestrian crossings and adjusts the green man time accordingly.

We are determined that freight operators in London work to the highest safety standards. We are keeping up pressure in the UK and Europe to improve vehicle design, and to ban those that don't meet the required standards from driving in the Capital.

A number of further actions will contribute to safer travel on our rail network including improvements to CCTV and lighting on our stations, plus greater staff visibility. We will also continue our successful customer awareness campaigns to encourage safe travel on the Underground and other services.



Step-free access

Since 2012 we have been introducing boarding ramps

An accessible network

As part of a huge programme to improve the accessibility of our services, more than £250m is being invested in step-free projects at a number of important locations including Bond Street, Greenford, Tottenham Court Road, Vauxhall, Victoria and Finsbury Park stations. A new £75m fund will speed up the rate at which the network is made more accessible. This will enable the installation of new lifts at around a dozen stations, in addition to the 26 Tube and London Overground stations already earmarked for improvement.

The funding will be used to match contributions from local councils and property developers for improvements to step-free access in a number of priority locations which will unlock large numbers of new accessible journeys. We are also committed to making all 30 Crossrail stations in London step-free, bringing the total number of stations step-free from street to platform to 196 across Tube, Overground (including stations inherited

through West Anglia devolution) and Crossrail, and 283 when including the wider rail network by 2020/21.

As part of major capacity schemes – including rebuilding central London stations – we’re introducing improved trains, increasing frequency with new signalling systems, providing lift access and reducing crowding. We’re also introducing low-floor vehicles with world-class customer information systems and upgrading many existing services to make them suitable for older and disabled people.

A fleet of new trains is now operating on the Circle, Hammersmith & City and Metropolitan lines, with low floors (providing level access at many platforms), wide doors, dedicated wheelchair spaces, priority seats, walk-through carriages and advanced audio and visual information. These trains are being introduced on the District line and by 2016 will be operating on 40 per cent of the Tube network.

Table 1 Accessibility

	Unit	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Higher is better								
Percentage of all rail and Underground journeys that are step-free	%	13	14	15	17	25	26	28
Bus stops fully accessible	%	82	89	95	95	95	95	95

Since 2012 we have been introducing boarding ramps at Tube stations where level access cannot be provided by other means. In 2014 we developed and gained approval from the Department for Transport (DfT) and the Office of Rail Regulation (ORR) for a new ramp design that can be used where the train is lower than the platform. This is already in use at Kilburn, Stanmore and Wembley Park stations and will soon be introduced elsewhere on the network.

We are also continuing the roll-out of wider gates at Tube stations across the network. We have already installed 370 wider gates at 184 stations, and all remaining feasible locations across the Underground network will have gates in place by the end of 2015.

Our world-leading customer information system on Victoria line trains allows us to make tailored, real-time announcements audibly and visibly that one centrally controlled, consistent and timely. We plan to introduce this on other lines in the future.

We invest heavily in our bus fleet. London’s 8,700 buses are wheelchair accessible and low-floor, with audio visual announcements to make sure passengers are kept up to date during their journey. We are making good progress to increase the number of bus stops that meet our accessibility criteria. In 2008, fewer than 30 per cent of the Capital’s 19,000 stops met these standards. This year we are forecast to pass 80 per cent and this is set to reach 95 per cent in 2016.

In 2016 we will complete the upgrade of London’s pedestrian crossings signals. By then, each one will have accessibility features including audible and/or tactile alerts that let people know when it’s safe to cross, and tactile paving to help locate the crossing point. We are also working to de-clutter pavements and make the pedestrian environment more accessible. This includes removing unnecessary signs and bollards and stepping-up enforcement against pavement obstructions outside shops.

Table 2 Customer satisfaction

	Unit	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Higher is better								
London Underground	Score out of 100	83	84	84	84	85	85	86
Buses	Score out of 100	83	83	83	83	83	83	83
DLR	Score out of 100	86	86	86	86	86	87	87
London Overground	Score out of 100	82	82	82	83	83	83	83
London Tramlink	Score out of 100	89	88	88	89	89	89	89
Crossrail ¹	Score out of 100	-	80	82	83	84	85	85
Emirates Air Line	Score out of 100	93	93	93	93	93	93	93
TLRN	Score out of 100	74	73	73	78	78	78	78
Congestion Charge	Score out of 100	82	80	81	82	82	82	82

Table 3 Passenger journeys²

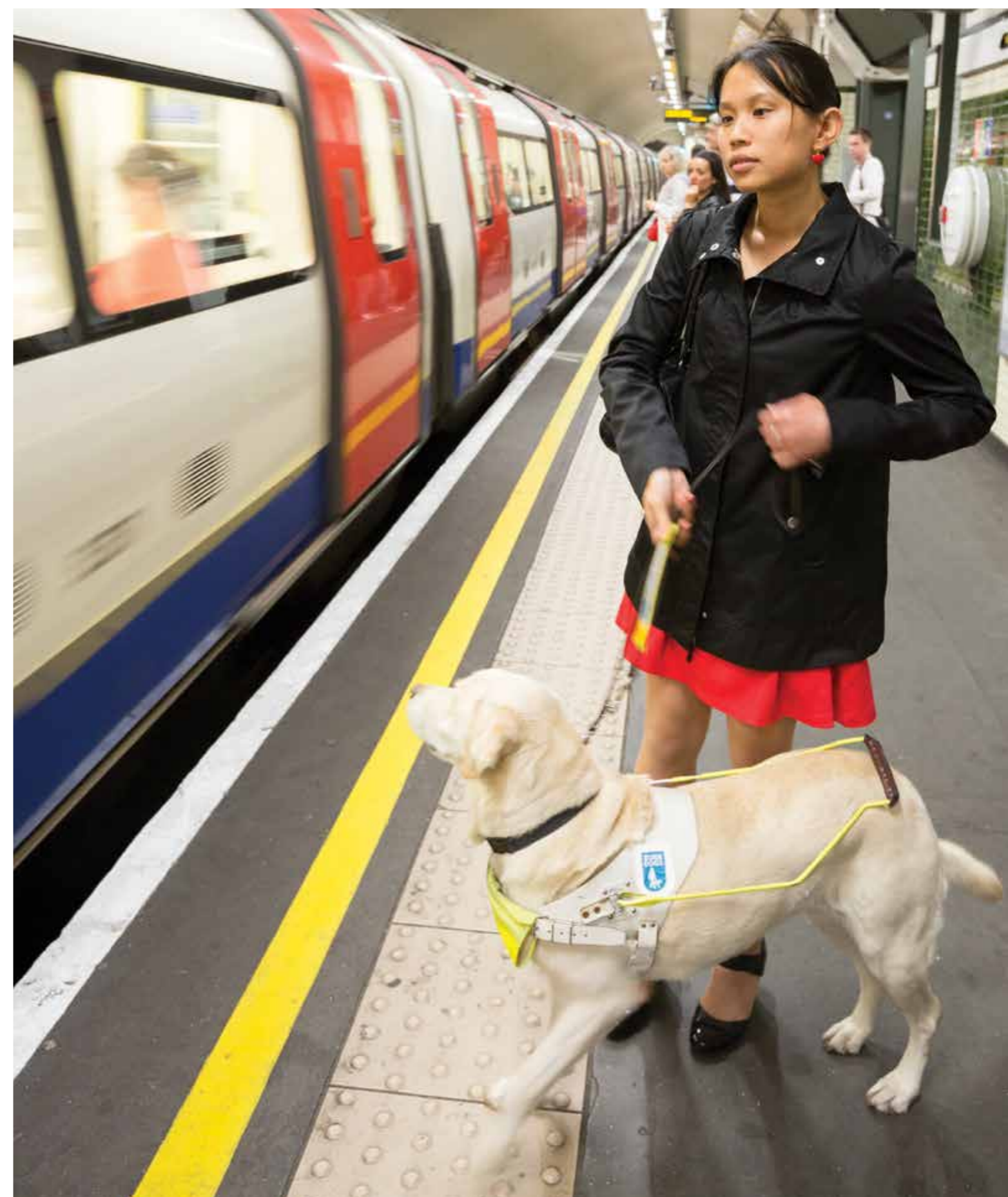
	Unit	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Higher is better								
London Underground	Millions	1,306	1,358	1,392	1,417	1,439	1,435	1,447
Buses	Millions	2,420	2,454	2,491	2,502	2,532	2,561	2,571
DLR	Millions	106.9	116.6	124.2	129.9	129.2	112.0	117.5
London Overground	Millions	138.6	166.1	176.2	186.4	204.1	216.1	222.6
London Tramlink	Millions	30.3	30.9	32.2	33.7	35.3	37.8	39.8
Emirates Air Line	Millions	1.8	2.2	2.6	2.7	2.7	2.8	2.9
London River Services	Millions	8.5	8.6	8.9	10.4	11.2	12.0	12.0

Table 4 Service volume

	Unit	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Higher is better								
London Underground	Million kilometres operated	81.7	84.3	87.3	88.7	88.5	92.0	93.3
Buses	Million kilometres operated	493	496	499	504	508	512	516
DLR	Million kilometres operated	6.0	6.5	6.8	6.8	6.9	6.9	6.9
London Overground	Million kilometres operated	8.1	10.1	10.5	10.9	10.9	10.9	10.9
London Tramlink	Million kilometres operated	3.0	3.0	3.3	3.3	3.3	3.5	3.5
Crossrail ¹	Million kilometres operated	-	2.2	2.7	2.6	5.4	9.7	11.4

¹ Crossrail KPIs will be measured from May 2015 when services begin operating

² The passenger journey forecast for Crossrail is currently being updated



A more accessible network
We are committed to making transport accessible for everyone.



Victoria station upgrade

Works on the new north ticket hall and the expansion of the existing ticket hall are well under way.

Delivery: our plans and our promises

Delivering safe, reliable, clean, sustainable and accessible transport.

With London's population increasing faster than previously thought, we need to make the most of our existing assets, expand our network, build on capacity enhancements, develop new technologies and, crucially, ensure we maintain or enhance reliability. We must also provide the best possible service for our customers, and guarantee the best value for public money.

Significant investment and a long-term capital programme over the past 10 years has allowed us to make radical improvements to benefit the many millions who use our rail, Tube and road networks. We will build on this success, completing the Northern line upgrade, increasing capacity on the Tube, London Overground, DLR and Tramlink, reducing congestion at key stations, completing Crossrail – Europe's biggest construction project – all while reducing crime, deaths and serious injury on our network, and reducing our impact on the environment.

Mayor's Tube reliability commitment

Good progress continues to be made in reducing disruption on the Tube with London Underground on track to meet the Mayor's commitment to cut delays by a further 30 per cent by 2015. We are systematically improving reliability by reducing the likelihood of delays and improving the way we respond to incidents to reduce the impact on our customers. By focusing on how we predict and prevent incidents, we will transform how we monitor and manage the network, enabling us to analyse precursors to incidents and mitigate them before they affect the service. New investment in the motors on the Central line trains, as well as a package of works to extend the life of signalling and trains on the Bakerloo line, will ensure that delays on the Tube continue to reduce beyond the Mayoral commitment.

Maximising capacity on our network

To support faster than expected population growth we will need a further 70 per cent increase in rail and Underground capacity by 2050. Our stable base of assets enables us to undertake major improvements to increase capacity and further improve reliability on the network.

Tube improvement programmes

New trains and signalling

The Sub-surface Railway upgrade is providing more frequent, more reliable and less crowded journeys for customers. It is the largest investment we are undertaking on the Tube and includes introducing 191 new, walk-through, air-conditioned trains on all four sub-surface lines – Metropolitan, Hammersmith & City, Circle and District – plus a new signalling system and control centre, power upgrades and extensive train depot improvements.

The new trains are already running on the Metropolitan, Hammersmith & City and Circle lines, and are now being introduced on the District line, with around half the fleet already renewed. All the new trains will be in service by the end of 2016.

The contract for the new automatic signalling system is being re-let after it became clear that the previous contractor was not going to deliver within the timeframe or for the agreed price, nor without considerable disruption in implementation. It is supported by a revised upgrade programme which will meet the intricate operational requirements of the oldest and most complex part of the Tube network. This project will increase capacity on the Circle and Hammersmith & City lines by

65 per cent, the District line by 24 per cent and the Metropolitan line by 27 per cent.

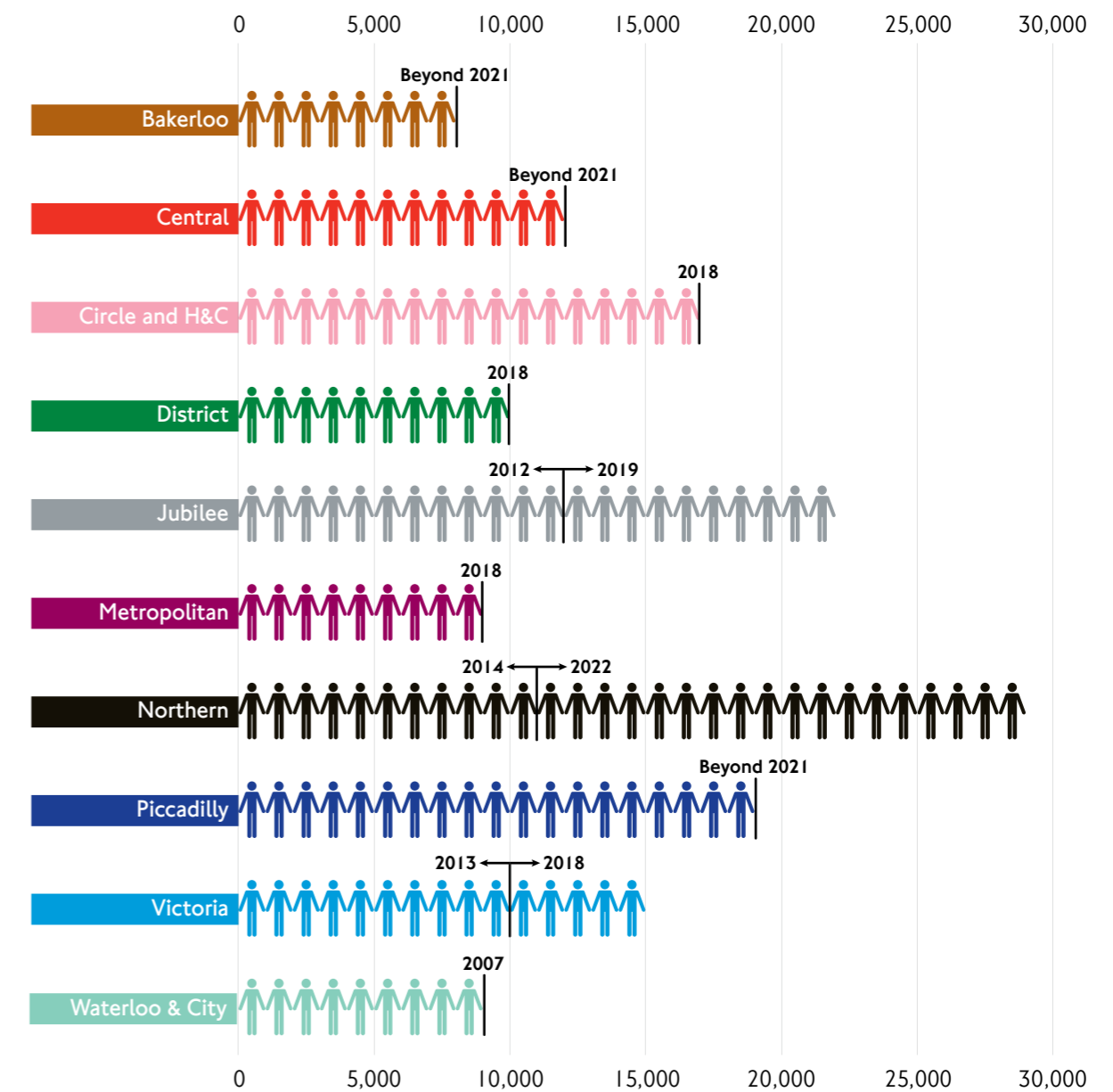
Line upgrades

The Northern line upgrade will provide a 20 per cent increase in peak capacity – an extra 11,000 passengers an hour – by the end of 2014 thanks to modern signalling equipment that allows us to run more trains more frequently with fewer failures. By March 2015, the line, which carries almost a million passengers every day, will have all 106 trains refurbished with cleaner, brighter interiors, new seat coverings and improved colour contrasting to help visually impaired customers.

