

Environment

Our approach to environmental sustainability is covered in detail in our Corporate Environment Plan. This sets out our environmental ambitions and how we will achieve this through our operations, maintenance and construction activities. It forms the detailed environmental pillar of our approach to sustainability. Key aspects of that plan are included in this report to help communicate our overall sustainability story.

The Corporate Environment Plan focuses on our own activities, however, it is also important to note that as London's strategic transport authority, we also help realise the environmental outcomes of the Mayor's Transport Strategy and the transport elements of the London Environmental Strategy. Examples include setting London-wide policy, operating road transport emissions schemes such as the Ultra Low Emission Zone (ULEZ) and achieving a wide range of environmental outcomes through the London borough Local Implementation Plans.

We support the Mayor's ambition to make London a carbon neutral city by 2030 by driving down carbon emissions, cleaning up London's air, protecting and regenerating the natural environment, and ensuring we are prepared for the impacts of climate change.

Our influence stretches beyond London, as our activities inspire transport operations across the UK and the world. Through our contracts, stakeholder engagement and partnerships we will make it clear that we expect high environmental performance and ambition.

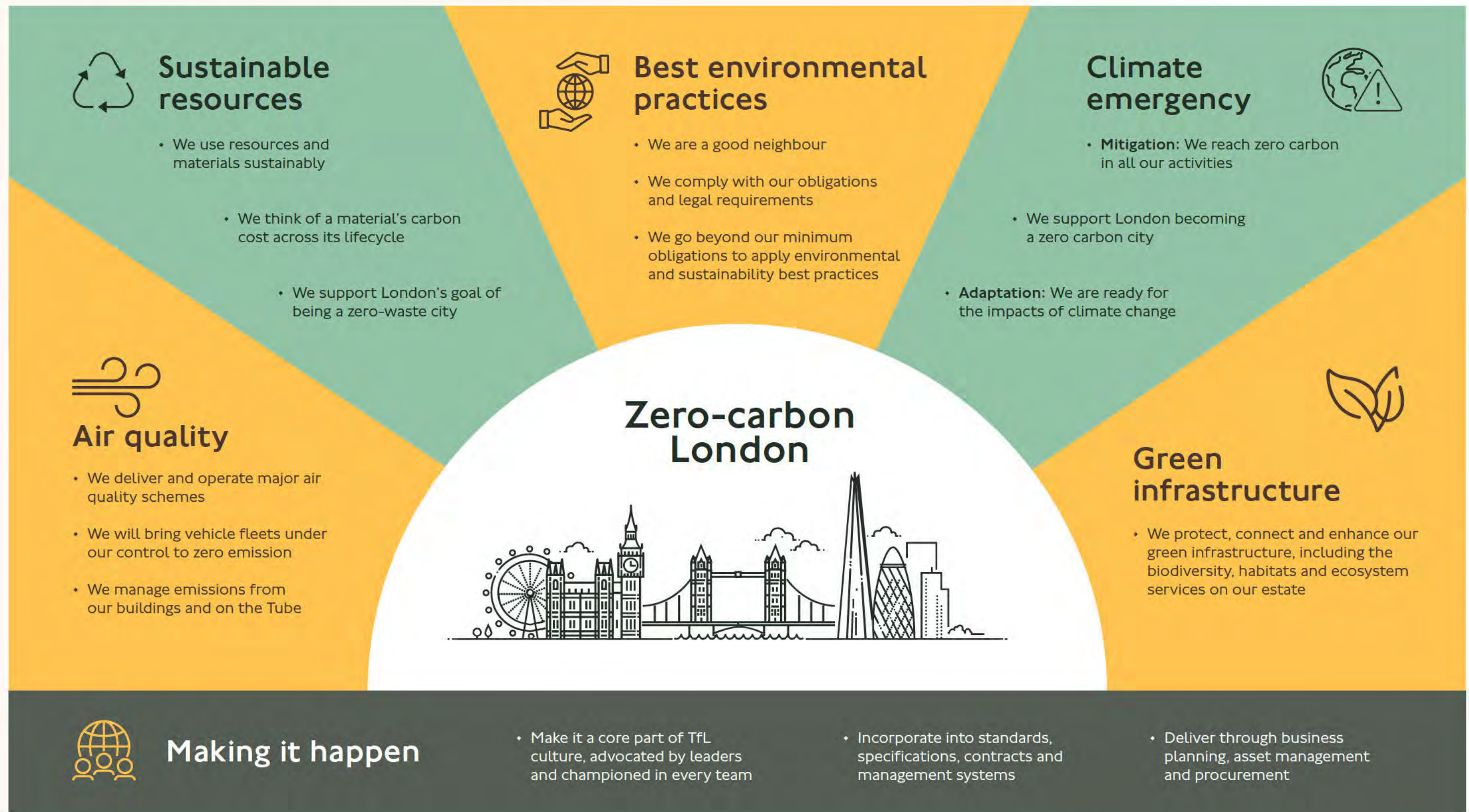
Our central vision on environment is to be part of a zero carbon London. The diagram on page 25 is our Corporate Environment Plan Framework, which is based on five key themes, each of which will help us in delivering our contribution to a zero carbon London.

We support the Mayor's ambition to make London a carbon neutral city by 2030

We can help London become a zero-carbon city



Our environmental framework and ambitions





Climate emergency

Transport is responsible for a quarter of London's carbon emissions, with private car use the primary source of these. Therefore, we have a vital role in increasing the proportion of journeys that can be made by walking, cycling and public transport, which is why we have a target of 80 per cent of trips in London to be made by these methods by 2041. We must ensure that our Underground, bus and rail services lead by example in reaching net-zero carbon operations, and we must reduce emissions from our buildings and infrastructure. To do this, we focus on the following:

Removing fossil fuel consumption

We are committed to converting our 9,000-strong bus fleet to zero emission. We already operate the largest zero-emission bus fleet in western Europe, with more than 500 electric buses currently in operation (increasing to 800 by the end of March 2022) and 22 hydrogen fuel cell buses. We are committed to making the cars and vans in our support vehicle fleet zero emission by 2030.

We have the largest zero-emission bus fleet in western Europe, with more than 500 electric buses in operation

Energy efficiency

We continually seek opportunities to reduce energy demand and optimise energy efficiency across our organisation. This not only reduces carbon emissions, but often also saves money. Examples include regenerative braking on the Underground, replacing lighting with LEDs, encouraging a culture of turning off equipment when not in use, procuring low energy assets and retrofitting our buildings.

Supplying renewable energy to TfL

We are the largest consumer of electricity in London, and within the top ten for the whole of the UK. This means what we do has a material impact on how quickly the UK market on renewables evolves. We are currently engaging with the market to unlock Solar Private Wire, which will enable us to directly receive zero-carbon electricity from local solar farms.

Renewable energy procurement

We have a strategy to move the more than 1.5 Tera Watt hours (TWh) of electricity we use annually to 100 per cent renewable energy. Procurement of power purchase agreements with renewable energy generators will begin in 2021/22, with the aim of securing up to 20 per cent of our consumption in this first step. We are working with the Greater London Authority (GLA), a strategic regional authority for London, with powers over transport, policing, economic development, and fire and emergency planning. We are exploring opportunities to jointly procure renewable electricity in this way for the entire GLA Group, alongside potentially creating a fund for public and private investors to invest directly into new renewable projects (which in turn supply energy to the GLA Group).

Carbon in our infrastructure and supply chain

Initial research suggests that carbon emissions from our supply chains and projects ('scope 3' emissions) could be around double our operational emissions. We are developing a more detailed and accurate baseline for these emissions to identify areas to focus our reduction efforts. In parallel, we are developing the expertise and tools to improve calculation of life-cycle carbon during early optioneering and detailed design of projects and programmes, so we are equipped to make life-cycle carbon emissions part of our design decisions.

We have adopted a carbon strategy for the delivery of our major projects, which is based on driving four outcomes:

- Baselining the carbon footprint of our major projects
- Reducing the carbon impact of our projects by using the baseline to identify and actively manage our carbon risks and opportunities
- Reporting on the carbon impact of our capital programmes and monitoring through our assurance processes
- Establishing a carbon culture and improving carbon literacy within the organisation

Adapting to the changing climate

The number and intensity of severe weather events is increasing, with prolonged periods of hot weather, flash flooding and winter storms. We established and continue to chair the quarterly Transport Adaptation Steering Group, which brings together stakeholders, such as Network Rail and Highways England, and experts, including the London Climate Change Partnership, to understand how we can proactively address the issue of climate change adaptation in the transport sector.

In addition, we have established a research programme with a range of partners to determine how severe weather events affect our operations, from the impact of rainfall and flooding on our road network, to the impact of high temperatures on London Underground. We are also completing a climate risk assessment for our assets.

Climate change presents not only a significant and growing health and safety risk to our customers, colleagues and communities, but also a financial risk to TfL, as discussed further under the economy pillar of this report.



Our plans to improve

We will continue to significantly reduce our operational carbon by transitioning from our national grid supply and obtaining electricity from renewable power purchase agreements. This means we can meet our targets to have our rail network powered by 100 per cent renewable electricity by 2030, our entire bus fleet to reach zero emissions by 2034 (with an ambition to achieve this by 2030), and all the cars and vans in our support fleet to be zero emission between 2030 and 2037 (depending on funding). As we replace our aging Tube fleet on some lines, we will take advantage of technology in both train design and signalling to reduce energy consumption. We will also ensure our long-term asset plans phase out the use of fossil fuels and are substituted by sustainable energy.

Alongside our bus fleet and rail services reaching net zero carbon, we will also develop clear plans to retrofit and tackle emission in our office buildings and across our network – ensuring optimum reach over our infrastructure's operational emissions.

