December 2023

Travel in London 2023
Annual overview

MAYOR OF LONDON

TRANSPORT FOR LONDON
EVERY JOURNEY MATTERS

Travel in London 2023

Annual overview

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Introduction

Travel in London is Transport for London's (TfL's) annual publication that summarises trends and developments relating to travel and transport in London. Its principal function is to describe how travel is changing and to provide an overview of progress towards implementing the Mayor's Transport Strategy (MTS). It also provides an evidence and analysis base for the general use of stakeholders and policymakers.

This sixteenth report covers trends and developments up to 2022 and into 2023, including historical series and, more recently, reflecting the disruption brought about by the coronavirus pandemic from early 2020 and London's subsequent recovery. The report is broadly structured around the Mayor of London's key aims for transport, as set out in the MTS.

For more information about any of the items featured in this report, please contact TiLEnquiries@tfl.gov.uk.

Changes to Travel in London reports

There are some changes to the format of these publications. This will allow us to be more responsive to the availability of new data and developments throughout the year and to be more flexible in terms of content and the provision of data.

Annual overview reports (this report) will continue to be published towards the end of each calendar year. They will cover the broad scope of the MTS and provide an evidence-based interpretative summary of trends and developments. In this way they will complement our delivery-based Annual Reports, also published on the TfL website. These reports will continue to be structured around the Mayor's key aims for transport set out in his strategy, these being:

- Eighty per cent of trips in London to be made by active, efficient and sustainable modes by 2041
- Healthy Streets and healthy people
- A good public transport experience
- New homes and jobs

More detailed material on specific topics will now be released at intervals throughout the year in the form of shorter reports as the data becomes available during the year.

2022-2023: an overview

- The last eighteen months have seen a continued recovery of travel demand from the unprecedented lows of the coronavirus pandemic. Overall public transport demand across all modes was estimated at 90 per cent of the pandemic baseline in October 2023. It is now clear, however, that the pandemic and the adaptations that went with it have left some important legacies for transport in London.
- Most significant of the pandemic legacies is the more widespread adoption of hybrid working among those for whom this is a viable option, and the resulting continuing shortfall in public transport demand relative to before the pandemic, setting back

progress towards the MTS key sustainable mode share aim. Across the whole of 2022, the proportion of all trips in London made by active, efficient and sustainable modes was 62.3 per cent. Data for 2023 covers the first three quarters of the year and if the trends seen so far continue, then the mode share could increase to 64 per cent for 2023. This compares to 63.6 per cent in 2019 before the pandemic and to the MTS aim of 80 per cent of trips by 2041.

- More widely, changes to travel behaviour such as a relative concentration of commuter trips on the middle days of the week and different travel patterns (for example more local trips) on working-from-home days can have both positive and negative effects on the transport aims, and it is important that these opportunities and challenges are fully taken account of in future policy.

- Because public transport trips usually involve an active travel stage to access the network (for example, the morning walk to the station), this in turn is also holding back progress towards the MTS active travel aim in aggregate terms, despite the pandemic bringing some notable gains in terms of the use of active travel modes and the provision that is made to encourage their use. For example, cycling in 2022 was estimated to account for 4.5 per cent of all trips in London (up from 3.6 per cent in 2019).

- A larger proportion of vehicles driving in London are cleaner. The London-wide compliance rate for vehicles subject to the Ultra Low Emission Zone (ULEZ) standards in the first month of operation was 95.3 per cent, up from 91.6 per cent in June 2023 and 39 per cent in February 2017 when changes associated with the ULEZ began.

- Although the impacts of the London-wide ULEZ on air quality are still being worked through, this and other complementary measures should mean that concentrations of nitrogen dioxide (NO_2) are expected to be 30 per cent lower in 2025 compared to 2019. Population exposure to illegal levels of nitrogen dioxide pollution means that nearly two million more people are now living in areas which meet the standards compared to 2016. However, challenges remain in meeting the tighter World Health Organization guidelines for nitrogen dioxide and fine particulate matter ($PM_{2.5}$).

- Pandemic impacts are also relevant to progress with some of the other MTS aims. In terms of safety, good progress has been made as a reflection of many road safety initiatives and several interim casualty reduction targets for 2022 have been met. However, the total number of people being killed or seriously injured on London's roads or killed or seriously injured by or while in a bus remain above the interim targets required to achieve the Vision Zero aim by 2041. On the public transport networks the return of customers after what might have been a lengthy interruption was accompanied by an increase in customer injuries, so action was quickly taken to reinforce safe behaviours.