A further upgrade to the Northern line will see more trains and changes to services at Kennington, and we will be able to increase train frequency to at least 30 trains an hour in peak times on each branch of the Northern line by 2022. This will allow us to carry an additional 18,000 people in the peak hour, easing overcrowding, providing additional capacity to central London and helping with the anticipated passengers from High Speed 2 at Euston. We are currently investigating further capacity and service improvements that can be made to the Northern line beyond our current plans.

The Victoria line has already seen a 21 per cent increase in capacity and is now running with 47 new trains. Last year we increased service levels again, operating 34 trains an hour at peak times. Further enabling works on the track and signalling assets will be completed by 2016, making it possible to run between 34 and 36 trains an hour – the equivalent to a train every 100 seconds in the peak.

Figure 1 Additional capacity in peak hour (since 2006)



In addition, more improvements will be made to the Jubilee line with refurbishments to the fleet and additional trains that will enable us to increase the frequency of services during the peak.

The next generation of Tube improvements

In 2015, train manufacturers will be invited to tender for the supply of around 250 'New Tube for London' trains. These higher capacity, energy-efficient trains will feature walk-through, air-cooled carriages for the first time on the deep-level Tube lines so customers will benefit from faster, more comfortable journeys. The trains will be capable of

conversion to fully automatic operation, although they will have an operator on board when they first enter service. We will work with customers, stakeholders and staff to understand how and where it is best to staff them over their 40 plus year lifespan.

Trains on the Piccadilly and Bakerloo lines are more than 40 years old and will need replacing soon, while the Central and Waterloo & City line fleets date from the early 1990s and are expected to be replaced in the late 2020s. Coordinating the sequence of these renewals is vital to ensuring our customers get the best possible service.



The Piccadilly line will lead the way with the first of these iconic new Tube trains. Signalling works on the line will begin at the end of the decade, with the first trains expected in the early 2020s, increasing peak capacity by more than 60 per cent by 2025. This will be followed by upgrades to the Bakerloo, Central and Waterloo & City lines.

Reducing congestion at stations
Vauxhall station

Around 25 million passengers use Vauxhall station annually, and demand is set to rise by up to 40 per cent over the next few years. Work is continuing to transform the station as part of a major investment designed to support the growth and regeneration of the Battersea Nine Elms area.

By the end of 2015, there will be step-free access, a new control room, increased capacity through an expanded ticket hall and an improved gateline.

Tottenham Court Road

By 2016, Tottenham Court Road station will be totally transformed and ready for Crossrail services from 2018. Once improvement work is complete, the station will serve more than 200,000 passengers every day without the overcrowding and delays currently experienced.

Customers will benefit from a new ticket hall six times larger than the current one, additional escalators to the Northern line, new entrances and step-free access to all services. Early

New Tube for London

Customers will benefit from faster and more comfortable journeys.

improvements will be completed in 2015, including two of the four new entrances and partial access to the new ticket hall, with the full opening the following year.

The project will also see the creation of a major new public space and gateway to the West End at St. Giles Circus.

Bond Street station

When Crossrail services begin in 2018, the number of passengers passing through Bond Street station will increase by more than a third to 225,000 a day. Our major scheme to re-build it will relieve congestion and improve accessibility by 2017. The work includes new escalators, a new interchange passageway to and from the Jubilee line, Central line and Crossrail, a new entrance and ticket hall as well as step-free access to every platform.

Victoria station

We are carrying out major improvements to alleviate congestion, make entry and exit quicker and easier, reduce delays and provide step-free access. The upgrade will fund an expanded main ticket hall, a new north ticket hall, improved interchange capacity and step-free access throughout.

Works to the new north ticket hall and the enlargement to the existing (south) ticket hall are well under way. Due for completion in 2018, this work will ensure that the benefits from the improvements to the Victoria line are maximised and the station better serves the major redevelopment of the area around it.

Finsbury Park

Finsbury Park is an important transport hub, providing interchange between the Tube, bus routes and mainline rail services, including Thameslink from 2018. The station's upgrade will accommodate additional demand from further enhancements to the Victoria line, improvements to the Piccadilly line and increased Thameslink services.

Customers will benefit from a new ticket hall, which will be provided as part of a major commercial redevelopment to the west of the station (maximising the opportunity provided by a third party developer), and step-free access to all lines by 2019. New interchange spiral staircases are already being used, reducing congestion and improving journey times. New gates will also be installed to safely manage passenger flow and reduce ticketless travel.

Bank station

Every morning, more than 100,000 passengers use Bank station. This vital transport hub in the City often has a level of demand that can overwhelm capacity, which means customers regularly cannot enter it until the platforms are cleared.

A new entrance to the Waterloo & City line will be constructed at Walbrook Square, providing step-free access and enhanced capacity by 2017. A new control room is also being built and the station systems are being upgraded to facilitate the new entrance and the main capacity upgrade.

By 2021, we will build a new tunnel to provide wider platforms and a new concourse. This will reduce crowding to the Northern line. A new entrance on Cannon Street will provide step-free access to the Northern line and DLR, while interchange will greatly improve with the addition of a new route, with moving walkways, from the Northern line and DLR to the Central line. These works will lead to significantly improved journey times.

Future station upgrades

To ensure the network continues to operate effectively we must enhance capacity at more Tube stations. We will initially focus on Holborn and Camden Town, and have plans for improvements to meet future demand and unlock growth in London's Opportunity Areas. We are also undertaking a detailed flood risk assessment of London Underground's stations, tracks and supporting services. We will invest in reducing the risk to the most vulnerable areas to flooding.

Holborn provides a vital interchange between the Piccadilly and Central lines. Demand for services is already high and customers can sometimes be prevented from changing lines or are held outside the station to maintain safety. The proposed works will resolve these issues and enable the full benefits of the Piccadilly line upgrade. A new interchange link and expanded ticket hall and concourse spaces will cut journey times, boost capacity and make the station step-free.

Over the past five years, demand at Camden Town has grown by 13 per cent in the morning peak and 18 per cent in the afternoon peak, resulting in increased congestion and the need for 'exit-only' station control at weekends. We are now planning to enhance the station to complement the Northern line improvements. Within the period of this plan we will begin work on a new ticket hall to help reduce capacity pressures, create new links at platform level and provide step-free access. These works will relieve crowding, make

changing services easier and make the station fully accessible. They are critical to supporting our planned future improvements on the Northern line.

Increasing capacity on the Overground

Demand for London Overground services has grown by 300 per cent in the past five years, and with the addition of the East London route to the network in 2010, overall demand has risen fourfold. This growth has outstripped capacity, causing severe peak-time congestion. To help resolve this, an extra car will be added to most four-car London Overground trains. On the East London route, the first tranche of five-car trains are already running and, by 2015, this route will have been completely converted, increasing capacity by 25 per cent. The introduction of five-car trains will begin on the North and West London routes from the end of 2015.

More frequent London Overground, DLR and tram services

Along with the increase in demand on London Overground, demand for the DLR and Tramlink has also risen by 45 per cent and 17 per cent respectively, and we expect it to increase further. To meet this we intend to boost train and tram off-peak and evening frequencies.

London Overground will run more trains on all routes during the late evening period, and provide some later last trains. This will particularly benefit locations where the night-time economy is strong, such as Dalston, Hackney and Camden.



Increasing capacity on the London Overground

By 2015, the East London route will have been completely converted to five-car operation.

DLR train frequency will rise to a minimum of 12 trains an hour in off-peak times for more than 95 per cent of journeys, and Tramlink will extend peak operating hours to include late evenings and Sundays, when demand is growing the most.

£4bn investment in London's roads

The Capital's 13,600km of roads are vital to its continuing success as a vibrant and internationally competitive city. Within this vast network we are responsible for more than 6,200 sets of traffic signals, around 1,000 CCTV cameras, 1,200km of footways, 1,800 structures, 12 major road tunnels, 40,000 lighting units, drainage and more than 40,000 trees. Every day, around 30 million journeys are made in the Capital with 80 per cent taking place on our road network. We need to ensure these journeys are reliable and safe.

We will continue to invest an unprecedented £4bn in London's roads through to 2021/22, drawing on the vision of the Roads Task Force. This involves a wholesale upgrade of the network with the best solutions for the problems road users face.

Road Modernisation Plan

The Plan includes hundreds of transformational projects designed to radically improve living and travelling conditions through safer, greener and more attractive streets and town centres, as well as safer conditions for cyclists and pedestrians. Working with the boroughs, we will make large scale improvements to bridges, tunnels and major roads, resulting in a road network that enables people and vehicles to move more efficiently, safely and reliably around London.

Making road assets more reliable

We are continually improving how we maintain our roads, from employing new repair techniques for potholes to installing low-energy street lights and traffic signals.

Over this plan we will convert thousands of street lights to new LEDs and put in place a central management system for remotely monitoring and setting lighting levels. This will reduce the electricity required by 50 per cent. We have introduced innovative ways to deliver maintenance through the London Highways Alliance Contract (LoHAC). Together with our partners in the boroughs we have worked to develop contracts which have saved an additional 15 per cent on highways works.

Our Structures and Tunnels Investment Programme (STIP) involves major renewal and replacement works on the Capital's most important bridges and tunnels over the next 10 years. Many of these assets have been prioritised for vital work because of their poor state of repair and existing restrictions. They include Hammersmith Flyover, Chiswick Bridge, Fore Street Tunnel, Upper Holloway Bridge, Power Road Bridge and Woodlands Retaining Wall. The works include repairing and renewing concrete and metal components, waterproofing bridge decks and replacing old mechanical and electrical equipment in tunnels.

Major road schemes

Elephant and Castle: Radical changes at the northern roundabout will reduce the impact of traffic and make the area feel cleaner and greener. Our proposals include the removal of the roundabout and the creation of a major new public space in and around the new peninsula. This will transform the area for those who live, work and travel in Elephant and Castle.



Euston Circus

We invest in major road schemes that improve important links and junctions.

Oval Triangle: In August 2014, we finished consulting on a substantial redesign of four junctions around Oval Tube station. The objective of this scheme is to radically improve cycling provision and safety. Improvements include segregated and mandatory cycle lanes through the junctions, separate traffic light phases, larger advanced stop-lines for cyclists and redesigned pedestrian crossings.

As recommended by the Roads Task Force, we continue to invest in major road schemes that tackle the key links and junctions where there is existing or forecast congestion, competition for space, or where roads simply aren't working properly. This means re-thinking how roads and places work to make them more user-friendly, greener and safer. We have begun a number of programmes to improve how the network functions, maximise



Maximising traffic flow through innovative technology

redevelopment opportunities, support local economic activity, enhance safety and urban realm benefits, and maintain or improve public transport performance.

Improvement works have now finished at Tottenham Hale and Euston Circus. This year we will complete schemes at Colliers Wood and Malden Rushett and begin construction at Elephant and Castle. Following public consultation, transformational projects in Wandsworth town centre, Croydon Fiveways, Euston Road, Old Street and Vauxhall Cross will begin soon. Development work will also continue on projects at King's Cross, Waterloo and Highbury Corner.

Works will also take place at important centres, such as Hounslow town centre and areas that get lots of visitors, such as Tottenham Court Road, and projects that enhance the public realm around interchanges, such as Ealing Broadway.

We will continue to work with and fund boroughs to deliver major schemes that transform town centres and local places. We seek to address all road users' needs; enhance the public realm; improve and regenerate local areas; support trips made by walking, cycling and public transport; improve safety and reduce the fear of crime.

Working with stakeholders

We continue to work closely with utility companies and our contractors to minimise disruption to the road network, saving 3,616 days of disruption in 2013/14 through joint working and early engagement with utility companies. We will build on this approach over the life of this plan.

Block closures have been introduced, minimising the number of works required for a single location. This involves contractors performing a range of works in a single night, with no need to do any more later. These are now being rolled out over the TfL Road Network (TLRN).

A total of 350 traffic management plans have been agreed for cycle highway and structural maintenance works, covering roughly 100km of the TLRN. These works could potentially incorporate more than 5,700 hours of collaborative works a year. We are arranging for these works to be viewed on our website for customer information. We are also developing guidance and instructions for developers, area coordination working groups and joint construction logistics initiatives to address the continuing increase in development in London.

Split Cycle Offset Optimisation Technique (SCOOT)

We will equip another 1,500 traffic signals across London's Strategic Road Network with SCOOT technology. This allows us to optimise signals and traffic flow in response to real-time traffic conditions. Further enhancements to SCOOT will allow the system to take account of pedestrian and cyclist demand. The first 200 sites were completed in September 2014.