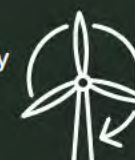
Based on the results of our research programme and the asset climate risk assessment, we will look to better embed climate change adaption into our long-term planning and decision-making processes. We will also work with other infrastructure owners and transport organisations to share and develop best practice.

We are working to increase awareness of the importance of green infrastructure for climate change adaptation. We aim to protect and increase green infrastructure and sustainable drainage systems (SuDs), for example, to help mitigate surface water flood risk and provide shade and local cooling.

Our rail network
will be powered by

100%

renewable electricity by 2030



Air quality

Emissions from our fleets

We are creating one of the greenest bus fleets in the world. Our bus fleet meets the latest Euro VI emission standard across the entire city and we have introduced more than 500 zero emission buses at tailpipe (electric and hydrogen). Currently, one in 20 buses in London are zero emission and this will continue to increase as we transition the entire fleet. We also have a fleet of around 1,000 support vehicles that we use to operate and maintain a safe transport system – and we are working to switch these to zero emission as soon as possible.

Wider road transport emissions

We play a significant role in delivering the Mayor's air quality programme and enabling activities on the road network. We operate the ULEZ which has cut down the number of older, polluting vehicles on London's roads and contributed to a 44 per cent reduction in roadside nitrogen dioxide within its boundaries in 2020 compared to 2017. From 25 October 2021, the ULEZ will expand to create a single larger zone bounded by the North Circular Road (A406) and South Circular Road (A205) and cars, motorcycles, vans, other specialist vehicles and minibuses driving into and within the zone, will need to meet the required emission standards or pay a daily charge. We have supported Londoners through £56 million for scrappage schemes, which have encouraged the disposal of nearly 10,000 more polluting vehicles.

Road transport in London accounts for 40 per cent of NO_x pollution in London, so our management of road traffic and transport materially impacts London's air quality. Our Surface Intelligent Transport System programme enables us to make real-time network management decisions taking account of all strategies, policies and impacts. This means that we can manage traffic light sequencing to reduce areas of high air pollution.

As a result of our delivery of measures in the London Environment Strategy (including the introduction of the ULEZ and reducing emissions from TfL buses and support fleets):

- In 2016, two million Londoners, including 400,000 children, lived in areas that exceeded legal limits of air pollution. In 2019, this had reduced to 119,000 people – a reduction of 94 per cent
- The number of state primary and secondary schools in areas exceeding the legal limit for NO_2 fell from 455 in 2016 to 14 in 2019 – a reduction of 97 per cent
- In 2016, monitoring sites in London recorded more than 4,000 hours above the short-term legal limit for NO_2 . In 2019, this reduced to just over 100, a reduction of 97 per cent


Taxi and private hire vehicles

Through our compliance and regulatory function, we are working with the taxi industry to ensure the greenest taxi fleet in the world. By continually tightening licensing requirements and taxi vehicle age limits, we will phase out diesel taxis and increase the number of zero emission capable vehicles in London. More than 4,200 already operate in the Capital.

Electric vehicle charging

Working with London Boroughs, we have helped deliver 311 rapid charging points and more than 3,000 slower chargers through the Go Ultra Low City Scheme.

Increasing active travel, including walking, cycling and public transport, is essential to improving the environment and the health of Londoners. This is why the Mayor's Transport Strategy has the central aim of 80 per cent of all trips in London to be made on foot, by cycle or using public transport by 2041. As described in our Corporate Environment Plan, our partnership working with London boroughs is key to achieving this ambition. More detail can be found in the Mayor's Transport Strategy and the supporting walking and cycling action plans.



We are working to help create the greenest taxi fleet in the world



Our plans to improve

To further reduce our greenhouse gas emissions and improve London's air quality, we will explore ways of financing the acceleration of the transition of our 9,000 strong bus fleet to zero emission by 2034. With Government support we can do this by 2030. If we can secure a viable way of making this affordable, this will be seven years earlier than our original target. We will work with taxi and private hire operators to support their conversion to zero emission capable vehicles while updating our own support vehicles. In terms of our supply chains, from 2025, all new contracts will require freight and servicing vehicles under 3.5 tonnes delivering to TfL buildings to be zero emission.

Increasing compliance through enforcement

We could make a greater contribution to sustainability and the environment through our enforcement activity if it had the right tools. We will work with the Government and make the case for additional enforcement powers which are currently available to local authorities but not TfL. This includes powers to tackle engine idling or the dumping of illegal waste.



We will explore ways of financing the acceleration of the transition of our 9,000 strong bus fleet to zero emission

by 2030

subject to funding

From 2025, all new contracts will require with freight and servicing vehicles under 3.5 tonnes to TfL buildings to be

zero emission



We are eager to make as many vehicles as possible zero emission



Our plans to improve

We aim to support London's goal to become a 'zero waste city' by using all our materials sustainably and understanding their carbon costs throughout their lifecycle. We have set targets to divert 100 per cent of non-hazardous construction, demolition and excavation waste from landfill and recycle 65 per cent of commercial and industrial waste by 2030.

TfL is covered by the GLA Group Responsible Procurement Policy. The policy includes prioritising circular procurement options, maximising value and using sustainable materials. The GLA Group Central Responsible Procurement Team have developed Circular Procurement Guidance and an e-learning tool to support our aim to embed circular economy principles and culture across the business.

We support London becoming a zero-waste city

Sustainable resources

We are working towards the Mayor's ambition of London being a zero-waste city and to support the transition to a low carbon circular economy. This includes:

Waste reduction

To reduce waste at source, we aim to eliminate it early in the planning and design stages of our projects and programmes. By far, the largest generator of waste by weight and volume are our major construction projects, where we recycle in excess of 98 per cent. We require all our major projects to achieve sustainability awards levels (CEEQUAL and BREEAM) that themselves require designing out waste and highly responsible waste management.

Recycling

We continue to pursue our objective of increasing recycling rates in stations, depots, offices, and construction activities (in addition to reusing waste items). We have begun to embed clear principles for the recovery and reuse of redundant equipment in our maintenance practices, by working with London Underground Materials Stores teams to store and redistribute key assets where possible.

We are also addressing litter left by passengers on our services – there are continued trials to increase segregation of recyclables. Waste that is not recycled is sent to incineration with energy-recovery.

100% 
of non-hazardous construction, demolition and excavation waste diverted from landfill by 2030



Our plans to improve

Following the development of our natural capital account, we will embed it into our decision-making processes and regularly update the account. This will help us track changes over time and identify where we need to focus our efforts to maximise the benefits we obtain from our green infrastructure.

In addition to better understanding how biodiversity across our estate can make London a more attractive city and more resilient in the face of the climate crisis, we will explore how biodiversity offsetting (as part of a mitigation hierarchy) on our estate could help us deliver biodiversity net gain.

We will support the Mayor's manifesto commitment to rewild and improve access to the Green Belt, plant green roofs on bus stops and increase wild flowers on our road verges and embankments.

Green Infrastructure

We aim to protect, connect, and enhance green infrastructure, including the biodiversity, habitats, and ecosystem services across our estate. We do this by recognising and acknowledging the benefits of green infrastructure, and aiming to deliver biodiversity net gain through maintenance and project delivery.

Sustainable drainage systems

By incorporating green infrastructure into our projects, particularly where they act as SuDs at ground level or as green roofs, we are helping to make London more resilient to extreme weather and climate change, reducing the pressure on London's historic drainage network.

Tree planting on the TfL Road Network

We continue to be ahead of our target of increasing trees on the TfL Road Network by an average of one

per cent per year. This is despite restrictions due to the coronavirus pandemic limiting the 2020/21 tree planting season to a single month from its usual six month window. A total of 717 new trees were planted in the shortened season, although this figure was lower than the number of trees removed for disease and safety reasons, as part of our annual inspections on tree health. Despite this year's challenges, we are ahead of our Mayor's Transport Strategy target due to tree planting efforts in previous years.

Natural capital

To protect the habitats and ecosystems across our estate, we need to ensure their value and importance is recognised at all levels across our business. Consequently, we are developing a natural capital account for our estate, which will quantify the value of the services provided by our green infrastructure.



486 ha

of Sites of Importance of Nature Conservation on our estate, representing 1.6% of London's Sites of Importance of Nature Conservation (by area) on just 1.25% of London's land

Other notable activity

Enhancing and regenerating the environment is our ambition, and compliance with the law is our bare minimum. The TfL Management System incorporates our approach to environmental management and is supported by training, communication, and assurance activities.

Noise

We actively consider our neighbours by continuing to find ways to reduce the levels of noise on our transport networks to the best of our ability. We test and use improved technology and materials, including targeted trials for solutions relevant to reduce noise impact. The transition of our vehicle fleets to zero emission and our focus on shifting journeys to active travel also contributes to reducing road traffic noise. We are aiming to meet 'no net increase in noise' in DEFRA noise key areas for TfL schemes.

We actively consider our neighbours by continuing to find ways to reduce the levels of noise

Property development

We continue to go beyond our obligations and legal requirements by adopting and implementing environmentally sustainable development best practice across our programmes. For example, the pilot launch of a Sustainable Development Framework for our property development portfolio will help us to achieve biodiversity net gain across our estate (see page 35 for more detail).

Compliance

We assess the sustainability issues of our projects and programmes and are independently verified where appropriate to improve their sustainable design, construction and maintenance principles. Larger TfL projects use the recognised sustainability rating systems BREEAM and CEEQUAL and our management system includes processes and tools to ensure we meet our environmental obligations and regularly undertake assurance and improvement activity.

We strive for environmentally sustainable property development



Economy

Being financially sustainable to provide a resilient and good quality of life for all



Economic impact

Over the course of the last 20 years, investment in public transport in London has been focused on more sustainable travel, with the number of trips made by walking, cycling or public transport rising from 52 per cent in 2000 to 63 per cent just before the pandemic. This shift in travel behaviour has kept London liveable despite its rapid growth, and the continued shift towards more efficient modes of transport is essential if the city is to continue contributing to a productive UK economy.