- Pandemic-related reductions in travel demand have contributed to reductions in public transport crowding and, temporarily at least, increases in average bus speeds. Although the transformative Elizabeth line has also contributed to the former, pressures affecting both these aims are expected to reassert themselves in the medium-term. Progress to reduce the journey time differential for those using the step-free public transport network has been notably rapid, with a 39 per cent reduction achieved by the end of 2023, compared to the 2041 target of a 50 per cent reduction.

- The year 2022 was also marked by the full opening of the Elizabeth line, a truly transformative addition to London's public transport network that, during 2022/23, carried 128.5 million journeys (and 155.2 million in the first full year of operation).

Monitoring progress towards the Mayor's Transport Strategy

Travel in London reports are the principal means of tracking progress towards the aims of the MTS. In his strategy and subsequent documents, the Mayor identifies specific outcomes, each having a quantified ambition for 2041 (see table 1 below). Progress towards these is tracked using the MTS Tracker dataset, which is published alongside this Overview.

Table 1   Mayor's Transport Strategy outcomes and measures.

| Outcome	Measure	2041 aim
Mode share	Proportion of trips undertaken by active, efficient and sustainable modes	80% of all trips
Active	Proportion of Londoners achieving 20 minutes of active travel per day	70% of Londoners
Safe	Number of people killed or seriously injured on London's roads	Zero
Safe	Number of customers killed or seriously injured on TfL services	Zero
Efficient	Number of car trips crossing cordons bounding central, inner and outer London	Three million fewer daily
Green	Average roadside nitrogen dioxide (NO_2) concentration in central, inner and outer London	60-70% reduction, 2016 to 2040, equivalent to a 94% emissions reduction
Green	All carbon dioxide (CO_2) emissions from London's transport network	72% reduction
Connected	Proportion of Londoners living within 400 metres of a bus stop	Assumed maintained at existing high level
Accessible	Additional journey time by step-free routes	50% reduction
Quality	Proportion of TfL rail journeys travelled in standing densities above two people per square metre	10-20% reduction
Quality	Average bus speed (within safety and speed limits)	5-15% improvement
New homes and jobs	Proportion of population living in areas with public transport accessibility level of four or higher	36% for Greater London, 56% for Opportunity Areas (by 2030)

Source: Transport for London.

Alongside these specific aims, this report covers the broader scope of the MTS and aspects of other strategies related to it, mainly the London Plan and the London Environment Strategy, including a broad range of content as appropriate.

Overall travel demand and mode shares

Recent travel demand trends and the pandemic recovery

The last eighteen months have seen a continued recovery of travel demand in London from the unprecedented lows of the coronavirus pandemic. Overall travel demand, however, remains short of pre-pandemic levels, particularly on public transport.