Surface Intelligent Transport Systems (SITS)

To deliver a road network fit for the 21st century, we need an approach to managing road space that gets the most from the existing network and technologies such as SCOOT, Variable Message Signs and CCTV. We are introducing new intelligent sensors that allow us to balance the competing demands for road space. The SITS programme will enable us to manage road space in real-time and provide the capability to unlock additional road capacity, improve journey reliability, and customer information.

Pedestrian Countdown

The project to install Pedestrian Countdown at 200 traffic signal sites across the Capital was successfully completed in March 2014. We now plan to double this to 400 sites by 2017.

Our bus network

The Capital's population is growing faster than any other European city. From 2015, London bus journeys are anticipated to rise by six per cent to almost 2.6 billion a year by 2020/21, with the network now increasing by five per cent from 493 million kilometres to 516 million kilometres. This is a substantial increase on the three per cent previously planned. Despite the impact from increasing traffic flow, bus reliability is at its best ever level. We plan to maintain our historically high levels of reliability and customer satisfaction over the whole plan period.

We will continue to improve the reliability of the bus network by investing a further £200m in targeting key locations across London on both the TLRN and borough roads, delivered through two parallel initiatives – the Bus Priority Pinch Points programme and the High Quality Bus Priority Corridors programme. Initially, we will look at around 30 key pinch points on the bus network affecting half of all bus journeys in the Capital. The Corridors programme will enable new developments in London's Opportunity Areas by improving their links to the wider public transport network.

Table 5 Reliability

	Unit	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Lower is better								
London Underground: total Lost Customer Hours	Millions of hours	22.67	18.84	18.38	17.67	16.99	17.00	16.81
London Underground: Excess Journey Time	Minutes	4.79	4.50	4.48	4.48	4.48	4.23	4.02
Buses: excess wait time	Minutes	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Serious and severe disruption (planned)	Hours	1,000	1,500	1,500	600	600	600	600
Serious and severe disruption hours per event (unplanned)	Hours	2.1	2.2	2.2	2.0	2.0	2.0	2.0
Higher is better								
DLR departures	%	98.8	99.0	99.0	99.0	99.2	99.2	99.2
London Overground PPM	%	96.0	95.0	95.0	95.0	95.1	95.2	95.2
Crossrail PPM ¹	%	-	94.0	94.3	94.5	94.8	95.0	95.0
TLRN journey time reliability	%	88.0	87.0	86.0	90.0	90.0	90.0	90.0
Percentage of carriageway in good state of repair	%	91	92	92	92	93	93	93
Percentage of footway in good state of repair	%	93	93	94	94	94	94	94
Traffic signal availability	%	99.1	99.1	99.1	99.1	99.1	99.1	99.1

¹ Crossrail KPIs will be measured from May 2015 when services begin operating

We are also planning to trial on-bus passenger counting using CCTV to reduce bus overcrowding on specific routes. This displays the number of vacant seats on the bus to encourage people to use the upper deck if seats are available.

Working with the freight industry

Freight activity underpins London's economic performance and growth. The industry ensures the Capital's many shops, organisations and vital services have sufficient supplies to carry out their business. Freight delivery is expected to increase as the economy and population grow, and as customers buy more online goods. By 2031, van deliveries alone are expected to increase by 35 per cent.

For the 2012 Games we changed our approach to freight management and experienced great success. Building on this, we're continuing to strengthen engagement with the industry – both with operators and the businesses they serve – helping them move more deliveries outside the busiest times, use the safest vehicles and improve driver training. This shift in delivery schedules will mean more efficient, safer, and environmentally friendly deliveries and servicing, and will support the development of a new Freight Strategy for the Capital.

Harnessing the Thames' potential

We want river services to become an integral part of the Capital's transport network. The Mayor's River Action Plan outlines specific measures to get more customers travelling by river. Our target is to achieve 12 million passenger journeys by 2020 – a 40 per cent increase on current levels.

There has been a 25 per cent rise in passenger numbers this summer (May to September 2014) compared with the same period in 2013, with more than 4.4 million passengers using the river. This strongly supports the activity carried out as part of the River Action Plan and has also been helped by major river events such as Totally Thames and the Tall Ships Regatta. The River Action Plan draws together many different ways of encouraging the use of river services, including: targeted marketing activity; improvements to piers (such as repainting, and new signage and lighting); increasing capacity at Bankside, Embankment and Westminster piers; and working with partners to develop new piers (the next to open will be Plantation Wharf in 2015).



Crossrail

The new rail link is vital to London's future as it will increase the city's rail network capacity by 10 per cent.

Unlocking growth for the future of London

Crossrail

In 2014, Crossrail construction reached its halfway point and next year we will finish the 42km of new twin-bore tunnels that will carry services through central London. From late 2014, as the engineering work approaches its conclusion, we will shift focus to tunnel and station fit-out and systems integration. Together with Crossrail and Network Rail, we will continue works on the outer sections, including 150km of overhead line electrification, signalling upgrades and improvements to inherited stations, including improvements to gatelines, signage, ticket machines and station cleanliness. All Crossrail stations will be step-free through additional accessibility schemes recently announced at Maryland, Manor Park, Hanwell, Seven Kings, Langley, Taplow and Iver.

Earlier this year, MTR Corporation was appointed to run services and will be initially taking over those running east of Liverpool

Street from 2015. The first new 200-metre long trains – currently being manufactured in Derby by Bombardier – will begin operating from early 2017 with full services through the central tunnel section from the end of 2018.

Crossrail will connect the outer suburbs in Reading in the west to Shenfield and Abbey Wood in the east with frequent, high-capacity services to Heathrow Airport, the West End, the City and Docklands. New central London stations will be integrated with the Tube at Paddington, Bond Street, Tottenham Court Road, Farringdon, Liverpool Street and Whitechapel.

The service is vital to London's future and will expand the city's rail network capacity by 10 per cent. It will also help to reduce congestion, increase capacity and alleviate crowding on many Underground lines, as well as on DLR and Southeastern train services. It will also generate £42bn for the UK economy.

More than 1.5 million more people will have access to quick, direct links to the heart of the Capital.

Crossrail 2

This major new rail line for London and the South East will also be essential to meet the needs of a growing capital city. It will be pivotal in reducing overcrowding on otherwise congested services and stations, adding 10 per cent to the Capital's total rail capacity. It will also underpin the delivery of thousands more homes for Londoners.

We have completed the initial development of a financing study following the award of a Government grant. A public consultation showed strong support for the service with 96 per cent of respondents in favour of the line. We are now developing proposals and plan to undertake further route-wide consultation in 2015, followed by powers to build the link in the 2020s.

Bakerloo line extension

We have started consulting on extending the Bakerloo line south into New Cross, Lewisham, Bromley and Hayes. The extension would provide much needed capacity and connectivity to southeast London where predicted population growth will increase the pressure on the area's existing rail and road networks. The extension would also provide quicker journey times, support development and regeneration, and relieve crowding on the existing National Rail routes.

Elephant and Castle

The Elephant and Castle area is undergoing major transformation with significant investment

to create 6,000 new homes, a redeveloped shopping centre and a re-modelled street network. Improvements to the Underground station are vital to help open up growth potential. The enhancements are still in the early planning stages, but it is proposed that work will be completed in 2019. It will include a new Northern line ticket hall – integrated with the re-development of the shopping centre – plus three new escalators and step-free access to the Northern line platforms.

Construction of the redesigned northern roundabout will begin in 2015. This will result in changes to the road layout, which will improve facilities for all road users, enhance the local environment, enable two-way traffic, and introduce dedicated cycle routes, surface-level crossings and create a more accessible public space.

Tottenham Hale

Tottenham Hale is one of the major centres for growth within the Upper Lea Valley Opportunity Area. Significant transport investments are being made to support the delivery of 5,000 new homes and 4,000 new jobs. Tottenham Hale station is a strategic interchange, providing links to Stratford, Liverpool Street, the West End and Stansted Airport, and will sit at the heart of a new district centre. An essential upgrade of the station is committed to increase capacity, improve interchange and reduce journey times at this strategic interchange, while also enhancing its status as a gateway to the growth area.

A lead contractor will be appointed in 2015 to deliver the upgrade, with a proposed completion date towards the end of 2017. The



Northern line extension

The Northern Line Extension (NLE) is a £1bn project connecting Kennington on the Northern line to Battersea Power Station, with a new intermediate station to be built at Nine Elms. This project will help regenerate the Vauxhall Nine Elms Battersea Opportunity Area, cutting journey times from Battersea to central London to under 15 minutes, and help create up to 24,000 new jobs and 18,000 new homes as part of wider regeneration plans. Having received the go ahead in November 2014 from the Secretary of State for Transport, the extension will be delivered in 2020.

A six-year contract to design and build the NLE has been awarded to Ferrovial Agroman Laing O'Rourke. The contract covers the main construction works including twin-bore tunnels, two stations, two vent shafts and track. The project will be financed by GLA borrowing, repaid entirely from developers' contributions, the Community Infrastructure Levy and income from incremental business rates. Battersea Power Station Development Company is also contributing significant funds to the scheme's development.

station works will build on the completion of our £34m transformation of the Tottenham Hale gyratory system to a two-way highway that is better for pedestrians and offers a higher quality public realm. These works, completed in 2014, also included the delivery of a new bus station which along with the upgraded station will form a fully integrated, accessible transport interchange.

River crossings

East London is expected to benefit from the Capital's population and economic growth. The availability of land in this area allows for major residential and commercial development, but we need to underpin this with transport infrastructure and new river crossings, linking it to the wider economy.

We are planning to build a road tunnel at Silvertown, providing resilience and congestion relief to the Blackwall Tunnel and supporting local regeneration, including an expected 13,000 new jobs and up to 25,000 new homes in the Royal Docks and Greenwich peninsula. We started consultation on our plans in October 2014.

Expanding our rail services

Since opening in 2007, London Overground has become ever more popular with our customers. It is currently one of the most punctual railways in the UK, with 96 per cent of trains arriving at their destination within five minutes of their scheduled arrival time. Owing to this success, Government has agreed that the West Anglia inner suburban routes, which operate from Liverpool Street to northeast London, should be transferred to TfL.



Tramlink upgrades

The service now carries 31 million passengers a year.

Customers can expect to see staff at all London Overground-managed stations while trains are running plus improvements to station safety and security, including Help Points and CCTV. They will also see accessibility improvements with a turn-up-and-go service for people needing assistance. Customers will be able to use Oyster and contactless payments, getting the same pay-as-you-go fare at these stations as on our other Tube and TfL rail services, with full access to our extensive multi-media travel service information.

All stations will be deep-cleaned and new ticket machines will be installed. Trains will also be deep-cleaned, before being replaced in 2018. These will have improved seating layout, air conditioning and provide a more comfortable journey.

The Gospel Oak to Barking line will get higher capacity, four-car electric trains from 2017 to replace existing diesel stock. These trains have better acceleration and braking performance, which helps reduce journey times. They

also allow for more passengers and are more energy-efficient (emitting 20-30 per cent less carbon than diesel trains). Subject to funding we are aiming to extend the route to serve a new station at Barking Riverside, reducing the journey time between Barking Riverside and Canary Wharf by eight minutes. This is one of the largest Growth Opportunity Areas in the country with outline planning permission for 10,800 new homes. This extension forms part of a wider transport improvement plan in the area. The regeneration benefits, in terms of reduced unemployment, are estimated at £13m per annum, and more households will boost the local economy by up to £47m a year.

Tramlink upgrades

Demand for London Tramlink has doubled since 2000 and the service now carries 31 million passengers a year. With south London's population and job market growing, demand is expected to continue rising. Four new trams have been ordered to alleviate congestion on the route between Wimbledon and Croydon, with the first arriving in mid-2015. These new vehicles, combined with 'double-tracking'

and platform works at Wimbledon, will boost capacity by 50 per cent on this section and improve access to central Croydon by allowing 12 trams an hour to run in each direction during peak times. These improvements will help to open the local job market by providing an additional 25,000 people with a journey time of less than 60 minutes to central Croydon.

The Westfield-Hammerson shopping centre development in Croydon will open in 2018, creating 5,000 jobs and increasing Tramlink passengers by two million every year. The Dingwall Road loop – jointly funded by ourselves and Westfield – will see up to 30 trams an hour on the eastern branches into Croydon, providing a significant increase from today's 22 trams an hour.

Subject to business cases and affordability, further schemes, such as an extension, could be progressed towards the end of the plan.

The DLR – continuing to regenerate east London

Since its launch in 1987, the DLR has been at the heart of east and southeast London's regeneration. This is set to continue over the life of this plan. Last summer we started work on doubling a section of track at Pudding Mill Lane which will increase capacity by 1,100 passengers in peak times between Stratford and Canary Wharf from 2015. The second phase of the project, to be finished in 2019, will complete the doubling of all track between Stratford and Bow Church, enabling further capacity. Train reliability will also be improved,

and the project will further promote the continuing growth and regeneration of the area.

Capacity increases are also planned for the Royal Docks Opportunity Area. Extra DLR vehicles will double the frequency on the Beckton branch to 15 trains an hour, Stratford International to Woolwich Arsenal services will have three-car trains, and Beckton Park and Custom House stations will be upgraded before Crossrail opens. These improvements – funded by TfL, Asian Business Port (ABP) & Royal Albert Dock, Royal Wharf and London City Airport – will underpin the growth of the Royal Docks, which is forecast to become the Capital's third largest business district, supporting 15,000 jobs at Royal Albert Dock and a further 12,000 at Silvertown.

Enabling growth

In addition to the investment in these notable projects to support the growth of London and provide wider transport benefits, a specific targeted fund has also been established. This TfL Growth Fund is designed to address specific transport blockages that would otherwise prevent development happening in areas with the potential for significant growth and where such funding can help unlock wider funding packages with developers, boroughs and other partners. There is £30m a year focused in priority areas on transport improvements which are key to unlocking growth and supporting new homes and jobs. We are continuing the roll-out of this Fund, increasing it from the currently available £300m to £360m over the next 10 years.



The DLR

Doubling trackworks will increase capacity between Stratford and Canary Wharf from 2015.

Current allocations include Vauxhall, Barking Riverside, Elephant and Castle, Woolwich, West Ham and Tottenham Hale.

Working with the boroughs to improve the urban realm

We will continue working with the boroughs to support transformational urban realm schemes across London. So far, we have completed improvements at Exhibition Road, Jubilee Gardens, St Paul's and Clapham Junction station entrance, enhancing the public realm,

regenerating local areas and supporting walking and cycling.