London makes a critical economic contribution to the UK and if it recovers quickly and robustly, it will be a strong economic engine for both growth and 'levelling up' across the UK, particularly given its significant fiscal contribution to the UK historically. London represents about 13 per cent of UK population but it accounts for nearly 23 per cent of the UK's gross domestic product (GDP) and before the pandemic, it was a significant driver of jobs and growth across the UK.

The central activities zone, which is London's vibrant centre and one of the world's most attractive and competitive business locations compared to anywhere else in the UK or in the world, is uniquely dependent on our public transport. Despite covering only a tiny fraction of its landmass, it is home to 4.4 per cent of UK jobs, and contributes to 7.8 per cent of UK Gross Value Added (GVA). Being home to about 26 per cent of all employment in London and more than 260,000 of London's 1.2million retail and other service jobs in 2019, it is supported by accessible, frequent and sustainable public transport which, before the pandemic, brought 1.2 million people into the central area every weekday. It plays a crucial role in driving jobs and growth across London and the wider UK.

We have a crucial role to play in supporting London and the wider UK economy to come out of the coronavirus pandemic

Nearly 5 per cent of UK jobs are in London's central activities zone

London has one of the most mature low-carbon transport systems in Europe, and our capital expenditure is already biased towards the green recovery. Our Financial Sustainability Plan, published in January 2021, at the request of the Government as part of our funding agreement for the second half of 2020/21, showed how with the right level of capital investment we can support Government objectives to meet the 2030 ambition to decarbonise transport and secure a sustainable green recovery for London, including through the transition of London's bus fleet to zero emission and working towards a zero-carbon railway.

We are actively working to attract customers back to our public transport networks as we emerge from the pandemic, focusing on ensuring they are clean, safe, well-maintained and reliable. This is not only vital to avoiding a car-led recovery and increasing the sustainability of travel in London, it also generates fare revenue which we then invest back into improving walking, cycling and public transport. This 'virtuous circle' is essential to maximising sustainable travel in London.

The new Elizabeth line is an example of a truly transformational project in terms of both construction and operation. The project will protect and improve the environment, develop skills, create jobs, promote sustainable travel, support new homes and the success of London and the wider UK economy.

By accelerating investment in decarbonisation of our network and renewable energy solutions, we will create thousands more jobs, produce innovative solutions and attract international investment. For instance, we estimate that

around 3,000 jobs could be secured through investment in our zero-emission bus fleet and enable manufacturers to create around 600 more.

Our major projects demonstrate the value that we create in the wider economy. These contribute to London's economy, boosting the UK economy and quality of life for millions of people, and supporting the redistribution of economic wealth by providing access to jobs and services in opportunity areas.

Our projects include asset renewals, line upgrades and major infrastructure projects that increase the reliability and capacity of our transport services and give people confidence to make sustainable travel choices. Network extensions like the Silvertown tunnel will reduce congestion, improve the reliability and resilience of the wider road network and provide improved cross-river transport links.

Crossrail is expected to add £42bn to UK GDP over the next 60 years and the Northern Line Extension will create £5bn of wider economic benefit over the same period.

As well as this, our organisation is key to unlocking new housing to tackle the existing housing crisis in a sustainable way. London needs 66,000 new homes each year for at least 20 years. The integration of land use and transport, and the provision of a robust and resilient public transport network, are essential in ensuring that different parts of the city are connected in a sustainable and efficient way.

We use our own land to directly support London's housing needs.

Our 5,700-acre estate makes us one of the largest landowners and we are currently undertaking one of London's most significant programmes of urban development and housing delivery. More than 10,000 new homes will be delivered across London, including a commitment to deliver 50 per cent affordable housing across all sites brought to market after May 2016. Work is underway on 1,580 of these homes, with planning committee approval or submission on nearly 8,000 more.

Sustainability Development Framework

As with many of our past initiatives, this programme will leave a lasting legacy for London and shape its development for many decades to come. It is therefore critical that it adopts and embodies sustainable development best practice. To ensure this is achieved, we have created our commercial development Sustainability Development framework. This is a metric-driven approach to optimising, specifying, delivering, and monitoring best-in-class sustainability performance across our development portfolio. It will continuously evolve over time in line with policy, best practice, and lessons learned.



1,580

Number of homes delivered/started on site by our Property Development programme since 2016/17

Our major projects play a vital role in London's economy



Case study one

New Piccadilly line trains

Fifty per cent of the new train fleet built by Siemens Mobility to replace the existing Piccadilly line fleet from 2025 will be built in Goole, East Yorkshire, employing up to 2,650 people: 700 people in engineering and manufacturing roles, 250 in the construction phase and 1,700 in the broader supply chain. Siemens Mobility has announced £50m of related contracts for UK suppliers, including a number for train components. These include almost £6m in contracts for Yorkshire-based LPA Lighting to provide the interior train lighting, Midlands-based suppliers Baker Bellfield to supply cab partition walls and I M Kelly for driver seats and footrests.

Up to
2,650



people to be employed to build
new Piccadilly line trains

New Piccadilly line trains will require 20 per cent less energy

Case study two

Manufacture of London Overground and Crossrail trains by Bombardier Transportation

All current London Underground and Overground fleets were built by Bombardier Transportation, now taken over by Alstom. Alstom's Derby train factory is the largest in the UK, employing 2,000 people directly and many more in the supply chain. The fleets for the Circle, District, Hammersmith & City, Metropolitan and Victoria lines and the new AVENTRA trains for London Overground were designed and built there.

Alstom employs 330 staff to support the Northern line alone and in total supports 4,709 rail cars across London Underground, Overground, TfL Rail and London Trams. This sustains jobs and apprenticeships across London, and in Derby, Crewe, Widnes, and Mansfield.



2,000

people work for Alstom
(formerly Bombardier) and
many more in the supply chain



Train manufacturers directly employ thousands of people



Our key Responsible Procurement achievements in 2020/21

- As part of National Apprenticeship Week in February 2021, we delivered a set of virtual events with 290 people interested in working for TfL and its supply chain attending the 12 supplier-led sessions
- There were 524 new apprenticeship starts in our supply chain, of which 51.2 per cent are from a Black and minority ethnic background and 27.8 per cent are women
- Of our 65 key suppliers who have issued a Modern Slavery Statement, 72.3 per cent scored 3/5 or above from Transparency in the Supply Chain analysis
- Thirteen TfL suppliers are accredited to the Mayor's Good Work Standard, the London benchmark for good employment practice, which encourages employers to adopt best practice in areas such as fair pay and conditions, diversity and inclusion, skills and progression and workplace wellbeing
- We paid 90.8 per cent of the invoices from SMEs within ten working days, to support their cash flow
- Of our Capital Delivery colleagues in construction and SHE roles, 170 took part in introductory Modern Slavery prevention training in March 2021. We also held a bespoke three-hour workshop as part of the development of the Modern Slavery Assurance Handbook, with representatives from each of our Purchasing and Commercial teams
- We have continued to upskill our Purchasing and Commercial teams through a number of Responsible Procurement half-day virtual training sessions, as well as our online Responsible Procurement eLearning module

We're committed to inclusive employment practices

Responsible Procurement

As part of the GLA Group, we have adopted a Responsible Procurement Policy. This high-level strategic policy sets out the GLA Group's plans, ambitions and commitments for ensuring continuous improvement in London. Our commitment is to ensure that our decisions on the procurement of goods, works or services are undertaken in line with the commitments set out in this document, under the following themes:

- Improving supply chain diversity
- Embedding fair and inclusive employment practices
- Enabling skills, training and employment opportunities

- Promoting ethical sourcing practices
- Improving environmental sustainability

These are applied, where relevant and proportionate, in commercial arrangements with partnering and contracting organisations.

By the end of Quarter 2 2021/22, the Responsible Procurement Implementation Plan for the Mayoral term 2021-24 will be published. The plan will set out the actions that we, along with the wider GLA Group, will prioritise to deliver on the commitments of the GLA Group Responsible Procurement Policy.



Securing financial stability means we can invest in London's future

Financial stability

Before the pandemic, we were on track to achieve financial sustainability and deliver an operating surplus by 2022/23 having taken out around £1bn from our net cost of operations from 2015/16 to 2019/20. However, with the devastation to our passenger income as a result of the pandemic, we required Government support of over £3bn in 2020/21. We have secured £1.6bn in 2021/22, including £1.08bn in the 1 June Funding and Financing agreement to December 2021; the latter agreement includes a target to achieve financial sustainability by April 2023.

This means that we will cover our cost of operating, maintaining and financing, as well as capital renewals to ensure assets remain in a good state of repair, by April 2023.

While we work on our plans to achieve this, our ability to invest for sustainability rests on securing certainty of longer-term multi-year funding. Government has explicitly committed to continuing to work with us on reaching a longer-term financial settlement beyond our current agreement. We will continue to push hard for this so that we can plan effectively for London's future and continue to deliver value for money through our services, capital projects, contracts and supply chain.



Our plans to improve

We had already embedded £730m savings into our Financial Sustainability Plan to be achieved in the six years to 2024/25. At the end of financial year 2020/21, we had £390m left to deliver, which is largely related to considering options in London Underground such as our supply chain, maintenance delivery, embracing new technology, and being more agile on resource planning.

We are also exploring options in major operating contracts, reviewing our head office accommodation strategy and exploring efficiencies in back and middle office costs and other business areas. As part of the 1 June funding agreement with Government, we agreed to examine how the remaining £390m of the embedded £730m savings could be accelerated. The Government also asked us to make additional savings of £300m, which we have included in our Revised Budget that was approved by our Board on 28 July 2021.