Figure 1   Average weekly demand on the main transport networks compared to the equivalent week before the pandemic, Mar 2020–Oct 2023.
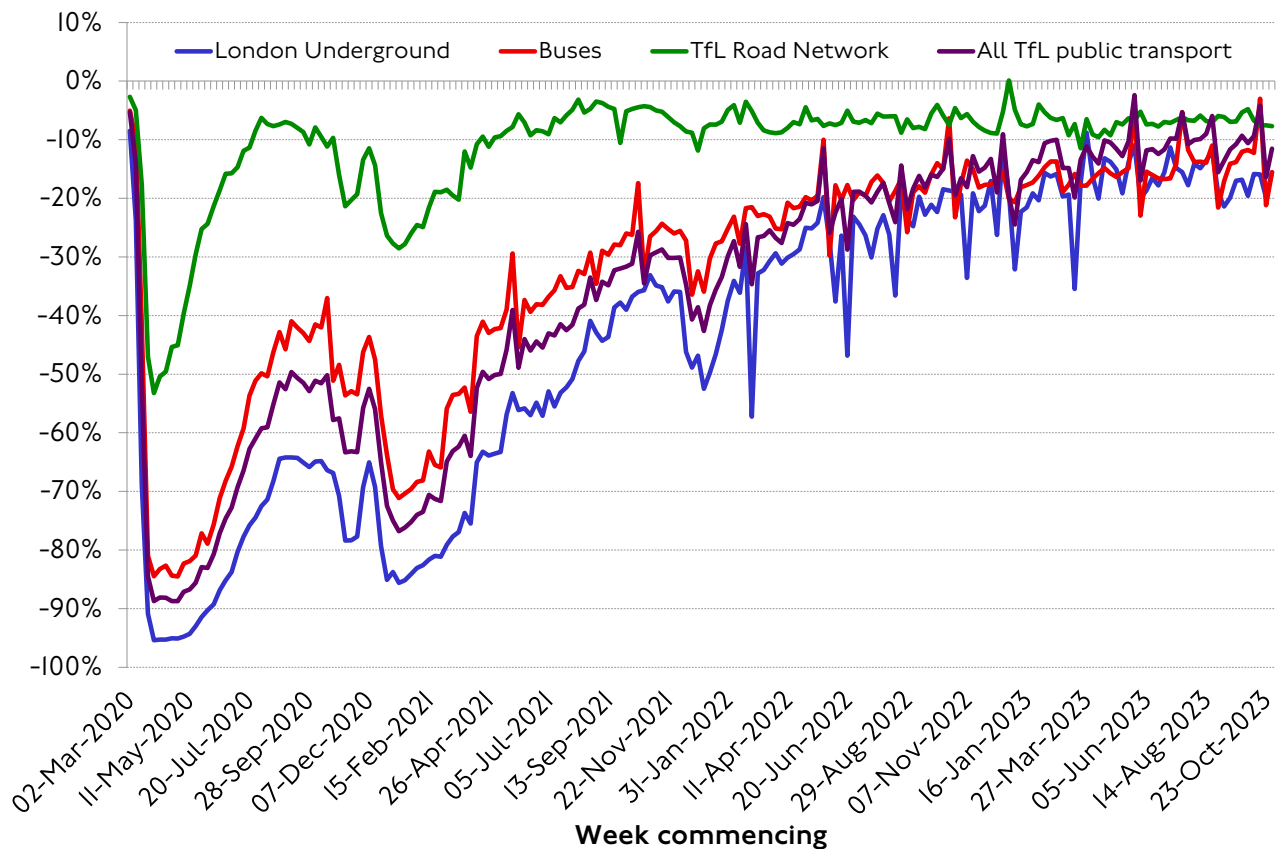
Source: TfL Strategic Analysis, Transport Strategy & Policy, based on TfL operational data.
Note: Public transport trends are calculated as change in seven-day average journeys from the equivalent week in 2019, where the averages have been adjusted to account for bank holidays on a like-for-like basis. The TfL Road Network trend, on the other hand, is an average of the day-to-day change from the equivalent date in 2019 for each of the weeks, adjusted to account for bank holidays in the same way. From 1 April 2023, the TfL Road Network trend source data was re-baselined to the equivalent week in financial year 2022/23 instead of before the pandemic. However, for comparability with earlier data and with the other modes the trend presented in the graph has been adjusted to represent change from the equivalent week before the pandemic.

Figure 1 shows the trend in travel demand throughout the pandemic and the subsequent recovery, in terms of values indexed against representative pre-pandemic baselines for the principal mechanised modes. The key point of interest is the trend from mid-2022 to date, representing the sustained recovery from the pandemic. By October 2023:

- Road traffic volumes on the TfL Road Network had recovered to around 92 per cent of the pre-pandemic levels. The relatively earlier return of road traffic and relatively higher levels during the pandemic itself have previously been noted.

- Overall public transport demand across all modes was estimated at 90 per cent of the pre-pandemic baseline in October 2023. Generally, public transport demand has been slower to return. As of late October, London Underground demand was around 84 per cent of the pre pandemic level, with bus demand also around 84 per cent.

The year 2023 has been particularly notable for a variety of external factors potentially affecting travel demand. For example: prolonged industrial action on transport services across the country, international and ceremonial events, and increased cost-of-living pressures. Despite these factors, figure 1 suggests a relatively stable picture and it is therefore increasingly likely that patronage at about these levels relative to before the pandemic represents settled, medium-term post-pandemic conditions.