We are currently working on 27 projects, including improvements to Tottenham Court Road, Ealing Broadway and other key town centres. We will maximise the opportunities and benefits these projects can provide including improving air quality, managing flood risk and delivering a high-quality urban realm.

Making life in London better

The services we provide and our continued investment in them help to make the Capital a place where people want to live, work and visit. Our commitment is not only to improve the streets, but also make them safer and more welcoming. We must also focus on making improvements across all London's roads, as everyone benefits when they are safer, less congested and able to support thriving local businesses.

As part of this, we are committed to meeting our wider environmental and social responsibilities and are working to maximise these benefits within all our programmes.

The Mayor's Vision for Cycling

More than 580,000 cycle journeys are made every day in the city and this number continues to rise. Since 2001, cycling trips on London's main roads have almost trebled and by 2020 we expect more than a million journeys will be made by bike every day. We will invest through to 2020/21 and beyond, ensuring that the Mayor's target of increasing cycling journeys by 400 per cent by 2026 is met.

High levels of cycling make more efficient use of limited road space and can reduce congestion and traffic emissions, while improving Londoners' health through active travel and a cleaner environment. All of these help make the Capital a more pleasant city to live and work in.

The Mayor published his Vision for Cycling in March 2013, outlining plans to spend £913m through to 2021/22. This investment will

provide a major boost to cycling, supporting the growing numbers of cyclists in central London and encouraging further growth across the Capital.

The spending falls under four main categories:

- A network for the bike**
 A network of cycle routes will be developed across the city including Quietways, a Central London Grid, Cycle Superhighways and the creation of up to three Mini-Hollands in outer London boroughs
- Safer streets for the bike**
 A range of measures to improve cycle safety, including targeting dangerous HGVs and altering junctions to make them cycle friendly
- More people travelling by bike**
 A number of initiatives will be developed and expanded to make cycling a more mainstream and popular mode of transport
- Better places for everyone**
 At the heart of this strategy is the notion that helping cycling will benefit everyone, not just cyclists. The improvements will create high-quality places with less traffic, more trees and a better environment for all

The scope of the infrastructure programmes includes identifying and surveying routes, building and enhancing new and existing cycling infrastructure, plus high-profile branding and wayfinding. This requires working with the London boroughs and a wide range of stakeholder organisations.



An artist's impression of Vauxhall's proposed segregated Cycle Superhighway track. We continue to improve infrastructure for a growing population of cyclists.

Central London Cycle Grid

In central London, Cycle Superhighways and Quietways will form a grid-like network of high-volume cycle routes, which are better and safer, while contributing to the overall rise in cycling numbers. The majority of the grid routes will be Quietways. These underused, quieter streets offer a ready-made opportunity to carry more journeys with minimum additional congestion on main roads and an alternative route for those cyclists who wish to avoid heavy traffic. The grid will be developed in partnership with the central London boroughs, and will complement and integrate with existing cycle routes.

A public consultation on the agreed alignment took place this summer and the first parts of the route will be delivered before the end of 2014. More than half of the grid will be in place by 2016.

Quietways

The Quietways will be a network of radial and orbital cycle routes throughout Greater London. They will be well-signed, linking

important destinations that follow direct back-street routes, through parks, along waterways or tree-lined streets. They will be designed to overcome the most important barriers to cycling, encouraging less confident cyclists who want a safer cycling experience, while providing for cyclists who want to travel at a slower pace. Every London borough will benefit from the programme. This network will complement the Central London Grid, Cycle Superhighways and Mini-Holland initiatives.

The first Quietway routes will be in place in 2015.

Cycle Superhighways

Four Cycle Superhighways (CS) were constructed in 2010 and 2011, while an extension to CS2 – from Bow to Stratford – was launched in late 2013. These routes are designed to increase cycle safety, providing space for both the novice and expert cyclist, and in turn boost cycle use in London. These routes have seen cycle trips rise by an average of 77 per cent since opening, with

30 per cent from either new trips or from individuals switching modes. Future routes will be designed to even higher standards and existing routes upgraded, in line with the aspirations set out in the Mayor's Vision for Cycling.

By 2016 four new routes will open, subject to public consultation. These include the East-West Cycle Superhighway, which will be one of the longest substantially segregated continuous cycle routes of any city in Europe. It will link CS3 at Tower Gateway to west London via Victoria Embankment, Parliament Square and Hyde Park. The North-South Cycle Superhighway will connect CS7 at Elephant and Castle to King's Cross, via Blackfriars Bridge – an area that currently sees a cyclist every two seconds in the morning peak.

CS1 will be a direct, back-street Cycle Superhighway connecting Tottenham Hale to the City, running parallel to the A10. CS5 will open between Oval and Belgravia via Vauxhall Bridge, providing segregated lanes for cyclists and avoiding Vauxhall gyratory, one of the most intimidating junctions for cyclists.

A substantial upgrade to CS2 will be completed between Bow and Aldgate, introducing separated cycle lanes and improved junction layouts along the majority of the route – as well as improvements for bus passengers.

Public consultations will be completed for all four routes by the end of 2014.

Mini-Hollands

The greatest potential for increasing cycling journeys is in outer London. The Mini-Hollands Programme aims to transform three outer London boroughs into cycling-friendly town centres, reducing pressure on local public transport services and congestion. The three successful Mini-Holland boroughs – Enfield, Kingston, Waltham Forest – were announced in spring 2014, and initial consultation and development is now taking place.

Eight boroughs were shortlisted under the Mini-Hollands programme, with three securing full status and funding of up to £30m each. We will work with all the other shortlisted boroughs to take forward substantial parts of their bids to improve cycle routes and facilities.

Better junctions

We have worked with our partners and stakeholders to improve cycling provision at some of the Capital's biggest and busiest junctions. Following the publication of the Mayor's Vision for Cycling in London, we are concentrating on redesigning 33 high-priority locations across London.

We expect a number of important improvements to be in place by May 2016. The aim is to provide improved facilities for existing cyclists and attract new ones by breaking down negative perceptions associated with the dangers of cycling, as well as improving safety.



Kingston

The Mini-Holland programme aims to transform three London outer boroughs into cycling friendly town centres.

We will carry on working closely with our stakeholders to develop junction design. Our design review group will continue to bring together key stakeholder groups and representatives from the boroughs and police. We will also continue to consult with the public before finalising designs. Following a consultation earlier this year, work is due to start at Elephant and Castle in 2015, with completion expected in 2016.

Other schemes are planned to improve intimidating gyratories including Archway, Swiss Cottage and Stockwell, as well as junctions and roundabouts such as Old Street roundabout, Westminster Bridge roundabout, Kew Junction and Lambeth Bridge North and South roundabouts. During 2015/16 schemes will be completed at King's Cross, Blackfriars, Oval and Stockwell and construction started at Archway and Swiss Cottage.

More people travelling by bike

In addition to improving road infrastructure, we are working with partners across London

to improve cycling facilities, run world-class cycling events and provide further cycle training and education to encourage more people to travel by bike.

Our Cycle Parking Programme aims to provide sufficient, secure and safe cycle parking. We created an extra 66,000 cycle parking spaces between 2008 and 2011 and are set to deliver a further 80,000 by 2015/16. We are committed to improving the provision for cyclists at railway stations and are working with boroughs and Network Rail to identify further locations in the Capital.

Major events in summer 2014 drew huge crowds, inspiring more people to cycle. London hosted Stage 3 of the Tour de France, with more than one million spectators lining the route. We also hosted Prudential RideLondon – a weekend of cycling activities that included the women's Grand Prix and the Prudential Surrey Classic 100. The latter attracted 20,000 riders despite torrential rain. Research shows these events are instrumental

in widening cycling’s appeal – cycling increased by eight per cent after the 2007 London Tour de France stage.

Borough cycling programme and Local Implementation Plans (LIPs)

London boroughs play a huge role in delivering the Mayor’s Vision for Cycling. The borough cycling programme has so far awarded more than £17m across the 33 London boroughs between 2014/15 and 2016/17, for many cycling initiatives. These include residential, on-street and station cycle parking, adult and child cycle training, and safer urban driving courses to improve lorry, van and coach driving.

In 2013/14, more than 9,500 cycle parking spaces were created and over 24,000 children received cycle training. In addition, LIPs funding helped complete the Holborn Circus project in the City of London, transforming a notoriously dangerous junction.

Barclays Cycle Hire

The Barclays Cycle Hire scheme now covers more than 100km² of the Capital with over 10,000 bicycles. The scheme was expanded into south and west London at the end of 2013. Our focus now is to identify and intensify further docking stations in areas of high demand, expand services to the Queen Elizabeth Olympic Park, and investigate integrated ticketing with wider solutions. Intensification of sites will make redistribution easier and more efficient and mean more bikes and docks are available in key locations.

E-bikes

The Mayor’s Vision for Cycling made a commitment to trial public-hire electric bikes to encourage even more people to switch to cycling. We completed an e-bike feasibility study in 2014/15 in partnership with the London Borough of Haringey, with the study forming the backbone of a full trial expected to be completed in 2015/16.

Table 6 Cycling levels*

Index	Units	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Higher is better								
Cycling levels on the TLRN (2005-2009 base)	Index	353	366	380	393	407	420	433

* Following publication, the dates in Table 6 were inaccurate and have now been amended. The original was published as follows: 2016/17 – 380; 2016/17 – 393; 2017/18 – 407



Legible London

More than 1,300 signs are installed across nearly every borough.

Encouraging walking in the Capital

We provide financial support to London boroughs through the LIP process to help increase the number of walking trips. In 2013/14, significant improvements were made to Clapham Old Town, Holborn Circus, Bromley North Village and Tolworth Broadway, to provide high-quality improvements to pedestrian accessibility, safety and public spaces.

Legible London

Helping those who visit, live and work in the Capital to move around the city easily is crucial to its continued success. With more than 1,300 signs installed across nearly every borough, Legible London is a world-class system for navigating the city. We will continue to work

with developers and boroughs to expand the coverage of signs across London, aiming for 3,000 by 2021.

We have introduced the innovative interliths – walking maps and information combined with illuminated transport beacons – at Paddington and river piers, and will also install them at the new Crossrail stations.

Walk London

We will continue to develop the Walk London network and associated events. Over three weekends in 2014/15, we aim to attract 12,000 people.

Reducing casualties and fatalities – targeting vulnerable road users

Around 80 per cent of the people killed or seriously injured (KSI) on London's roads are either walking, cycling or riding a motorcycle. We need to improve the safety of these vulnerable road users through:

- Issuing data and maps of high pedestrian risk locations among the bus, taxi and private hire industries to increase their awareness of accident hotspots
- More Pedestrian Countdown facilities installed across the Capital
- Town centre safety pilot programmes to reduce risks to pedestrians and promote more walking trips
- Reducing further motorcyclist KSIs by working with the police to make better use of offender retraining for motorcyclists as an alternative to prosecutions
- Working with the motorcycle industry and local boroughs to promote the use of personal protection equipment by motorcyclists, which significantly reduces the severity of injuries when involved in a collision. We will also work with representatives from the motorcycling industry to launch a new Motorcycle Courier and Delivery Code

We will continue to prioritise cycling safety with the major infrastructure programmes outlined in the Mayor's Vision for Cycling in London. As the Central London Cycling Grid, additional Cycle Superhighways and the first of the Quietway routes take shape, cyclists will have

more world-class cycling infrastructure to keep them safe. We will also publish planned and emergency diversion routes, which take cyclists along the safest and most direct routes when usual cycle routes are unavailable.

We will continue our education and training activity, targeting the most vulnerable road users. Our road safety education programme will target children of all ages, from pre-school, with the Children's Traffic Club, through to secondary school.

Harnessing technology to improve safety

We have begun trialling Intelligent Speed Adaptation (ISA) on London's buses to understand the potential role this technology can play in observing speed limits.

We have carried out trials of optical and radar pedestrian and cyclist detection systems for buses and are considering further use of driver awareness technology on London's bus fleet.

Safety cameras

The use of safety cameras to enforce speeding and red light offences has seen a significant drop in road traffic accidents. As a result, there have been far fewer fatalities or serious casualties. Working with our partners in the London boroughs and police, we will replace old wet film cameras with new digital safety cameras and identify potential new sites where cameras are the most effective solution to reduce speed-related fatalities and collisions. We will also trial innovative average speed cameras – replacing spot speed cameras – on a number of roads.

Working with the police to improve safety

We will continue to fund the MPS Cycle Safety Team and carry on with the Exchanging Places programme, which gives people the opportunity to sit in the cab of a large goods vehicle and learn how to share the road safely. More than 10,000 people have now taken part in the programme, with the scheme winning the prestigious Prince Michael International Road Safety Award. We will double the number of Exchanging Places events from 2015.

Improving the safety of freight vehicles

Freight disproportionately contributes to road casualties – 20 per cent of 'all road' casualties and 50 per cent of cycling casualties involve freight vehicles, even though they only make up 16 per cent of traffic. We will implement freight-specific measures to reduce fatalities and casualties, including:

- Launching the UK's first Safer Lorries Scheme, in partnership with the Mayor, London's boroughs and Heathrow Airport, following consultation in 2014. The Scheme will require heavy goods vehicles in the Capital weighing more than 3.5 tonnes to be fitted with sideguards and/or extended view mirrors subject to a limited number of exemptions. The Scheme will operate across London 24 hours a day, seven days a week, covering the same area as the Low Emission Zone
- Working with the freight industry to ensure half of all commercial vans and lorries operating in London will be accredited as meeting safety standards through the Fleet Operator Recognition Scheme by 2016
- Employing only companies that meet a monitored set of stringent road safety standards and promoting this approach to other organisations
- Promoting the common code of practice work-related road risk developed through

our successful collaboration with the construction and waste sector

- Working with vehicle manufacturers and regulators in the UK and Europe to improve vehicle safety by defining better standards for future vehicle design by the end of 2015. This includes reducing blind spots and maximising the area visible from the driver's cab
- Continuing to press Government for a mandatory road safety module in the Driver Certificate of Professional Competence (CPC) syllabus and for it cover the safety of vulnerable road users such as cyclists and pedestrians
- Ensuring our own fleet and those we employ meet a monitored set of stringent road safety standards and promoting this approach to other organisations
- Working to ensure every lorry and van driver in London is trained to be more aware of vulnerable road users. A total of 4,000 driver and 800 manager training places will be available every year and a van operator toolkit incorporating driver training will be developed and piloted by April 2015
- Working with the MPS, City of London Police and the Driver and Vehicle Services Agency (DVSA) so the Industrial HGV Task Force can continue to improve the safety of all vulnerable road users through education and enforcement. The Task Force will also continue to crack down on non-compliant HGV operators and drivers in the Capital reducing the risks and dangers on London's roads
- Developing initiatives to tackle the environmental impact of delivery and servicing by April 2015

Reducing crime further

The rate of crime on TfL's public transport system is at its lowest ever level, with very few passengers experiencing or witnessing crime. Working with our partners in the BTP, City of London Police and the MPS, we provide funding for more than 2,500 dedicated transport police and police community support officers to ensure our public transport system remains a safe, low-crime environment.