The Government has asked us to conduct a review of our pension scheme, to identify reform options which would put our pension fund into a financially sustainable position and we have agreed the terms of reference for the review. We were also asked to freeze pay, in line with the public sector pay pause while we are in receipt of Government funding.

We have been asked to conduct a joint review of actual passenger demand levels as we recover from the pandemic and prepare a revised medium-term capital investment programme which takes into account future demand scenarios, post COVID-19. This programme includes measures to improve tracking of capital efficiencies and quantification of anticipated carbon reductions from future capital spend. We are working to confirm the programme with Government through the Spending Review.

Security risk management

The threat from deliberate, intentional acts to harm TfL and London's people, reputation and economy is constant, evolving and increasingly significant in an unstable world. Financial crime, cyber crime, organised crime and the hostile actions of nation states are becoming indistinguishable. TfL is an operator and owner of critical national infrastructure and a key player in the safety and security of London. We adopt an holistic and risk based approach to improve security and protect customers and colleagues from hostile and deliberate actions that cause harm.

We work to identify existing and emerging security risks and seek to reduce our vulnerability to terrorism, nation state hostile acts, extortion (through cyber attacks), organised financial crime such as fraud, blackmail, corruption, espionage, sabotage and industrial scale theft. Our systematic approach to protective security contributes to TfL and London's sustainability.

Everyone at TfL has a role to play in security and we actively work to increase awareness, understanding and competence through security training, briefings and acting on security communications.

Our tax strategy

We are committed to meeting all legal requirements. We are transparent about our approach to tax and discuss the interpretation of tax legislation with HMRC, particularly where the tax treatment is unclear. We have a zero-tolerance approach to all forms of tax evasion, fraud, corruption or bribery whether under UK law or under the law of any foreign country.

Fare evasion

The vast majority of our customers pay their fares. This fare income is reinvested in running and improving services for our customers. We take a robust approach to tackling fare evasion and ticket fraud and ensure fairness to all our customers. We do this through designing out opportunities for fare evasion, using technology to deter and detect fraud, and proactive enforcement and compliance activity across our public transport networks.

Financial crime, cyber crime, organised crime and the hostile actions of nation states are becoming indistinguishable

We use technology to deter and detect fraud on our network

Other notable activity

Financial risk of climate change

The financial risks of climate change are wide-ranging and have implications for matters such as financing and supply chain disruption. However, the direct impact on our network and operations in terms of asset failure, service disruption and associated potential health and safety liabilities means that adapting to climate change is key to mitigating financial risk. We are actively working to report in line with the Taskforce on Climate Related Financial Disclosures and will be providing a submission to Defra under their Adaptation Reporting Power.

There has been an anecdotal increase in incidents across our network that have been linked to weather events. The potential of further severe weather events due to climate change could lead to many more incidents, such as extensive flooding, like we saw during July 2021, or failure of assets – including embankments, and flooding controls and defences – any of which could be catastrophic for London and its transport network.

We have a dedicated programme of research to understand current and future severe weather impacts. Part of the programme includes identifying improvements to data collection so we can better carry out comprehensive quantitative assessments of the impact of weather events on our assets and operations and how this might be exasperated by climate change. This is a medium-term programme over several years that, in the short-term, is being supplemented with a range of case studies that highlight the impacts of severe weather on our operations. This information is helping to make the case across the business that climate change adaptation is a priority for decision-making and provide guidance on how to best manage this risk. Adaptation is now a key environmental priority for London Underground's asset strategy.

Climate change adaptation is a priority for the business



Our plans to improve

To enable quantitative or comprehensive assessments of the impact of current weather events on our operations, we are:

- Planning a scoping study to investigate which teams across the business should be using the latest climate projections, and how that data could be made more accessible for use across diverse team functions
- We will also review our processes and governance to start collecting pan-TfL data in this area, so we can build a better forecast of the risks we face as an organisation

Modern slavery

More than 95 per cent of our key suppliers are registered in the UK but many of their operations and supply chains are global. We use a risk-based approach, prioritising steps to achieve greater supply chain visibility where our risks are highest, recognising that workers in the lowest tiers of supply chains are often the most vulnerable.

As an example, we are actively working to ensure that workers producing our uniforms are treated fairly wherever they may be in the world. Recently, following mobilisation on the Underground uniform contract, each factory is required to undergo an annual, independent, third-party social audit against the nine principles of the Ethical Trading Initiative Base Code.

We are actively working to ensure that workers producing our uniforms are treated fairly wherever they may be in the world

We ensure the workers producing our uniforms are treated fairly



Our plans to improve

We will continue to raise awareness of modern slavery to our people and will enhance how we address modern slavery and supply chain transparency through targeted learning.

We will risk assess our key suppliers, inviting them to share their approach to modern slavery through the UK Government's Modern Slavery Assessment Tool and work with them to act on key recommendations resulting from the assessment.

Driving sustainability through our TfL Vision and Values

Our TfL Vision and Values reinvigorates our purpose to move London forward by setting out a longer-term view, beyond our immediate recovery: a bold long-term vision for the next era of TfL. One that is stronger and capable of tackling the single, most pressing crisis of our time: climate change. And one that will contribute to a more inclusive, dynamic, democratic place to work, all for the good of London.

Because everything we do – our public transport services, our roads, our walking and cycling routes, our estate and infrastructure, and our role in regulation and enforcement – we can do more to improve people's lives and help our city navigate the future, than almost any transport body in the world. TfL's purpose is to move London forward safely, inclusively and sustainably.

Safely

- Preventing colleagues and customers from being killed or seriously injured
- Making customers feel safe and secure while travelling
- Being a workplace where every person feels safe

Inclusively

- Reflecting the diversity of our city to serve it better
- Keeping transport affordable for the greatest number of people
- Improving accessibility so that everyone can make journeys with independence

Sustainably

- Balancing our income and our costs so London can keep moving long into the future
- Working to reduce carbon emissions, positively impact our environment and adapt to climate change
- Supporting a clean, healthy London that is not congested with traffic

Our vision is to be the strong green heartbeat for London. We have developed roadmaps to chart our next steps towards this future. They start with our colleagues and end with our customers, with safety and inclusion woven through both, in line with our purpose. They include plans to make our network more financially and environmentally sustainable, while we continue essential day-to-day operations and project delivery. These roadmaps will evolve as we continue to work with our colleagues and learn along the journey. They will be updated annually.

How we work is as important as what we do. Putting people at the heart of how we work starts with this: we treat every journey like it matters, both our customer's journeys around London, and our colleagues journey in the organisation. To achieve this, we have three core values: to be caring, open and adaptable. This starts with our employees and extends to everyone we work with, including the trade unions. This ambition extends to our contractors and supply chain partners as we will need every bit of their expertise, insight and support.

Our vision is to be the strong green heartbeat for London

We keep London moving safely, inclusively and sustainably

References to other reports

This section contains relevant reports that may be useful if you are interested in delving deeper into a topic. Reports listed might span one or more of the three pillars of sustainability and we have indicated which pillar(s) are most relevant.

Click on the publication for more information. This list is not exhaustive but attempts to summarise some of the more relevant publications. A full list can be found in the Publications and Reports section of our website.

Publication	Society	Environment	Economy
About TfL web landing page	●	●	●
TfL Business Plan and Budget	●	●	●
Commissioner’s report	●	●	●
Annual Report and Statement of Accounts	●	●	●
Mayor’s Transport Strategy Annual Update	●	●	●
Travel in London Report	●	●	●
TfL Pension Fund (On sustainable Investing)	●	●	●
Safety, health and environment Annual reports	●	●	
TfL Sustainable Timber Policy		●	
Bus Crime statistics (London boroughs)	●		

Publication	Society	Environment	Economy
Road danger reduction dashboard and data	●		
Annual Diversity and Inclusion impact report	●		
Employment Landing page	●		
Human Resources Quarterly Report	●	●	
TfL Modern Slavery and Human Trafficking Annual Statement	●		
Santander Cycles Performance report	●		●
Transparency landing page	●		●
Senior Pay	●		
GLA Group Responsible Procurement Progress Report	●	●	●
Vision Zero action plan	●		

Glossary

Accessibility	Considering the design of products, devices, services and environments to ensure everyone can use them
Anchor Institutions Charter	Charter launched in March 2021, to which TfL is a founding signatory. TfL has committed, along with some of the city's other biggest organisations, to working together by using their procurement and recruitment power to maximise employment opportunities and help young people to flourish
Biodiversity	Term used to describe the enormous variety of life on Earth, including plants, bacteria, animals and humans. It can be used more specifically to refer to all the species in one region or ecosystem
Biodiversity net gain	An approach to development that leaves biodiversity in a better state than before
British Transport Police (BTP)	National special police force that polices railways and light-rail systems in England, Wales and Scotland
Building Research Establishment Environmental Assessment Method (BREEAM)	The world's longest established method of assessing, rating and certifying the sustainability of buildings
CapEx	Funds used by a company to acquire, upgrade and maintain physical assets such as property, plants, buildings, technology or equipment
Capital delivery	Investment in construction projects that build, maintain and improve our network's infrastructure
Capital investment	The amount invested in a company to enhance its business objectives
Carbon dioxide (CO ₂)	Principal greenhouse gas related to climate change
Circular economy	System based on the principles of designing out waste and pollution, keeping products and materials in use and regenerating natural systems
Circular procurement	Relates to any purchase required for an organisation to operate, as part of their transition towards a circular economy
Civil Engineering Environmental Quality Assessment and Award Scheme (CEEQUAL)	Evidence-based sustainability assessment, rating and awards scheme for civil engineering, infrastructure, landscaping and works in public spaces
Climate change adaptation	Improvements to the built environment, assets or processes that lead to a reduction in harm or risk of harm, or realisation of benefits associated with climate variability and climate change. Adaptation policies can lead to greater resilience of communities and ecosystems to climate change
Commercial and industrial waste (C&I waste)	Consists of a wide variety of office product packaging, including cardboard, wood, metal, glass, textiles, containers and aggregates. For TfL, this includes waste from stations, tenanted properties, depots and head offices