It is however still too early to conclude that the transport recovery from the pandemic has fully run its course, or the extent to which other factors such as cost-of-living pressures are holding back this recovery. It is increasingly clear that there are some important legacies from the pandemic that will continue to affect travel demand in London for some time. The growing facility for hybrid working is key among these, particularly affecting commuter and business travel demand on public transport, and perhaps also having other consequences for the nature of trips made, such as trip purpose, trip length and travel demand on different days of the week.

Total travel demand during 2022 and into 2023

An average of 24.7 million trips per day were made in London by all modes in 2022, some 9.8 per cent lower than the 27.4 million in 2019 (before the pandemic). However, this includes early 2022, when the pandemic restrictions had just been lifted. Furthermore, various other disruptions like international events and challenging cost-of-living pressures continued to disrupt travel throughout the remainder of the year.

The recovery continued into 2023, with provisional quarterly estimates up to the end of September 2023 shown in figure 2. The unprecedented impact of the pandemic on travel demand in London during 2020 and 2021 is also clear from the figure, although the relative resilience of active modes was noteworthy.

Travel demand continued to increase into 2023, up to 25.7 million trips per day in quarter 2 (April to June), just six per cent lower than in 2019 and a four per cent increase on 2022. The largest increases were seen on public transport. So far, bus demand in 2023 is eight per cent higher than in 2022, and London Underground demand is 20 per cent higher. Cycling trips are estimated to have increased by five per cent in 2023.

Figure 2   Estimated daily trips by mode, seven-day week average, 2000-2023.
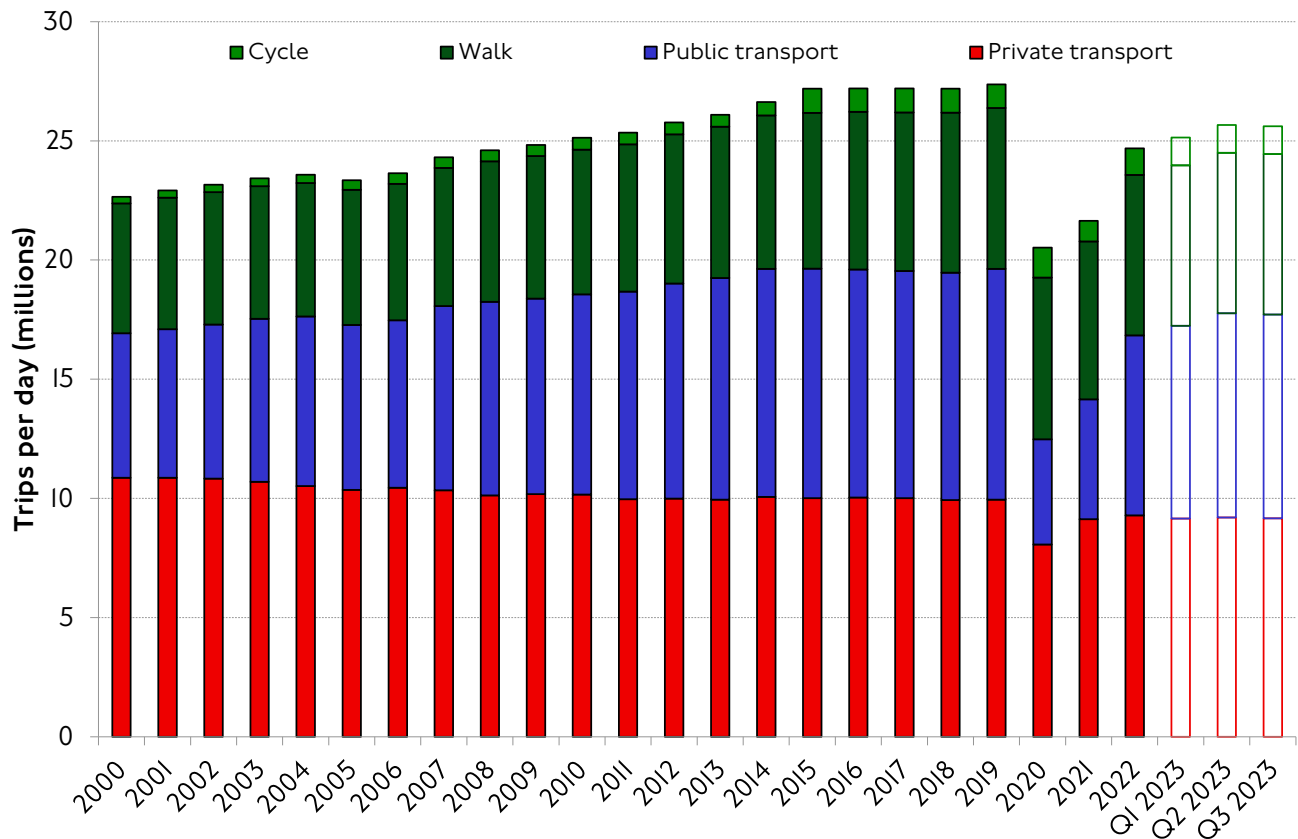
Source: TfL Strategic Analysis, Transport Strategy & Policy.
Notes: Trips are complete one-way movements. They may include several modes and journey stages but are classified by the mode that is typically used for the longest distance. Round trips are counted as two trips: an outward and an inward leg. Cycle trips have been revised back to 2015 following a change in methodology. The 2023 quarterly estimates are provisional.