Over the coming year, we will introduce Operation Trafalgar – an intelligence-led policing initiative aimed at protecting the most vulnerable people at high-risk locations and at certain times of the day.

In 2013/14, a single command was set up for managing the rail and Tube network in the Capital. This will be echoed in 2014/15 with

the MPS also creating a single command for the policing of London's roads and surface transport network. This will be a significant asset for the city, helping to keep crime low on the public transport network, while leading on road safety and reliability.

Crime on the Tube, Overground and DLR remains at the lowest levels since records began and is forecast to fall even further over the life of the Business Plan. A number of initiatives will contribute to safer travel on TfL's rail network including improvements to CCTV and lighting on our stations and greater staff visibility.

On the bus network, the crime rate is less than half of what it was in 2005/06 when levels peaked. The volume of bus-related crime has also fallen by just over 50 per cent. The new TfL funded MPS Roads and Transport Policing Command will renew focus on reducing crime, fear of crime, collisions and casualties, and congestion.

TfL will also continue its successful customer awareness campaigns to encourage safe travel on all services.



Reducing crime further

We provide funding for more than 2,500 dedicated transport police and police community support officers.

Table 7 Safety and security

	Units	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Lower is better								
London Underground and DLR recorded crime	Million passenger journeys	7.4	7.1	6.9	6.8	6.7	6.7	6.7
London Overground recorded crime	Million passenger journeys	6.1	7.6	7.0	6.6	6.1	5.7	5.6
Buses recorded crime	Million passenger journeys	7.4	7.3	7.2	7.1	7.1	7.0	7.0
Higher is better								
Cumulative reduction in KSIs on London's roads	%	(38.7)	(38.9)	(39.1)	(39.3)	(39.6)	(39.8)	(40.0)



Delivering sustainable transport

A fair deal for London

Our customers expect our plans to be sustainable. That means we must provide social and economic value while reducing our impact on the local and global environment. The way we do things is fundamental to this.

Crucially, we operate a reliable, high-capacity network offering lower-polluting services (including trains, buses, cycling and walking).

Ultra Low Emission Zone

In 2008, we introduced the Low Emission Zone, setting strict requirements on vehicle emissions within the Capital. Along with the Mayor, we want to reduce emissions even further and have developed a proposal for an Ultra Low Emission Zone (ULEZ) to cover central London, where air pollution is particularly bad. Subject to public consultation, the ULEZ would require all vehicles driving in central London to meet new exhaust emission standards. It would also increase the number of zero-emission capable vehicles in our bus fleet, as well as those licensed as taxis and private hire vehicles. The scheme is currently being consulted on and the Mayor will make his final decision by spring 2015. If confirmed, the scheme would be introduced in September 2020, giving Londoners more than five years notice to meet the new standards.

Cleaner air
We aim to improve London's air quality and reduce our impact on the environment.



Electric buses

We introduced eight electric single-deck vehicles on four routes.

Hybrid buses

More than 10 per cent of London's buses are hybrid with around 900 buses using this environmentally friendly technology. This is set to approach 15 per cent in 2015, and is expected to reach 20 per cent by 2016, when we should achieve our initial target of 1,700 hybrid buses in service. By 2020, all double-decker buses in central London have to be Euro 6 hybrid for ULEZ.

Buses account for 22 per cent of the city's transport carbon dioxide (CO₂) emissions, with the hybrid buses contributing towards reducing overall CO₂ in London from all sources by 60 per cent by 2025.

We are reducing nitrogen oxide (NOx) emissions from the bus fleet, having installed more than 1,000 buses with exhaust after-treatment technology. We plan to cut NOx emissions by 20 per cent through fitting a further 800 buses with selective catalytic reduction (SCR) equipment by the early part of 2015. In addition, Euro 3 engine buses that are not fitted with SCR will be replaced with new, ultra-low emission Euro 6 engine vehicles by the start of 2016.

Electric buses and bus technology trials

We remain firmly at the forefront of

demonstrating and evaluating new technology. We have rolled out zero-tailpipe-emission buses with up to eight electric, single-deck vehicles serving four routes and eight hydrogen fuel-cell buses on the route from Covent Garden to Tower Gateway. In 2015, we will trial inductive-charging technology and range-extended hybrid buses between Canning Town and Walthamstow. The on-board batteries of these specially built buses will be boosted via wireless technology at each end of the route without requiring physical leads. The trial is part-funded under the Zero Emissions Urban Bus System European programme.

The potential of these different forms of technology will help us develop plans for greater use of zero-emission buses in central London and to implement the ULEZ. To comply with ULEZ, we plan for all single-deck buses in central London to be zero-tailpipe emission and for double-deckers to be both hybrid and Euro 6 engine standard. To achieve this we will expand our plans for hybrid double-decker buses raising the target from 1,700 by 2016 to 3,400 by 2020.

Funding has also been secured from the European Commission to assess the potential of up to three range-extended, diesel-electric, double-deck hybrid buses using high-power

Table 8 Environmental performance

	Unit	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Lower is better								
NOx emissions from bus fleet	Tonnes	4,123	3,403	3,334	3,272	3,005	2,677	2,306
CO ₂ forecast for TfL grams per passenger	Passenger km	66	61	57	53	49	46	45

wireless charging infrastructure. Two 'inductive power transfer' ground stations are to be installed at bus stands at Walthamstow Central and Canning Town Bus Stations to serve route 69. The funding has been secured as part of a project which aims to demonstrate the wider benefits of electric buses in urban environments in eight cities across Europe.

Zero-emission capable taxis

From 2018 all newly licensed taxis must be zero-emission capable. Five vehicle manufacturers are now committed to meeting this deadline, with us supporting the development of vehicles for London's taxi market. We are also exploring similar requirements for private hire vehicles and will consult on this as part of the ULEZ proposal.

TfL is consulting on proposals to tighten the existing taxi age limit to 10 years. If the proposal is adopted TfL will establish a £40m fund to assist taxi drivers in purchasing newer vehicles. We expect this to be complemented by funding from the Office for Low Emission Vehicles which will help accelerate the uptake of new zero-emission capable taxis.

Promoting ultra low-emission vehicle use

We continue to encourage the uptake of electric vehicles through Source London, a consortium of 64 public and private partners, providing a network of public charging points for electric vehicles. The scheme has expanded to provide 1,400 charge points and more than 1,000 scheme members. Following a competitive tender process, IER Bolloré has taken over the operation of the scheme and plans to increase the number of charge points to 6,000 by 2018.

Earlier this year the Government announced the main elements of a £500m package of measures to support the development and use of these vehicles. We are working hard to ensure London benefits from this funding.

Car clubs

London has the largest car club industry in Europe – globally only New York's is bigger. In line with the Mayor's Transport Strategy, our support for car clubs is based on their potential to encourage sustainable mobility and improve the overall performance of vehicle fleets. Car clubs offer the freedom and flexibility of a car but with less adverse environmental impact than private car ownership. Vehicles are typically newer than privately owned vehicles so are better in terms of air quality and emit less CO₂. Their use also has the potential effect of fewer cars on the road, therefore reducing traffic and congestion.

Our vision is to have a strong and diverse car club offering in London that does not rely on public funding and can reduce the burden of private car ownership for businesses and residents. We are undertaking research to inform policy on the potential size and role of this industry and aim to further encourage investment in this sector.

Mayor's Air Quality Fund

We are working with the Greater London Authority and the Capital's boroughs to tackle poor air quality hotspots and raise awareness of the environment while reducing people's exposure to harmful emissions. The Mayor's Air Quality Fund, set up in 2012/13, has so far allocated £6m to 38 projects in 29 London boroughs. These include:

- Promoting the coordination of deliveries and consolidation of freight activities in and around the central London Business Improvement Districts
- Working with four boroughs and Bart's NHS Trust to reduce emissions and exposure at the Bart's hospital estate
- Expanding the Shoreditch Zero Emission Network into surrounding areas of Tower Hamlets and Islington, to promote the use of low-emission vehicles by businesses and put in supporting infrastructure
- Working with schools to reduce exposure and raise awareness about air pollution and tackle local emission sources, such as engine idling. One example is Warren Secondary School's green wall, which officially opened in July. The 54m²-high structure is made up of five plant varieties which trap NO₂ and PM10 particulates and helps to improve local air quality
- An education and training programme to increase awareness and promote activities to improve air quality near schools through the School Travel Accredited and Recognised (STAR) scheme

We will fund a total of £20m of improvements over the lifetime of this plan, encouraging businesses, schools and other groups to participate.

Reducing our carbon emissions

The Mayor has set London a target of a 60 per cent reduction in CO₂ emissions by 2025 from a 1990 base. Ground-based transport accounts for around 22 per cent of London's CO₂ emissions. We will work towards meeting the Mayor's target of generating 25 per cent of the Capital's energy from local sources by 2025. We aim to achieve this by purchasing electricity sourced from London low and zero-carbon electricity generators so long as there is no extra cost to tax and fare payers.

Our aspiration is to achieve 20 per cent of our annual demand from these sources by 2016 and 40 per cent by 2020. We are the biggest user of electricity in the Capital and in a good position to increase our energy efficiency, thereby lowering carbon emissions and costs:

- All of our new Tube trains have regenerative braking, a technology that re-uses energy when train brakes are applied. It reduces the energy required and the waste heat expelled into tunnels. On the Victoria line, regenerative braking combined with other new technology on our trains, signalling and power systems, has cut the energy required to run our service by 34 per cent
- We are investigating opportunities for connecting the London Underground power network to third party low-carbon energy sources

- We are investigating the opportunity to install low-carbon generation units which will maximise use of the currently underused space within Greenwich Power Station. Additional generation at Greenwich can reduce CO₂ emissions and costs linked to London Underground's electricity consumption compared to the National Grid. This would also have the potential to support a district heating scheme in the area, reducing heating costs and emissions while contributing to the Mayor's targets for decentralised energy
- We are using the Mayor's award-winning RE:FIT programme to retrofit our buildings, saving energy, cutting costs and contributing to the Mayor's target to retrofit 100 GLA group buildings by 2015. The 22 TfL buildings retrofitted so far under the programme are already saving 3,700 tonnes of CO₂ and around £500,000 each year. We have a further programme of RE:FIT works and have scheduled for another 10 buildings in 2015
- Upgrading the entire London Tramlink network to energy-efficient lighting

These actions help reduce carbon emissions and support our customers and those we do business with to do the same by switching to more environmentally friendly forms of transport.

Reducing emissions from our assets

We are committed to leading by example in reducing emissions from assets and mitigating the impact our operations have on the environment. We have already committed

funding to upgrade our street lighting to LED and, as part of this Business Plan, have allocated further investment to convert other parts of our highway infrastructure to LED, delivering significant CO₂ and energy savings.

We also have responsibilities to reduce noise, which can have a detrimental effect on human health. To mitigate these impacts, we will implement noise barriers at priority locations on the TLRN. We will also trial sustainable urban drainage systems to test measures to reduce flood risk due to climate change, and we will install additional green infrastructure and green walls.

Alternative fuels and energy efficiency

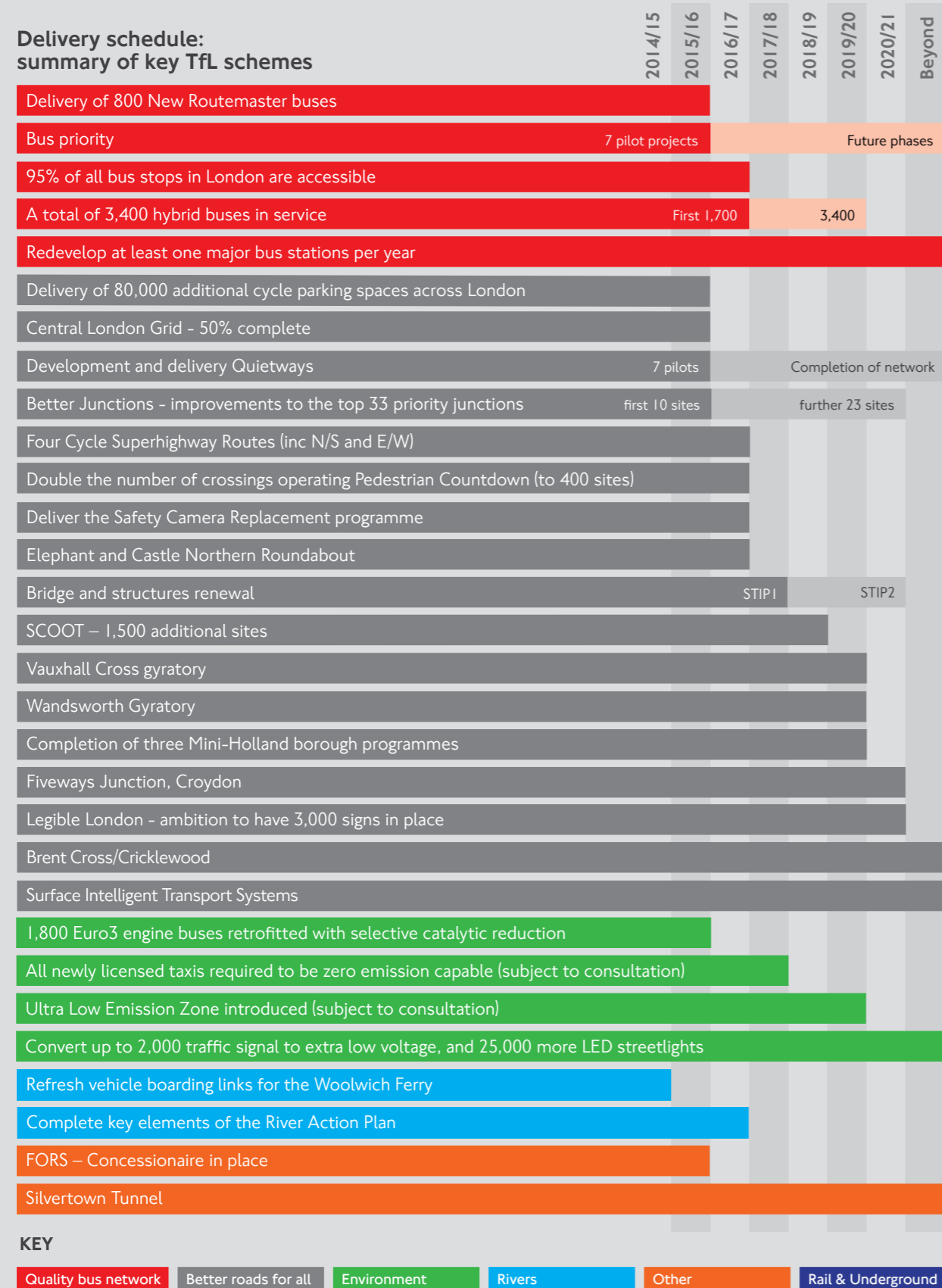
We are looking at the wider environmental benefits of harnessing used cooking oil and animal tallow that might otherwise end up in landfill. We have successfully trialled 20 per cent bio-diesel blends on 120 vehicles at Stagecoach's Barking garage for the past two years. We are now working with four other bus operators to extend its use at up to 12 more garages from 2015 and encourage potential suppliers to move into the market so greater quantities from sustainable sources can become available. Subject to adequate availability of the 20 per cent bio-diesel blend, we will work towards its potential use across the bus network by 2020.