Conference of the Parties (COP)	The supreme decision-making body of the UNFCCC (United Nations Framework Convention on Climate Change). All States that are Parties to the Convention are represented at the COP, at which they review the implementation of the Convention and any other legal instruments that the COP adopts, and take decisions necessary to promote the effective implementation of the Convention, including institutional and administrative arrangements
Construction, demolition and excavation waste (CDE waste)	The largest waste stream generated in London. It can contain bricks, slabs, concrete, plaster (gypsum), plasterboard, insulation and excavation materials such as soil, sand and wood
DEFRA	Department for Environment, Food and Rural Affairs
Dial-a-Ride	TfL's free door-to-door service for those with permanent or long-term disabilities
Ecosystem services	The benefits provided by natural capital that contribute to making human life both possible and worth living
Ethical trading initiative base code	Viewed as a global reference standard as a code of good labour practice, widely used as a benchmark to conduct social audits and develop ethical trade action plans
Euro VI	The name given to a set of limits for harmful exhaust emissions produced by virtually any vehicle powered by petrol or diesel engines
GLA Responsible Procurement Plan	Greater London Authority Responsible Procurement Plan
Greenhouse gas	Any gas that induces the greenhouse effect, trapping heat within the atmosphere that would normally be lost to space, resulting in an increase in average atmospheric temperatures, contributing to climate change. Examples include carbon dioxide, methane and nitrous oxides
Green infrastructure	The network of parks, green spaces, gardens, woodlands, rivers and wetlands (as well as features such as street trees and green roofs) that is planned, designed, and managed to: promote healthier living; lessen the impacts of climate change; improve air quality and water quality; encourage walking and cycling; store carbon; and improve biodiversity and ecological resilience
Global Reporting Initiative (GRI)	An international independent standards organisation that helps businesses, governments and other organisations understand and communicate their impacts on issues such as climate change, human rights and corruption
Independent Disability Advisory Group (IDAG)	A panel that helps TfL better understand the impact of its policies, projects and programmes on disabled customers

Low Emission Zone (LEZ)	Encourages the most polluting heavy diesel vehicles driving in London to become cleaner. The LEZ covers most of Greater London and is in operation 24 hours a day, every day of the year
MPS	Metropolitan Police Service
Natural capital	The set of environmental resources (green space, air, water, wildlife) that provides services, such as flood protection or cleaner air, that benefit the wellbeing of Londoners and the city's economy.
Net-zero carbon	Making the amount of carbon emitted into the atmosphere equal to the amount taken out of the atmosphere. Reaching zero carbon on a net basis, where any residual greenhouse gas emissions are offset
Oxides of nitrogen (NO _x) consisting of nitric oxide (NO) and nitrogen dioxide (NO ₂)	Two gases whose molecules are made of nitrogen and oxygen atoms. These nitrogen oxides contribute to the problem of air pollution, impacting on human health and life expectancy and playing a role in the formation of both smog and acid rain
Non-visible disability	A disability that is not immediately apparent, typically chronic illnesses and conditions that significantly impair normal activities of daily living
Optioneering	Evaluating different options to solve a specific problem
Pilates	A method of exercise that consists of low-impact flexibility, and muscular strength and endurance movements
Procurement	The process of finding and agreeing to terms and acquiring goods, services, or works from an external source, often via a tendering or competitive bidding process
Rewilding	The process of restoring ecosystems to the point where nature can take care of itself. It often involves reintroducing a few key species that act as a catalyst for wider nature and biodiversity restoration
Scope 3 emissions	Other indirect emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, and electricity-related activities not covered in scope 2
Scoping study	A preliminary study to define the scope of a project
SHE	Safety Health and Environment
Small and medium enterprise (SME)	Business with fewer than 250 employees, and a turnover of less than €50 million, or a balance sheet total of less than €43 million
Social cohesion	The extent of connectedness and solidarity among groups in society

Social development	Improving the wellbeing of every individual in society so they can reach their full potential. The success of society is linked to the wellbeing of each and every citizen
Social integration	Process during which newcomers or minorities are incorporated into the social structure of the host society
Solar private wire	Generating new solar power on land with a direct contention to TfL's network, thereby providing a renewable supply of energy to London Underground services
Step-free access	The use of lifts, ramps and level surfaces instead of stairs or escalators, and avoidance of gaps onto our trains, buses and boats
Supply chain	The activities and processes required by an organisation to deliver goods or services to the consumer
Sustainable drainage systems (SuDS)	Systems to slow and reduce the flow of rainwater before it reaches our drainage systems, helping to reduce the risk of surface water flooding
Tactile paving	Textured ground surface found on footpaths, stairs and station platforms to warn or direct pedestrians who are visually impaired
The London Recovery Board	London's recovery is led by the London Recovery Board, chaired jointly by the Mayor of London, Sadiq Khan, and the Chair of London Councils, Councillor Georgia Gould. It brings together leaders from across London's government, business and civil society, as well as the health and education sectors, trade unions and the police, to oversee the long-term recovery from the coronavirus pandemic
The Paris Agreement	A legally binding international treaty on climate change. It was adopted by 196 Parties at COP 21 in Paris, on 12 December 2015 and entered into force on 4 November 2016. Its goal is to limit global warming to well below 2, preferably to 1.5, degrees Celsius, compared to pre-industrial levels
Three pillars of sustainability	Sustainability is most often defined as meeting the needs of the present without compromising the ability of future generations to meet theirs. It has three main pillars: Society, Environment, Economy. The factors of these must be balanced in equal harmony to achieve true sustainability
United Nations Sustainable Development Goals	A blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including poverty, inequality, climate change, environmental degradation, peace and justice
Vision Zero	An approach for that aims to eliminate all deaths and serious injuries on London's transport system
Workplace champion	Employee that is dedicated to improving a certain area within the company

About TfL

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

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

We run most of London's public transport services, including the London Underground, London Buses, the DLR, London Overground, TfL Rail, London Trams, London River Services, London Dial-a-Ride, Victoria Coach Station, Santander Cycles and the Emirates Air Line. The quality and accessibility of these services is fundamental to Londoners' quality of life. By improving and expanding public transport and making more stations step

free, we can make people's lives easier and increase the appeal of sustainable travel over private car use.

We manage the city's red route strategic roads and, through collaboration with the London boroughs, we are helping to shape the character of all London's streets. These are the places where Londoners travel, work, shop and socialise. Making them places for people to walk, cycle and spend time will reduce car dependency, improve air quality, revitalise town centres, boost businesses and connect communities. As part of this, the Ultra Low Emission Zone scheme and more environmentally friendly bus fleets are helping to tackle London's toxic air.

During the coronavirus pandemic we have taken a huge range of measures to ensure the safety of the public. This includes enhanced cleaning using hospital-grade cleaning substances that kill viruses and bacteria on contact, alongside regular cleaning of touch points, such as poles and doors, and introducing more than 1,000 hand sanitiser points across the public transport network.

Working with London's boroughs we have also introduced Streetspace for London, a temporary infrastructure programme providing wider pavements and cycle lanes so people can walk and cycle safely and maintain social distancing.

At the same time, we are constructing many of London's most significant infrastructure projects, using transport to unlock much needed economic growth. We are working with partners on major projects like the extension of the Northern line to Battersea, Barking Riverside and the Bank station upgrade.

Working with Government, we are in the final phases of completing the Elizabeth line which, when open, will add 10 per cent to central London's rail capacity. Supporting the delivery of high-density, mixed-use developments that are planned around active and sustainable travel will ensure that London's growth is good growth. We also use our own land to provide thousands of new affordable homes and our own supply chain creates tens of thousands of jobs and apprenticeships across the country.

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

We are constantly working to improve the city for everyone. This means using data and technology to make services intuitive and easy to use and doing all we can to make streets and transport services accessible to all. We reinvest every penny of our income to continually improve transport networks for the people who use them every day. None of this would be possible without the support of boroughs, communities and other partners who we work with to improve our services.

By working together, we can create a better city as London recovers from the pandemic and moves forward.