Active, efficient and sustainable mode share

A central aim of the MTS is to increase the active, efficient and sustainable mode share for all trips in London to 80 per cent by 2041. This will enable us to support growth in the Capital's population and economy in a sustainable manner. During 2022 the sustainable mode share was 62.3 per cent, up from 57.8 per cent in 2021. This compares to 63.6 per cent in the last pre-pandemic year (2019). While progress towards this aim before the pandemic was slower than required to meet the target, it is also clear that the pandemic legacy of lower overall demand for public transport is now adversely affecting progress towards this aim.

Initial estimates based on the trend in figure 2 suggest that the active, efficient and sustainable mode share in 2023 could be around 64 per cent.

Figure 3 shows the historic trend in the context of the trajectory required to meet the Mayor's 2041 aim (shown as a straight line to 2031). Two features stand out from the figure. The first is that, compared to the overall scale of the pandemic impact on travel demand, the pandemic impact on active, efficient and sustainable mode share was relatively modest. This reflected a combination of much lower overall mobility, and a relative increase in the share of trips that were made by active modes, notably walking

and cycling, particularly during periods of formal restrictions. The second is that, into the recovery, the continuing relative shortfall of public transport trips is acting as a drag on the overall proportion of trips made by active, efficient and sustainable modes.

Figure 3   Active, efficient and sustainable trip-based mode share in London, 2010-2030.
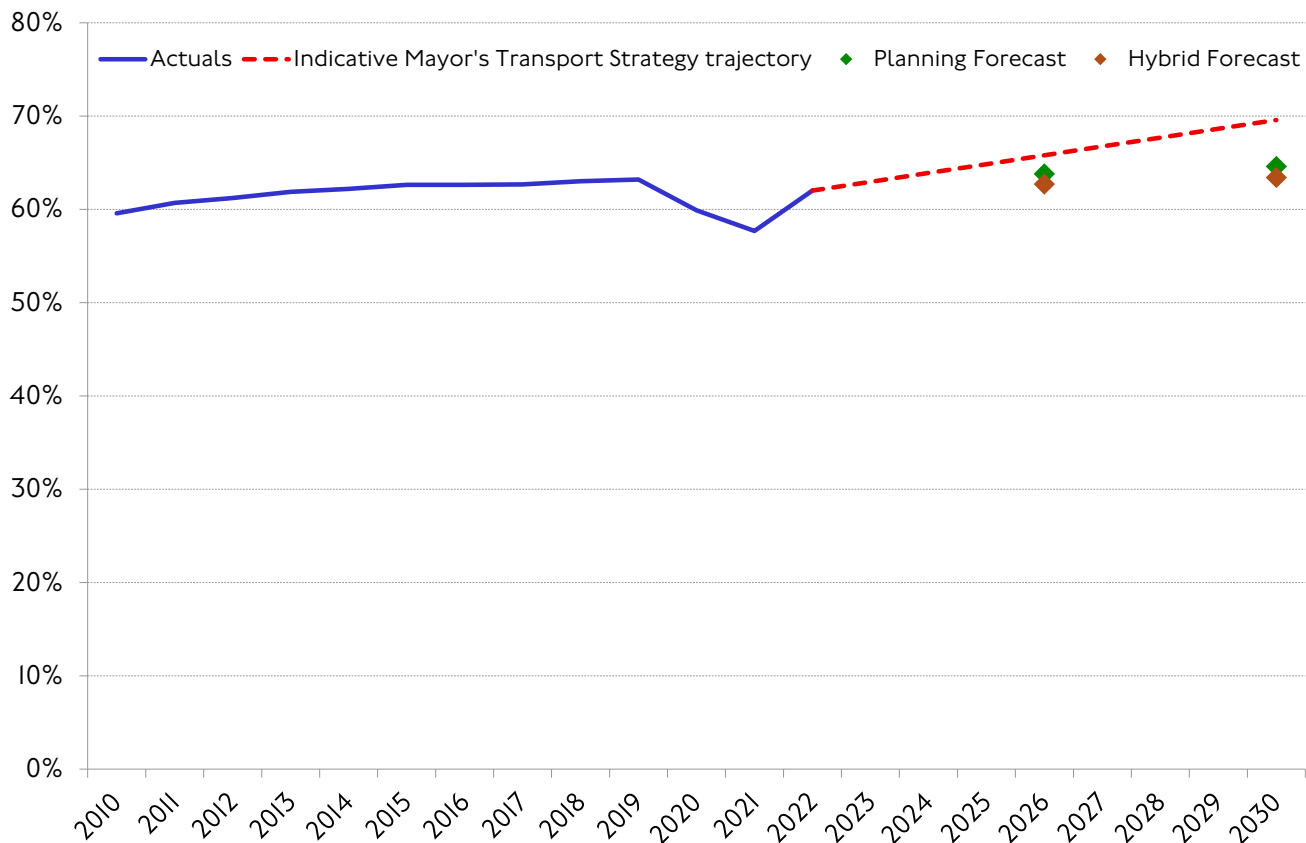
Source: TfL Strategic Analysis, Transport Strategy & Policy.
Note: The Planning Forecast represents our best modelled assessment of the future taking into account macroeconomic trends (population, economy, etc.) as well as committed and funded changes to the transport network. The Hybrid Forecast also incorporates our best assessment of the current position within the envelope of uncertainty defined by our forecasting scenarios.