TfL will continue to maximise the opportunities to exploit secondary heat sources within the city, such as geothermal or waste heat, to ensure they contribute towards realising the Mayor's ambition for extensive low-carbon energy generation and provision.

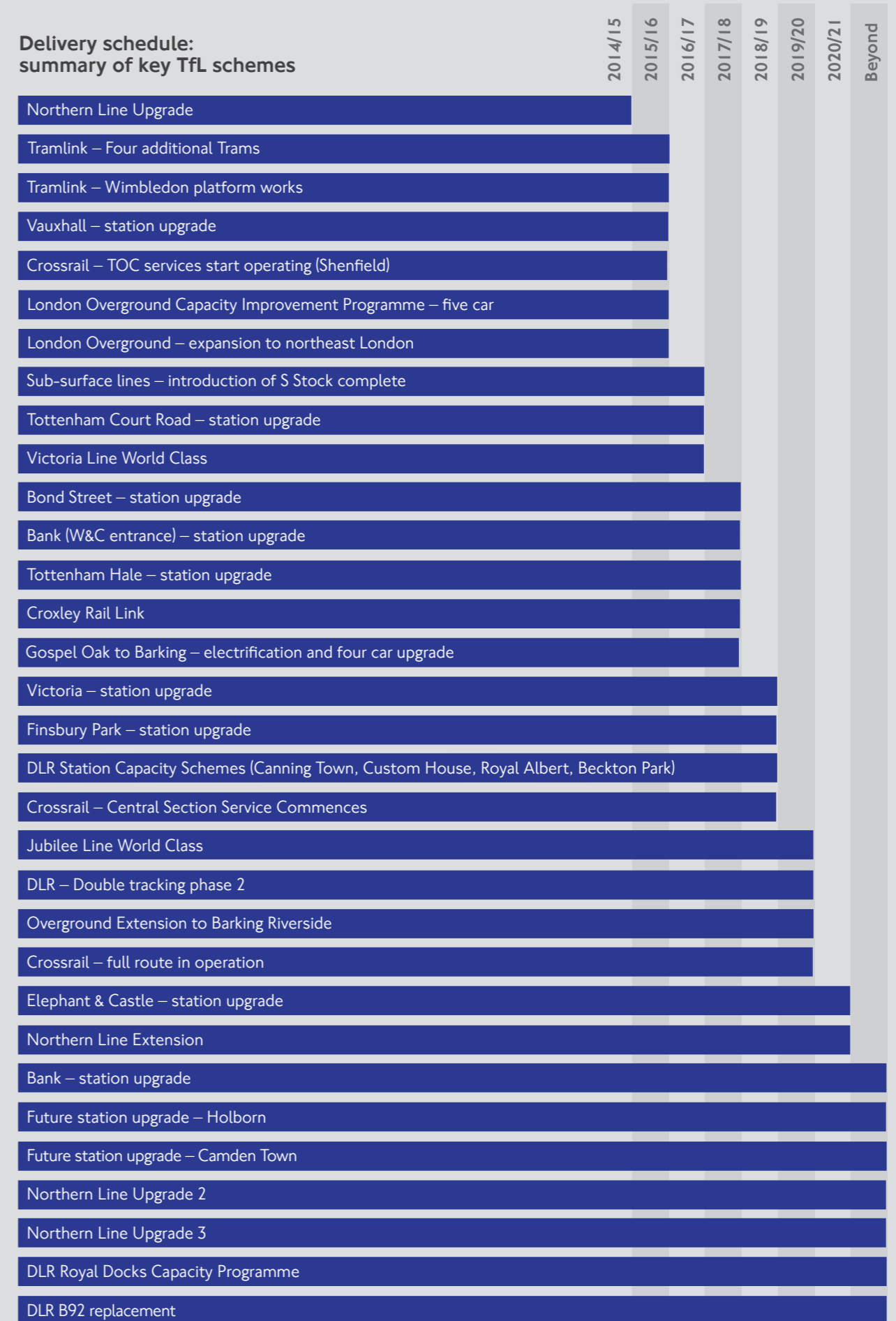
Our delivery timeline

This diagram sets out the planned delivery timescales for key infrastructure schemes supporting delivery of the Mayor's Transport Strategy. These are funded and there is significant activity planned during the period of this Business Plan.

Delivery schedule: summary of key TfL schemes



Delivery schedule: summary of key TfL schemes



Our people: dedicated to customer service

To keep London working and growing we need to recruit, reward and develop the right people

We are committed to employing the best people from all walks of life to provide the best possible service. But more than this, we play an important role in encouraging diversity and supporting society by opening up opportunities in education, employment and other essential services.

By employing individuals with the right skills, knowledge and behaviours, we are continually working to provide our customers, who are at the heart of our strategy, with world-class service. Regardless of how we provide that service, either directly or via a third party, we need to ensure people have a positive experience when travelling around the network.

It's also important that all our staff demonstrate our values and behaviours. Our people excel in delivering a vast range of projects, from frontline staff at stations to planners who can develop new bus routes or accountants focused on ensuring finances are robust.

To ensure we deliver the best customer service we can, we will:

- Recruit individuals with the right skills, knowledge and behaviours
- Support career progression and development
- Reward our people appropriately for their great work





Apprenticeships

We aim to increase the number of apprenticeship programmes that we offer.

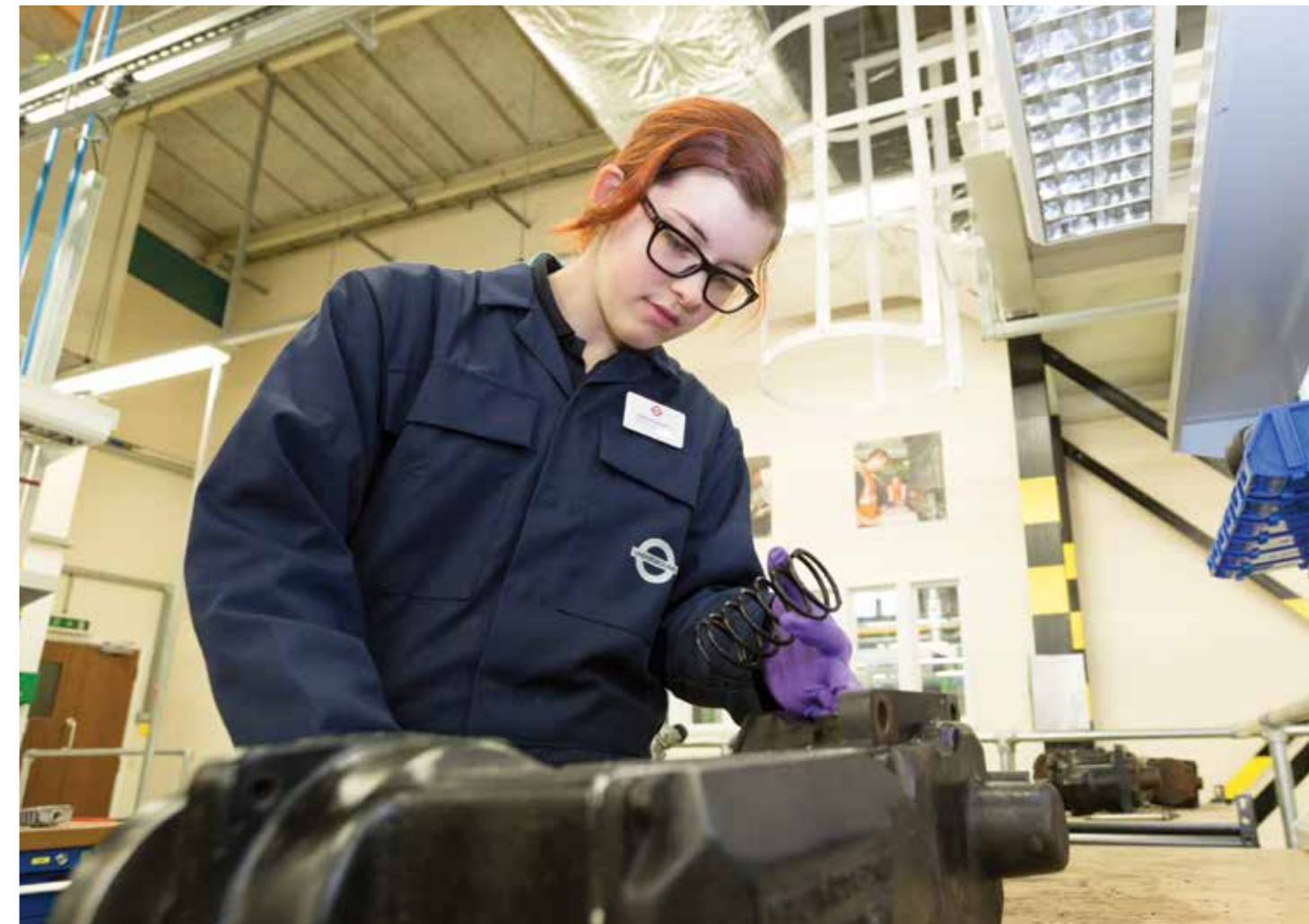
Recruiting individuals with the right skills, knowledge and behaviours

Our award-winning graduate programme

In 2014, 117 graduates started at TfL and in April we were once again named the Graduate Employer of Choice for Transport and Logistics at the Times Top 100 Graduate Awards. As well as achieving this status for the seventh time since 2007, we also moved up from 99 to 63 in the rankings. Our graduate scheme was also shortlisted for the most popular Graduate Recruiter in Engineering Design and Manufacture category, TARGETjobs National Graduate Awards 2014 and for Innovation in Business Led Graduate Development in the Association of Graduate Recruiters Development Awards, 2014.

Expanding and developing apprenticeships

We have attracted almost 1,400 individuals on to our apprentice scheme working in more than 16 different areas. Five new apprenticeship programmes have been introduced, including the first Higher Apprenticeship Scheme, while a further seven are currently in development. This will bring the number of direct apprenticeship programmes we offer to 22. As well as expanding our engineering and planning schemes, our focus will be on developing the Higher Apprenticeships as an alternative to university.



Supporting career progression and development

The way our people perform is a major focus for us. By supporting and investing in individual career progression and development, this encourages staff to demonstrate our values and behaviours and ultimately be beneficial to our customers.

Director and management development

Our directors and managers must lead our people effectively, while improving business performance across the network. A director development programme is already under way focusing on improved collaboration, the latest thinking in customer service,

transport delivery, commercial focus and the use of public funds. It will also support succession planning and movement across the organisation.

A similar programme for development for senior leaders was launched in late 2014.



Rewarding our people

Throughout the year we have been consulting with employees and trade unions over plans to change how we manage our performance-related pay. We aim to provide greater incentives to high-performing staff by better linking pay to individual performance with a consistent and fair approach to all.

This will develop a culture of high performance and ensure that pay is aligned with the external market, delivering better value for money. The changes will come into effect on 1 April 2015.

Promoting diversity and supporting society

We have signed up to the Your Life campaign which encourages more women into science, technology, engineering and maths. In addition, we have supported the first Women in Engineering day, hosting more than 370 secondary school girls at a week-long event at London Transport Museum which saw them getting involved in engineering-related activities. We also provided female engineer guest speakers at the Royal Greenwich University Technical College (UTC).

Ten women employees were offered the opportunity to take part in a nine-month, peer-to-peer coaching programme. The course, managed by Coaching Squared, matches participants with someone at a similar level in another organisation, providing both parties with an alternative perspective on working life. A further 10 places have been allocated for the programme which began in October 2014.

Two places have been funded on Stonewall's Leadership Programme. This initiative provides a safe space for LGBT professionals to explore the relationship between sexual orientation and leadership performance, allowing participants to learn about the significance of their identity in the workplace. The places have been advertised through our LGBT staff network group.

We joined the Race for Opportunity (RfO) Mentoring Circle programme in December 2013. The scheme provides mentoring opportunities to black, Asian and minority ethnic (BAME) employees and is being evaluated based on participants' feedback. We will join the second RfO programme in January 2015 and consider how to involve a wider pool of BAME employees.

A bespoke programme for middle managers is being developed in partnership with Common Purpose (an international leadership development organisation), with a pilot which started in October 2014. The nomination process will specify that the preference for the programme should be given to BAME employees, with a target of 40 per cent representation to address under-representation at senior levels.

One hundred years ago, 100,000 women entered the transport industry to take on responsibilities held by men who enlisted for military service in the First World War. Together with a number of partners, through the One Hundred Years of Women in Transport programme, we will continue to celebrate the significant role women have played in transport over the past century as a way of broadening the appeal of the industry to women.