STREETSCAPE GUIDANCE

Fourth Edition
2022 Revision 2

MAYOR OF LONDON



**TRANSPORT
FOR LONDON**
EVERY JOURNEY MATTERS

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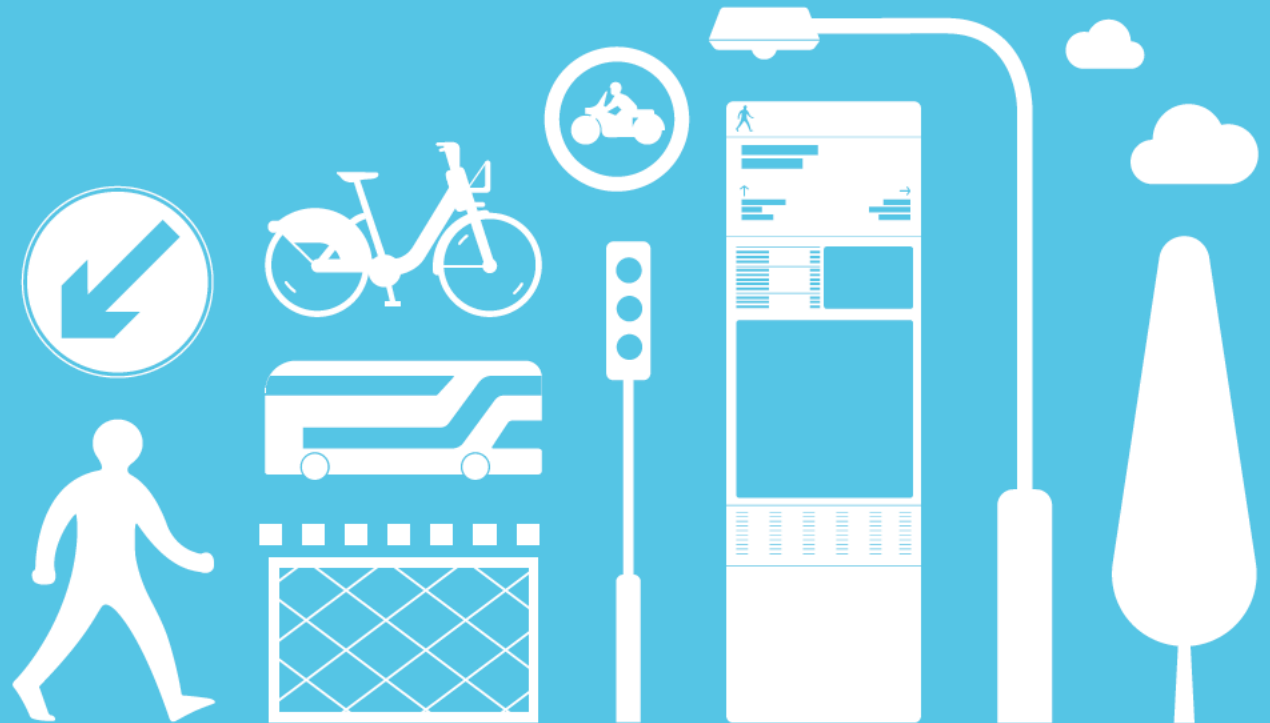
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1.1 Background

The purpose of this Streetscape Guidance is to set a high standard for the design of London's streets and spaces by applying best practice design principles. With imaginative application of the right materials and good craftsmanship, Transport for London (TfL) is working towards breathing new life into the public realm. Through better and bolder design, we intend to transform our streetscapes into welcoming places, creating a public realm and transport network fit for a globally competitive economy.

This guidance sets the standard for London's streets and whether a one-off major project or a smaller local adjustment, it defines our aspirations and outlines the criteria for good design, material selection, installation and maintenance.

Streets account for 80 per cent of London's public realm. Raising the ambition for streets with a collaborative, design-led approach is key to achieving new standards of excellence and recognising the fundamental role our streets and places play in improving the public realm and providing an enhanced quality of life.

Figure 1: Wimbledon Bridge



Streets are places for people. Successful streetscapes are inclusive and provide for the competing requirements of their users, including pedestrians, cyclists, motorcyclists, bus operators, bus passengers, private vehicle owners, and freight vehicle operators. Understanding and carefully balancing the diverse needs of these users will ensure better and safer places to support the variety of activity on our streets.

Figure 2: Oxford Street has been designed to provide for the competing requirements of its users



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1.2 What is Streetscape Guidance?

Streetscape Guidance provides the tools to apply best practice design principles and create consistently high quality links and places across London. While this guidance has been developed primarily for the Transport for London Road Network (TLRN), the principles are equally applicable to any street in London should a local authority choose to adopt them.

The guidance has three primary functions, which are:

- To encourage those responsible for designing, building, operating and maintaining London's streets to use a robust design approach in balancing the movement of people and goods with high quality urban realm
- To demonstrate the high level of ambition, innovation and creativity required on London's streets to deliver excellent levels of service
- To highlight the design considerations required for appropriate layout, material selection, application and maintenance, and to reinforce best practice design principles, ensuring that a high quality approach to street design is implemented across London

Figure 3: Streetscape Guidance provides the tools necessary to create high quality streets



Streetscape Guidance acknowledges emerging policies and describes the need to better understand the role of London's streets for 'place' and 'movement' functions, and to prioritise street improvements which enhance the efficiency and quality of the street environment as a whole.

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1.3 Who is Streetscape Guidance for?

This guidance is a working tool for those responsible for designing, building, operating and maintaining London's streets. It also provides more general guidance and advice for a wider audience, including design professionals, academics, highway authorities, road user groups, local communities and private developers.

A broad range of topic areas are covered in this document, commensurate with the variety of design considerations that exist in a city as complex and varied as London. This guidance is designed to supplement rather than replace existing standards, requirements, or guidelines, such as the Traffic Signs Regulations and General Directions (TSRGD) and the Design Manual for Roads and Bridges (DMRB). Where further information exists on a topic area from an associated TfL guidance document, this will be clearly highlighted. Our associated guidance documents are listed below:

- Streetscape Guidance
- London Cycling Design Standards Guidance
- Kerbside Loading Guidance
- Accessible Bus Stop Design Guidance
- Station Public Realm Urban Design Guidance

While Streetscape Guidance has been developed primarily for the Transport for London Route Network (TLRN) the principles are equally applicable to any street in London.

Figure 4: Upper Street in Angel has flexible amenities which allows for a more efficient use of space



1.4 How should I use the document?

Streetscape Guidance is structured so that the reader can systematically work through a process that establishes how to best **plan, select and compose elements** which contribute to improving the quality and function of London's streets and places.

Part A sets out the **vision** for London streets. It details our strategy and ambition to build a more efficient and effective transport system while balancing user needs. The 'Street Types' framework is presented to recognise the different roles London's streets perform and to assist in the application of context sensitive design.

Part B presents **best practice case** studies from all over London to exemplify how excellence can be achieved. The case studies highlight the importance of identifying suitable interventions and the most appropriate measures and amenities to be used, in a context sensitive way, to enhance the experience of those using the space.

Part C describes how **creativity and innovation** must be integrated into the overall approach to ensure London continues to be an attractive, vibrant and accessible place to work, live and visit. Where practical and appropriate, it encourages the trialling and testing of new initiatives to stimulate future

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street improvements and meet the evolving expectations of all street users.

The barriers that prevent experimentation are identified and the process for incorporating innovative ideas, technologies, materials and layouts is explained.

Part D recognises that each street has a **unique function, performance and character** which must be balanced to ensure the needs of the users are met while reflecting and enhancing the character of the place.

Part E provides the **technical guidance** for a range of street components. It recommends the material palette and layout options for composing London streets, and provides advice on the selection and placement of products which meet the strategic criteria for quality and function, while enabling local flexibility.

1.5 How is the document relevant to my work?

Streetscape Guidance can be used to support a variety of street improvement works, from small scale decluttering regimes to extensive new streetscape layouts. It provides the framework and criteria for selecting surface materials and street furniture, and identifies how these should be configured within the street environment.

Streetscape Guidance should be used as early as possible in the development of a project or proposal to help define the brief and inform the initial stages of the design process. This helps to ensure best practice design principles are applied and that a consistent approach is taken in the design of London's streets and places.

Site specific design and good detailing is integral to producing excellent streetscapes and so this guidance should be used to provide general advice on design details. Arrangements and technical drawings are for illustrative purposes only.

Figure 5: This document is provided to support a variety of street improvement works from planning through to design and implementation



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1.6 How do I collaborate?

Collaboration is essential in realising the vision for London; providing world-class streets and places that are fit for the future. Continuous improvement of our streets relies on the united effort of a wide range of skilled professionals, technical staff and stakeholders.

Meeting the desired level of ambition will require new and exciting ways of involving people, and developing a joint understanding of the challenges, the trade-offs and the need for action. Active and meaningful partnerships will need to be made; working together to explore new opportunities, to promote regulatory change where necessary, and to improve all users experiences on London's streets.

The importance of early engagement cannot be overstated. At TfL we are committed to the discussion of new ideas, innovations and improvements at a sufficiently early stage to allow an impact on decision-making, and ensure that better and more informed decisions can be made.

It is our intention that Streetscape Guidance be a 'live' document – regularly reviewed, edited and updated to reflect the latest in best practice. Of course, this requires ongoing and valued contributions from a wide audience. Suggestions, comments and queries are strongly encouraged and should be emailed to: StreetscapeGuidance@tfl.gov.uk

Future editions of this document will continue to set out London's evolving aspirations for world-class streets, including the goals, knowledge, and advances in technology and innovation. This will ensure our guidance remains a comprehensive and valuable resource for those responsible for designing, building, operating and maintaining our Capital's streets and places.

Figure 6: Collaboration and engagement with communities and necessary stakeholders is essential to ensure a cohesive approach to improving the quality of London's streets



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1.7 Engagement and approvals

To achieve London's vision for streets, open and honest discussion is needed among a wide range of stakeholders, including design professionals, academics, highway authorities, road user groups, local communities and private developers.

New ideas, products, materials or layouts being proposed to us will require active and early engagement to ensure a shared understanding of the challenges, constraints, and opportunities.

1.8 How and when should I engage with TfL?

Developers, consultants and TfL staff with streetscape-related proposals for the TLRN should contact our streetscape manager during concept development. The streetscape manager is responsible for advising on the application of Streetscape Guidance and can assist in clarifying processes, expected timings, and criteria for decisions and decision makers. It is therefore strongly recommended that contact is made as early as possible.

If the proposal relates to a new idea, product, material or layout, the streetscape manager may decide that further information is needed and stakeholders will be requested to complete a streetscape application form. This form is used to understand if the proposal:

- Offers a solution to a problem, such as improving legibility, increasing safety, or providing a multipurpose function to improve the overall street-user experience
- Is technically feasible and meets wider planning criteria
- Improves to the look and feel of the streetscape

- Is safe, durable, and cost effective to maintain or replace
- Resists damage
- Has demonstrated use, either in London, the UK or worldwide

Please contact the streetscape manager at:
StreetscapeGuidance@tfl.gov.uk

Following review of the application form, the streetscape manager may ask for additional information, grant consent, or request that the proposal be presented to our Streetscape Design Review Group (SDRG) for further review and discussion.