Trends in the principal drivers of travel demand

Travel demand is primarily a reflection of the number of people living in London and economic activity. Both these underlying drivers have been affected by significant developments during the pandemic and in the post-pandemic period.

London's population

The latest census of population was conducted across the UK in March 2021, during the latter stages of the pandemic restrictions. The population in London was estimated at 8.8 million (figure 4). Although this was an increase of 7.7 per cent compared with 2011 (8.2 million), this rate of growth was slower than between 2001 and 2011 (14 per cent). At face value, this suggests that the rate of population growth may have been relatively overestimated in the latter years of the last decade, which has implications for key indicators such as the active, efficient and sustainable mode share, progress against

which was partly predicated on relatively higher population growth resulting in higher densities favouring trips by active, efficient and sustainable modes.

Other features revealed by the census, such as the relative ageing of London's population and spatial differences in the rate of population growth may also have implications for our plans.

London remains a young city, with just 11.9 per cent of the population aged 65 or over – the figure for England is 18.4 per cent. However, the highest growth rates between 2011 and 2021 were in people in their fifties, sixties and seventies, with the largest in people in their fifties. The number of people in their twenties declined, as did children under five. This may have potentially important impacts on travel, as data from our travel surveys suggests that older Londoners are more likely to drive and less likely to use public transport.

The largest percentage increases in population over 2011 occurred mainly in east London, with Tower Hamlets increasing by 22 per cent since 2011. Barking & Dagenham, Newham, City of London, Greenwich and Hounslow all increased by more than 13 per cent, well above the London average. In contrast, Richmond upon Thames, Lambeth, Haringey and Hammersmith & Fulham all had population increases below five per cent. The populations of Camden, Westminster and Kensington & Chelsea all declined, although this could have been affected by temporary changes to living arrangements during the pandemic.

For more information about London's population trends visit the [demography pages](#) on the Greater London Authority's website.