Educating, inspiring and providing opportunity

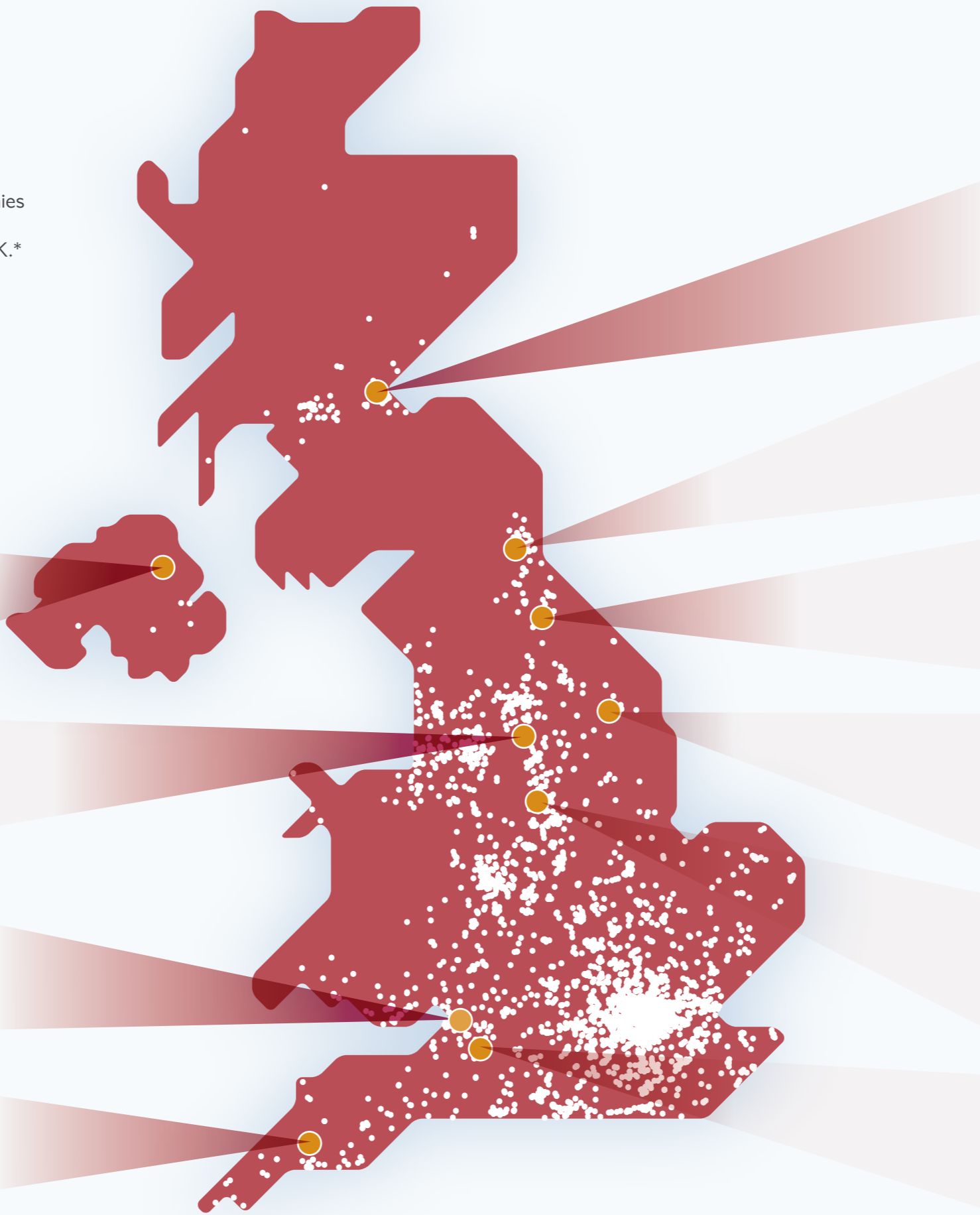
Our education programmes continue to inspire the next generation of transport professionals and we are working even more closely with industry and our supply chain.

- The Transport and Infrastructure Education Partnership, founded by Crossrail, is an initiative involving ourselves, Network Rail, High Speed 2, City Airport, Engineering UK and STEMNET to deliver education and skills programmes
- We continue to build on the success of the Royal Greenwich UTC by working with Network Rail and the Sir Simon Milton Westminster UTC and promoting UTCs more broadly
- London Transport Museum's education programme continues to encourage employment skills for young people with the pilot Skills for Schools initiative, which has involved more than 200 11 to 16-year-olds
- Our partner school programme supports employability skills courses run by the Royal Greenwich UTC and four London Academies Enterprise Trust bodies: Nightingale, Aylward, Bexleyheath and Kingsley. Elements of the programme have also been extended to Uxbridge College and the STEM Sixth Form Academy Tech City
- We help young Londoners through our Route into Work programme at London Transport Museum and with our supply chain. This four-day, accredited pre-employment course for those not in education, employment or training has helped more than 200 young people since 2011
- A Department for Work and Pensions pilot programme has been developed with six contractors – Shaw Trust-CDG, Reed, A4E, Maximus, Seetec and Ingeus to deliver welfare reform. The Work Programme is designed to help the long-term unemployed back into work. Since 2012, more than 130 Londoners have begun work with our suppliers through the pilot scheme and we have filled roles in a range of disciplines including highways operatives, trainee civil engineers and track maintenance operatives
- We are continuing our Steps into Work programme which supports individuals with learning disabilities gain a BTEC level 1 work skills qualification. This 12-month programme involves three 11-week unpaid work placements for each participant and aims to help them get paid employment. Work skills are developed in a business environment where on-site learning and assistance is provided. Since December 2011, 30 students in five tranches have taken part in the programme, bringing the total number of work placements at TfL to 87

Supporting the UK economy

Our supply chain extends across the country, from new buses in Ballymena to rails from Scunthorpe. Working with these companies we supported 63,380 jobs in 2013/14; 45,700 were outside London, benefiting local communities and families across the UK.*

*This data is provided by Regeneris and excludes jobs supported through Crossrail. TfL supports 84,300 jobs including Crossrail, 69 per cent of these are outside London.





Wrightbus
Ballymena, Northern Ireland
New Routemaster assembly




Camira
Huddersfield, West Yorkshire
Seat assembly



BIC
Bristol
Tactile units for pedestrians



Tiflex
Liskeard, Cornwall
New Routemaster flooring




Alexander Dennis
Falkirk, Scotland
Supplier of buses to operators




Romag
Consett, County Durham
Supplier of glass for 'S stock' trains



Cleveland Bridge
Darlington, County Durham
Supplier of steel to Crossrail



Tata Steel
Scunthorpe, Yorkshire
Supplier of rails



Bombardier
Derby, Derbyshire
Supplier of trains



Trapeze
Trowbridge, Wiltshire
Countdown bus information – iBus

Snapshot of 2012/13 data.



Value: providing value for money

Focusing on getting more for less

Every penny we get, whether from fares or from Government funding, is spent running or improving services. It is essential that we get the maximum value from our funding while taking into account what our customers need now and in the future. We must also recognise our responsibility as a steward of public funds, and the need for environmental and affordable solutions that take into account our wider social and economic responsibilities.

Our ambitious £1.6bn efficiencies programme continues to be vital in managing our budgets with reduced Government grant especially at a time of continuing austerity. It has ensured we can provide customers with what they want and improve services by making them more reliable with increased capacity while bearing down on fares and driving London's economic growth.

We have continued our excellent track record of investing in our assets and services, which saves money in the longer term, through innovative solutions and taken this ambitious approach into generating commercial income.

The new Business Plan is balanced, with expenditure fully funded through income, Government grant and borrowing. Our cash balances directly fund the capital improvements we have committed to.

Canary Wharf Crossrail station
Improving our transport network is essential to support London's growth.

A commercially focused organisation

Work is accelerating to ensure our assets are generating revenues to their greatest potential over the Business Plan. We are doing this through a number of measures that maximise our unique commercial position.

One innovative scheme that looks to utilise the retail services in and around stations is 'Click & Collect'. We have implemented these facilities in partnership with a number of major supermarket retailers in 42 of our car parks. This concept has proven extremely popular with commuters as well as those who live near our stations, and we are working with retailers to expand it further. The retail estate is also being revolutionised across our stations. At Old Street station, we have retained the best of the existing retail outlets alongside new 'pop up' businesses and start-ups, as well as new concepts from established retailers. These schemes ensure that we generate all available income from our estate, helping to drive further investment while bearing down on fares.

We have one of the largest property portfolios in London and we are investing in it, and developing it, to ensure it delivers value for money. The Earls Court Partnership Ltd, our joint venture with Capital & Counties, is making good progress on the first phase of the wider Earls Court Joint Venture, providing 7,500 much-needed new homes and up to 10,000 new jobs.

Earls Court is just one of 80 development schemes that we will take forward over the next 10 years. We are also working on maximising income from 55 Broadway,

the Grade I listed headquarters of London Underground, which we are seeking to convert to a prime residential building with a significant adjoining affordable housing development.

All commercial activity is underpinned by hundreds of our high-quality assets across London and access to the 10 million people on our network every day. We continue to look into the vast opportunities for innovative solutions and quality service to come together, working with retailers, telecoms companies and others to develop proposals and implement these at locations including major Tube stations such as King's Cross and Canary Wharf, through to local Tube, bus and coach stations, and London River Service piers.

Efficiencies

Our savings and efficiencies programme was established to meet the challenge of operating one of the world's most extensive transport networks while delivering improvements at a time of unprecedented financial pressure.

The programme, which is one of the largest in the public sector, is vital to ensure the organisation maximises value for our customers and can continue the improvements needed to keep London moving and growing. We plan to save almost £16bn up to 2020/21, with £12.5bn of this already secured, allowing us to invest in infrastructure while holding down fares and we have just over £3bn savings to be secured. Our investment to improve transport services is dependent on securing these further savings.



Click and collect

Our innovative scheme looks to utilise the retail services in and around stations.



London Highways Alliance contract

Creating partnership with other organisations helps to reduce costs and disruptions.

We get better value from our investments than ever before. We have made savings and efficiencies through various schemes, including new maintenance arrangements and procurement innovations. We have established a culture of rigorous efficiencies which is demonstrated by our commitment to an ambitious cost reduction programme covering all areas of the business through:

- The Crown Commercial Service (CCS): by aggregating our power purchasing with the wider public sector through CCS, working to identify alternative energy sources and energy savings through environmental initiatives, we will save £50m over the life of our Business Plan
- London Highways Alliance Contract (LoHAC): this pioneering shared service was jointly developed in partnership with the London boroughs. The eight-year contracts started in April 2013 and have a potential to save £2.6bn. We now have them with 12 boroughs, and more are set to join

The contracts are already delivering significant savings, but this will improve as working relationships are established between us, the boroughs, contractors, sub-contractors and suppliers. Particular emphasis has been placed on creating a long-term view of London's highway works to:

- Identify opportunities to combine highway works and minimise traffic disruption
- Maximise the use of staff, plant and material to minimise costs
- Identify key constraints or pressures, for example peaks and troughs in demand for granite kerbs, asphalt plant availability or road space
- Build collaborative and supportive relationships between contractors and sub-contractors

- Provide contractors with certainty over their long-term work so they can provide the best value for money

Traffic Control Maintenance Services (TCMS)

The new TCMS contract started in October 2014. It will provide repair and renewal services for traffic signals across London and will deliver more than 12 per cent savings, that's £42m over their duration, compared to the previous contracts.

Cash-free buses

The decision to move to cash-free bus travel means we are at the forefront of the change in the way that customers, Londoners and tourists choose to pay for goods and services. Customers will benefit from a quicker, cheaper and more convenient method of paying their bus fare, and the scheme will also reduce the time buses are stationary at bus stops. It will

enable us to save £24m each year, savings that will be reinvested in further improvements to the Capital's transport network.

Fares

The Mayor and TfL were able to hold down fares to RPI only in January 2015 without compromising delivery of major improvements, due to an extra government grant. To safeguard the investment needed to ensure we can modernise our network and cope with London's growth, from January 2016, our planning assumption remains that fares will increase at a rate of RPI plus one per cent, with the specific level to be decided by the Mayor as set out in the GLA act.

Bus subsidy – net operating surplus

The bus subsidy is used to fund capital investment and concessionary fares. Capital investment in vehicles, premises and plant

Table 9 Bus subsidy

(£m)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Net bus operating surplus								
Total Costs	(2,161)	(2,265)	(2,270)	(2,378)	(2,497)	(2,615)	(2,724)	(16,910)
Total Income	1,584	1,652	1,736	1,815	1,907	2,005	2,095	12,793
Total Subsidy (A)	(577)	(613)	(535)	(563)	(590)	(611)	(629)	(4,117)
Remove non-operating costs								
Bus contracts – capital expenditure element	(288)	(298)	(313)	(331)	(348)	(365)	(380)	(2,325)
Other Bus Capital Costs	(107)	(137)	(38)	(24)	(21)	(18)	(23)	(368)
Total non-operating costs (B)	(395)	(435)	(351)	(356)	(369)	(384)	(403)	(2,693)
Include revenue foregone for concessionary fares (C)	204	213	226	243	261	279	296	1,722
Net Operating Surplus / (deficit) = A-B+C	22	35	43	35	40	52	70	298



Table 10 Prudential borrowing limits

(£m)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Incremental borrowing limit	650	600	700	900	500	500	600

made by bus operators appears as operating expenditure for TfL as these assets are owned by the operators. Concessionary fares are the provision of free travel for children under 16, or 19 if in full-time education, and subsidised travel for older students, military veterans and other groups. The Freedom Pass which gives free travel for older people and those with disabilities is funded via the London boroughs.

Considering operating expenditure alone, this means removing any costs relating to capital investment and recognising income that is lost owing to concessionary fares. Bus revenue covers operating expenditure demonstrating a net operating surplus. This is shown in the last line of the bus subsidy table (Table 9).

We reinvest all our income to run and improve our services for customers. Fares are our largest funding source and we consider the need to maintain affordability, constantly improve and provide value for money now and in the future. The fare level is set each year by the Mayor.

Government funding

London’s population is continually growing. Without funding from our Government grant and retained business rates, we could not deliver the investment in order to keep the Capital moving. Our funding settlement is constantly reviewed; most recently at last year’s Spending Review, which resulted in a reduction to our operating grant funding.

Government grant is provided for three areas of our work:

- General grant: this contributes to the day-to-day running of the network and over time contributes to capital investment levels. Grant levels are agreed with Government to 2015/16, it also goes towards investment
- Capital investment grant: this is used to fund investment and improvements in our network. Central Government has recognised the need for stable capital funding and provided a commitment to providing this to 2020/21
- Crossrail grant: capital funding specifically for building Crossrail

Since autumn 2013/14, retained business rates have replaced a share of what was previously paid through Government operating grant. They are a share of London business rates, being reinvested in the Capital.