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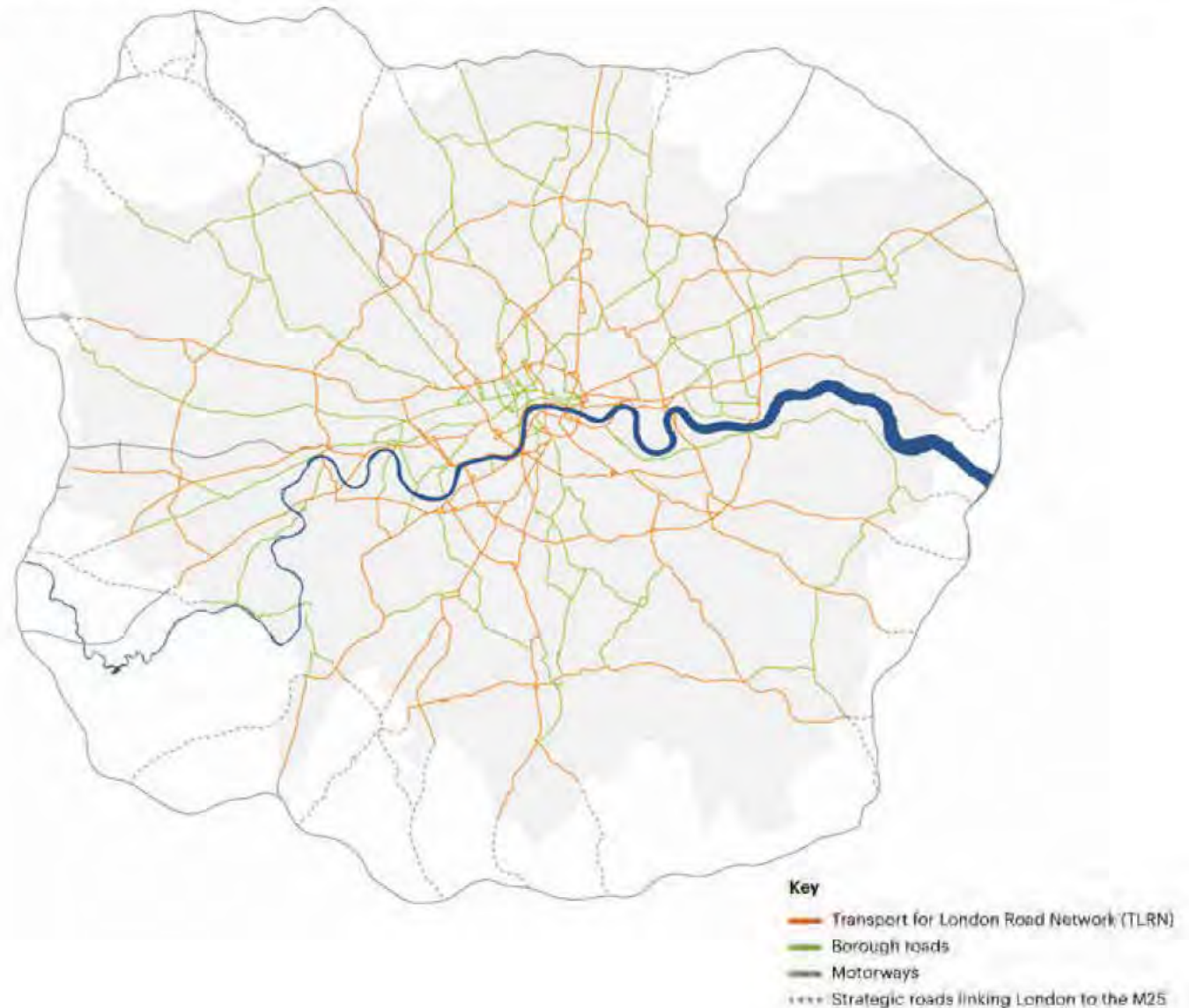
1.9 What is the Streetscape Design Review Group?

The SDRG is the decision-making body for all streetscape matters relating to the TLRN. It is a multidisciplinary panel formed of specialists from across TfL to ensure that the aspirations, design principles, materials and layouts outlined in Streetscape Guidance are well implemented and maintained. Meetings take place every four to six weeks and attendance is by invitation only.

We encourage early engagement as part of an iterative design process.

Proposals presented at the SDRG will receive practical advice and feedback to help guide ongoing development and design. The SDRG will also confirm if presented proposals deviate from Streetscape Guidance. Deviations from Streetscape Guidance will be subject to our formal approval process.

Figure 7: London's strategic road network



1.10 Do I require approval?

All proposals on the TLRN require formal approval from the SDRG. There is also an exceptions process for non-standard materials which is detailed below.

Proposals that are subject to our exceptions process may be invited to return to the SDRG periodically to ensure visibility of progress. Exception decisions will generally be informed within eight weeks if no further presentations have been requested by the SDRG. Additional information regarding the exceptions process can be made by contacting the streetscape manager at StreetscapeGuidance@tfl.gov.uk

Figure 8: TfL's exceptions process

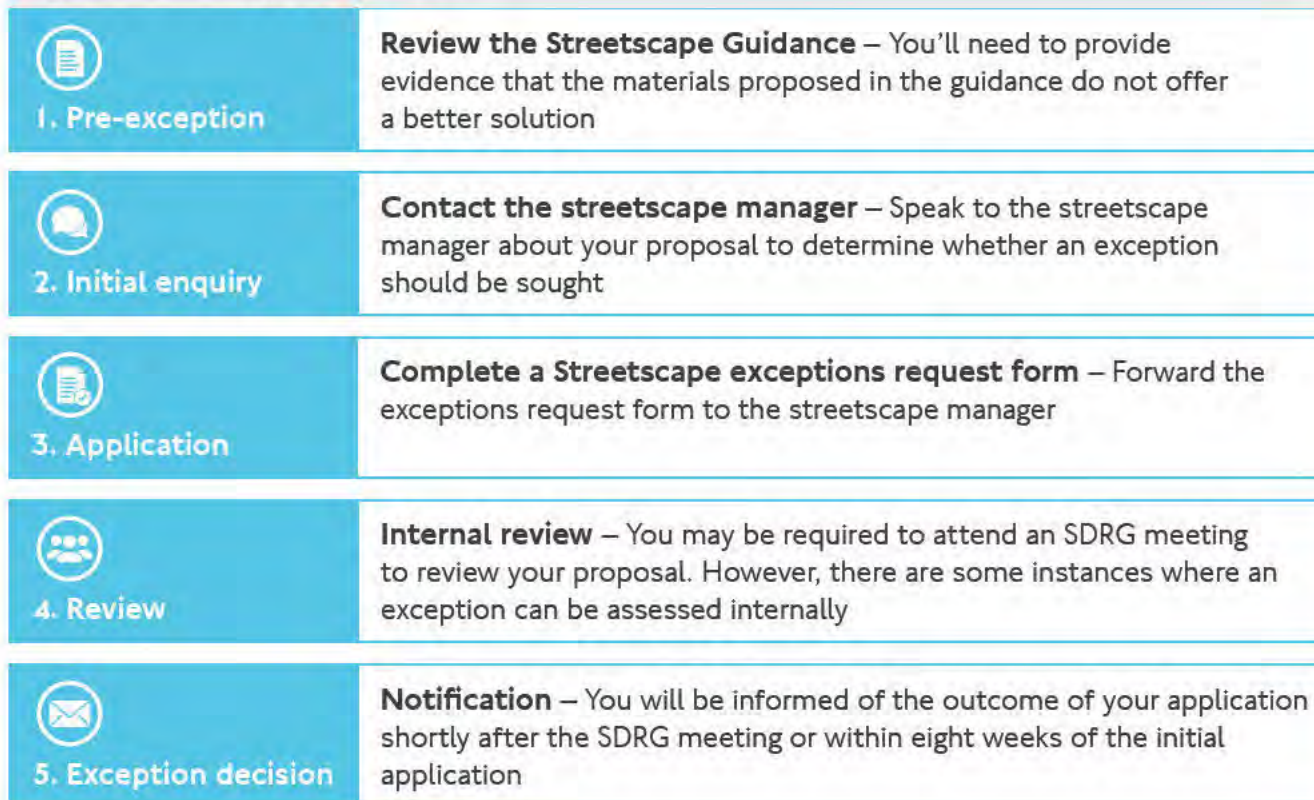


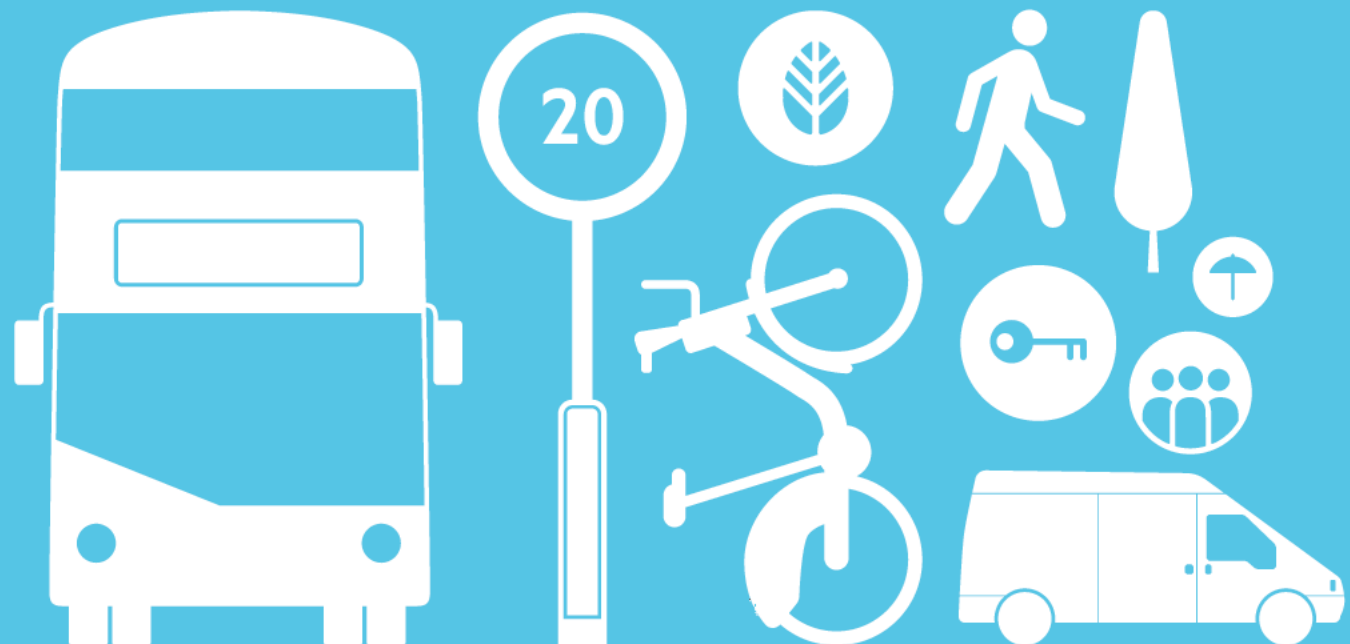
Figure 9: Exhibition Road required multiple exceptions and approvals from SDRG



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Part A A vision for London's streets

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2.1 Planning for the future

London is knitted together by a vast network of streets, roads, public squares, interchanges and junctions. Accounting for 80 per cent of London's public spaces, roads play an important role in our daily lives: as places where we live, work and move through. With such a high percentage of our public realm located on our streets, these spaces need to work hard to provide high quality places that are resilient, flexible and functional.

London's population is expected to reach 10.8 million people by 2041. To combat the effects of population growth a more efficient and balanced transportation network is required to respond to ever increasing demand.

The Mayor's Transport Strategy (MTS) sets the vision for transportation in London. It also addresses the need to invest in the road network so that an improved public realm supports more walking and cycling, to improve access to transportation, and better balances the needs of road users.

2.2 The Mayor's Transport Strategy

The Mayor's Transport Strategy sets out plans to transform London's streets, improve public transport and create opportunities for new homes and jobs. To achieve this, the Mayor wants to encourage more people to walk, cycle and use public transport.

The strategy uses the Healthy Streets Approach. This makes health and personal experience the priority as we plan our city.

The Healthy Streets Approach will be applied to the whole transport system to help create:

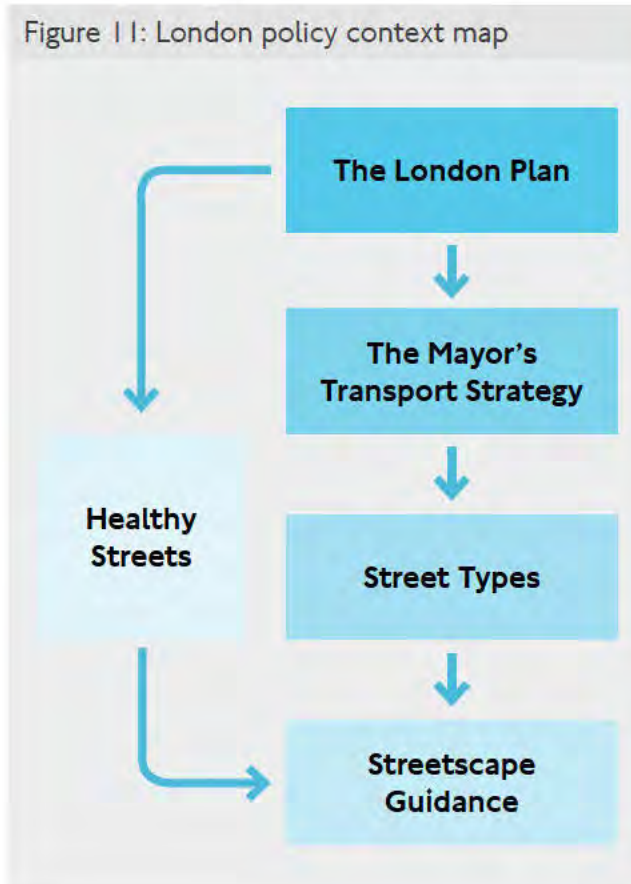
- **Healthy Streets and healthy people:** Streets make up 80% of London's public spaces – making them Healthy Streets will improve the quality of life for everyone in London.
- **A good public transport experience:** Public transport is the most efficient way for people to travel distances that are often too long to walk or cycle. A seamless, 'whole-journey' experience will provide an attractive alternative to using the car.
- **New homes and jobs:** London needs 65,000 new homes every year to meet demand, plus around 1.3 million more jobs by 2041. We have an opportunity to reshape London and make sure it grows in a way that improves the quality of life for everyone.

Figure 10: London's network of streets knit the city together



©Commission for Architecture and the Built Environment (CABE)

Figure 11: London policy context map



2.3 Street Types for London

Key to delivering the goals set out by the MTS is a holistic understanding of and approach to managing London's current and future demands on the road network. Street Types sets out a new framework that helps takes account of local and network priorities and aims to guide operational, policy and investment decisions.

Street Types uses a classification matrix of nine categories to map London's streets according to their movement (of people and goods) and place functions. Thus far, the network in 32 out of 33 London boroughs has been mapped in a collaborative effort between TfL and the boroughs.

The resulting mapping of London's streets is intended to enable TfL, the boroughs and stakeholders to:

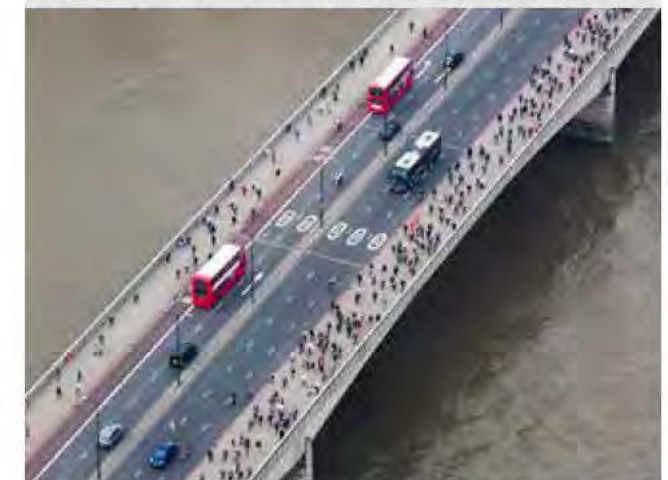
- Set priorities for different streets and roads, and make trade-offs accordingly
- Reflect changing functions and aspirations as streets and areas change
- Highlight to all interested parties where a mismatch between form and function may be limiting a location from realising its potential
- Identify the tools that may be appropriate locally to deliver change
- Balance place-specific needs with the overall function of the network

- Establish the need for intervention at a strategic level to keep London moving

Street Types has helped TfL, boroughs and developers collaborate to look at streets not as corridors that facilitate the movement of people, goods and services rather than 'traffic', and places which contribute to the Capital as a key part of the public realm. The mapping process has also helped us to understand the relative balance between movement and place functions at key locations across London.

This classification has identified parts of the road network which attract the most people allowing us to target locations where different types of intervention might be more or less appropriate. In that way we can ensure transport continues to support London's growth in a safe and sustainable manner, mindful that the

Figure 12: London bridge busy with pedestrians



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that this is done by area or location, depending on outcomes sought.

Street Types for London (STfL) is an exciting and emerging transport planning concept. This new shared geography is helping to reshape how TfL and the boroughs use the limited space available on our road network. Importantly it doesn't just focus on the transformation of key locations, but ensures we are maximising the usage and maintenance of our existing infrastructure.

Please contact StreetTypes@tfl.gov.uk for further information, or visit our website tfl.gov.uk/street-types

Figure 14: The Street Types transcend highway ownership and borough boundaries

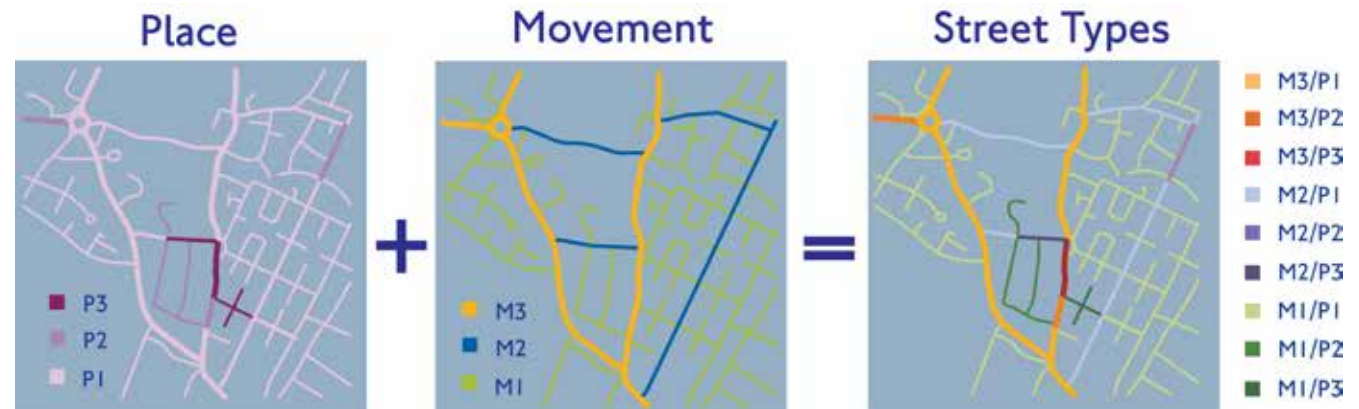


Figure 13: Street Types matrix