Prudential borrowing

A proportion of our funding comes from borrowing. This is undertaken within prudent limits set out in our funding agreement with central Government and approved by our Board. The maximum amounts we can borrow each year (beyond borrowing already held) are set out in Table 11. We constantly assess the conditions and will only borrow where it is prudent to do so.

We borrow from a variety of sources, with consideration given to the cost of borrowing, market conditions and the level of flexibility offered. These sources include:

Secured finance

Our funding keeps the Capital moving and growing.

- A £5bn Medium Term Note programme, created in 2004 and updated annually, which saw us become the first UK local authority to raise medium to long-term finance through issuing bonds independently of Government
- A £2bn Commercial Paper programme created in 2010, which made us the first UK local authority to raise short-term finance through the issuance of up to 12 months paper independently of Government
- The European Investment Bank, with loans linked to specific infrastructure projects
- The Public Works Loan Board
- Finance leasing arrangements, used for specific assets such as rolling stock
- Bank loans, including a £200m bank overdraft facility that is in place to provide contingent liquidity. We believe our proposed levels of borrowing remain affordable and consistent with prudent financial management, which is reflected in our strong credit ratings

Risk

Our ability to deliver this plan depends on many factors. These include achieving the savings in our ambitious efficiency programme and Commercial Development target, which is essential to keeping the plan balanced. We must also consider risks in operating, maintaining and upgrading a diverse transport network in the context of London’s economic and political climate.

We currently capture strategic risk through the Strategic Risk Register. The objective of this is to capture the key non-project risks that could impact the delivery of our strategic objectives. Our strategic risk register is available publicly and discussed in open session at the Audit and Assurance Committee.

We continue to work with the committee to enhance the way we manage strategic risks. We are investing in risk training and systems to ensure our staff take the right approach to risk and manage it effectively and efficiently. We are also improving our management information and approach to risk reporting to ensure the right decisions are taken.

Financial tables

Table 11 TfL group finances – operating income, costs and funding

TfL Group (£m)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Fares income	4,297	4,667	4,972	5,268	5,739	6,326	6,769	38,037
Other operating income	680	631	692	738	782	822	846	5,191
Total operating income	4,977	5,298	5,663	6,006	6,521	7,147	7,615	43,228
Operating expenditure (net of third-party contributions)	(6,276)	(6,667)	(6,777)	(6,872)	(7,130)	(7,477)	(7,711)	(48,910)
Operating margin	(1,299)	(1,368)	(1,114)	(866)	(610)	(330)	(96)	(5,682)
Debt service	(358)	(415)	(464)	(534)	(585)	(628)	(673)	(3,655)
Interest income	25	33	61	57	46	10	11	242
Group items	27	38	(24)	(57)	16	25	30	55
Margin	(1,605)	(1,712)	(1,540)	(1,400)	(1,132)	(923)	(728)	(9,040)
Financed by:								
General Grant	846	675	687	699	711	723	735	5,076
Overground Grant	28	29	30	31	32	33	34	218
GLA precept	6	6	6	6	6	6	6	42
Business Rates Retention	828	851	881	911	943	976	1,011	6,402
Other revenue grants	3	0	0	0	0	0	0	3
Total revenue grants	1,712	1,561	1,604	1,647	1,692	1,738	1,786	11,741
Surplus to fund capital plan	107	(151)	63	248	560	816	1,058	2,701

Table 12 TfL group finances – capital expenditure, income, borrowing and funding

TfL Group (£m)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Capital expenditure	(2,102)	(2,223)	(2,229)	(2,601)	(2,665)	(2,508)	(2,735)	(17,063)
Third-party contributions - capital	44	54	48	50	102	168	163	628
Capital expenditure (net of third-party contributions)	(2,058)	(2,169)	(2,181)	(2,551)	(2,563)	(2,341)	(2,572)	(16,435)
Sales of property and other assets	43	16	115	223	93	184	185	858
Net capital expenditure (Core TfL)	(2,014)	(2,154)	(2,066)	(2,327)	(2,471)	(2,157)	(2,388)	(15,577)
Crossrail	(1,617)	(1,615)	(1,208)	(685)	(156)	(144)	(16)	(5,442)
Total capital expenditure	(3,631)	(3,769)	(3,274)	(3,013)	(2,627)	(2,301)	(2,404)	(21,018)
Financed by:								
Operating surplus from above	107	(151)	63	248	560	816	1,058	2,701
Investment Grant	909	925	941	957	973	990	1,007	6,702
Other Capital Grants	119	141	290	262	112	51	23	998
Crossrail funding sources	1,696	893	104	109	143	25	25	2,995
Working Capital	(304)	(370)	1,043	62	(54)	(108)	105	375
Borrowing and cash movement	1,104	2,330	832	1,375	891	527	187	7,246
Total	3,631	3,769	3,274	3,013	2,627	2,301	2,404	21,018

Table 13 Rail & Underground income, operating and capital plan

TfL Group (£m)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Fares Income								
London Underground	2,413	2,575	2,737	2,905	3,078	3,203	3,371	20,281
London Rail	326	467	528	577	785	1,149	1,336	5,167
Total Fares Income	2,738	3,042	3,265	3,482	3,862	4,352	4,706	25,448
Other Operating Income								
London Underground	211	137	157	179	183	190	195	1,252
London Rail	14	27	22	22	29	45	51	210
Total Other Operating Income	225	164	178	201	213	234	246	1,461
Operating Expenditure (net of third-party contributions)								
London Underground	(2,078)	(2,189)	(2,173)	(2,173)	(2,180)	(2,274)	(2,290)	(15,356)
London Rail	(405)	(549)	(600)	(628)	(800)	(965)	(1,019)	(4,966)
Total Operating Expenditure	(2,482)	(2,738)	(2,772)	(2,801)	(2,980)	(3,239)	(3,310)	(20,322)
London Underground Net renewal and reliability projects	(254)	(206)	(198)	(233)	(151)	(82)	(47)	(1,171)
Net Capital Expenditure								
London Underground	(1,269)	(1,270)	(1,362)	(1,360)	(1,307)	(1,333)	(1,587)	(9,489)
London Rail	(229)	(288)	(199)	(375)	(386)	(164)	(142)	(1,783)
Net Capital Expenditure	(1,498)	(1,558)	(1,561)	(1,735)	(1,693)	(1,497)	(1,729)	(11,271)
Net Investment Spend	(1,751)	(1,764)	(1,759)	(1,968)	(1,844)	(1,579)	(1,776)	(12,443)
Net Service Expenditure								
London Underground	(977)	(954)	(839)	(682)	(376)	(297)	(358)	(4,483)
London Rail	(293)	(343)	(249)	(404)	(373)	65	225	(1,372)
Net Service Expenditure	(1,271)	(1,297)	(1,089)	(1,086)	(749)	(231)	(133)	(5,856)

Table 14 Surface Transport income, operating and capital plan

TfL Group (£m)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total
London Buses								
Bus fares income	1,558	1,625	1,707	1,785	1,877	1,973	2,062	12,588
Bus Contract costs and ticket commission	(1,969)	(2,038)	(2,140)	(2,261)	(2,375)	(2,495)	(2,597)	(15,875)
Direct Bus Subsidy*	(410)	(413)	(433)	(475)	(498)	(522)	(535)	(3,287)
Other Bus Income	26	27	29	30	30	31	33	205
Other Bus Operating Expenditure	(86)	(90)	(92)	(93)	(100)	(102)	(104)	(667)
Bus Capital Expenditure	(108)	(140)	(38)	(27)	(27)	(29)	(54)	(424)
Net Bus Service Expenditure	(579)	(616)	(535)	(566)	(596)	(622)	(661)	(4,173)
Other Surface Transport								
Other Operating Income	369	366	371	378	401	404	404	2,693
Other Operating Expenditure	(764)	(849)	(824)	(729)	(768)	(804)	(858)	(5,595)
Other Capital Expenditure	(287)	(376)	(380)	(507)	(516)	(438)	(404)	(2,909)
Net Service Expenditure	(1,260)	(1,475)	(1,367)	(1,424)	(1,479)	(1,460)	(1,519)	(9,984)

*Direct Bus Subsidy, see page 75 for a comprehensive explanation.

Table 15 Corporate directorates income, operating and capital plan

TfL Group (£m)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Other Operating Income	45	59	100	116	125	139	151	736
Operating Expenditure (net of third party contributions)	(703)	(726)	(732)	(737)	(739)	(738)	(777)	(5,153)
Net Capital Expenditure	(121)	(78)	(87)	(58)	(234)	(192)	(200)	(969)
Net Service Expenditure	(779)	(745)	(720)	(679)	(847)	(790)	(826)	(5,386)

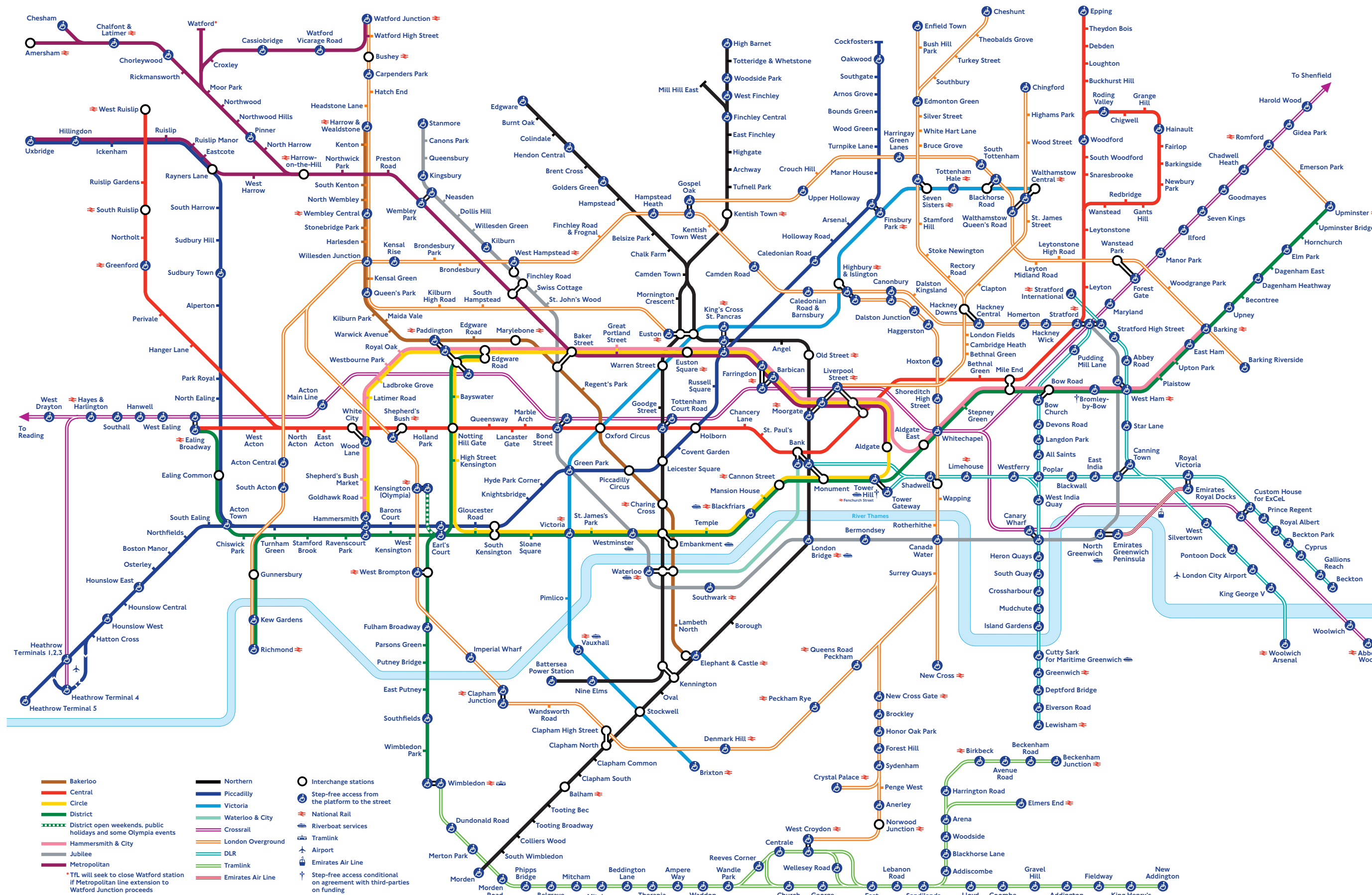
Table 16 Emirates Air Line income, operating and capital plan

Emirates Air Line (£m)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Fares Income	6	8	10	11	13	14	15	76
Other Income	4	4	4	4	4	4	4	26
Operating Expenditure (net of third party contributions)	(6)	(7)	(7)	(7)	(8)	(8)	(8)	(50)
Net Capital Expenditure	(1)	0	0	(1)	0	0	(1)	(4)
Net Service Expenditure	3	5	6	7	8	10	10	48

Table 17 Crossrail financial summary

Crossrail (£m)	Prior years	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Sponsors' funding commitment	(7,603)	(2,002)	(1,481)	(549)	(622)	(54)	0	0	(12,311)
External funding sources of which:									
DfT committed funding	(3,237)	(1,082)	(800)	0	0	0	0	0	(5,119)
GLA funding (incl. Crossrail Business Rate Supplement)	(3,564)	(529)	0	0	0	0	0	0	(4,093)
Developer contributions	(64)	(96)	(89)	(102)	(107)	(142)	(52)	(25)	(678)
Sale of surplus land	0	0	0	(40)	(134)	(285)	0	0	(459)
Cash funding from TfL Group	(737)	(295)	(592)	(407)	(380)	373	52	25	(1,962)
Total funding	(7,603)	(2,002)	(1,481)	(549)	(622)	(54)	0	0	(12,311)

TfL's Rail Transport Network at 2021



- Bakerloo
 - Central
 - District
 - Hammersmith & City
 - Metropolitan
 - Northern
 - Piccadilly
 - Victoria
 - Waterloo & City
 - Crossrail
 - London Overground
 - DLR
 - Tramlink
 - Emirates Air Line
 - - - Jubilee
- Interchange stations
● Step-free access from the platform to the street
🚆 National Rail
🚤 Riverboat services
🚊 Tramlink
✈️ Airport
🚡 Emirates Air Line
† Step-free access conditional on agreement with third-parties on funding
- * TfL will seek to close Watford station if Metropolitan line extension to Watford Junction proceeds



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