Figure 4   Long-term trend in London's population, 1939-2021.
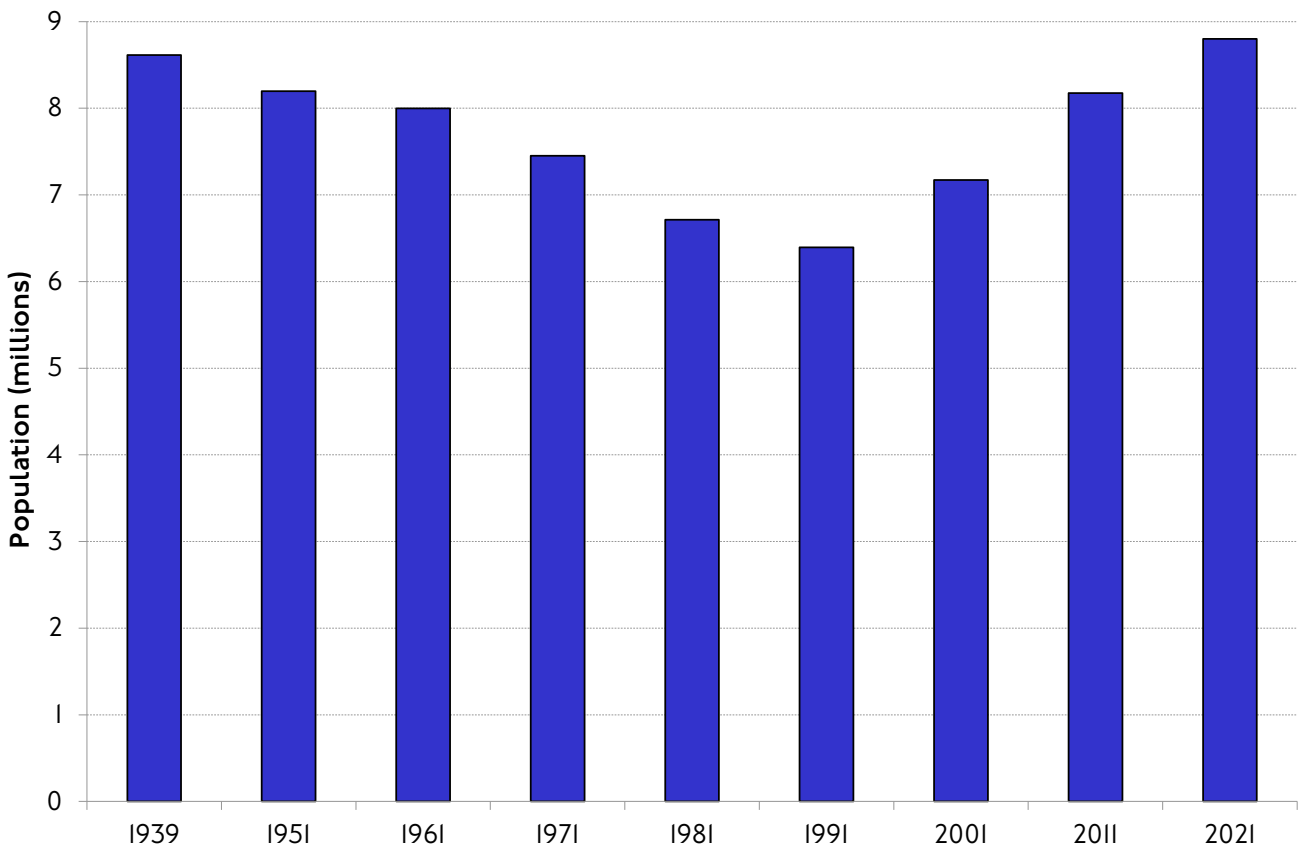
Source: Office for National Statistics.

London's economy

London accounts for 23 per cent of the UK's economic output, based on the 2021 Gross Value Added (GVA), and is home to one million private sector businesses (19 per cent of the UK total). London's post-pandemic economic recovery has been strong, with GVA at the end of 2022 four per cent higher than in 2019.

However, inflationary pressures and the resulting cost-of-living crisis are expected to dampen growth in the medium-term. Consumer confidence in London decreased from 25 points in September 2023 to (negative) nine points in October 2023, indicating a negative outlook over the coming year.

Figure 5 shows a range of medium-term forecasts of London's GVA from the Greater London Authority's Macroeconomic scenarios for London's economy report. In the 'gradual economic recovery' scenario, it is estimated that GVA will grow between one and two per cent annually to 2025. In this scenario, London's economy closes some of the gap with the pre-pandemic trend but remains below pre-pandemic forecasts over the next decade, demonstrating a degree of economic scarring in the medium to long-term.

Figure 5   Gross Value Added (GVA) in London, 2019-2025.
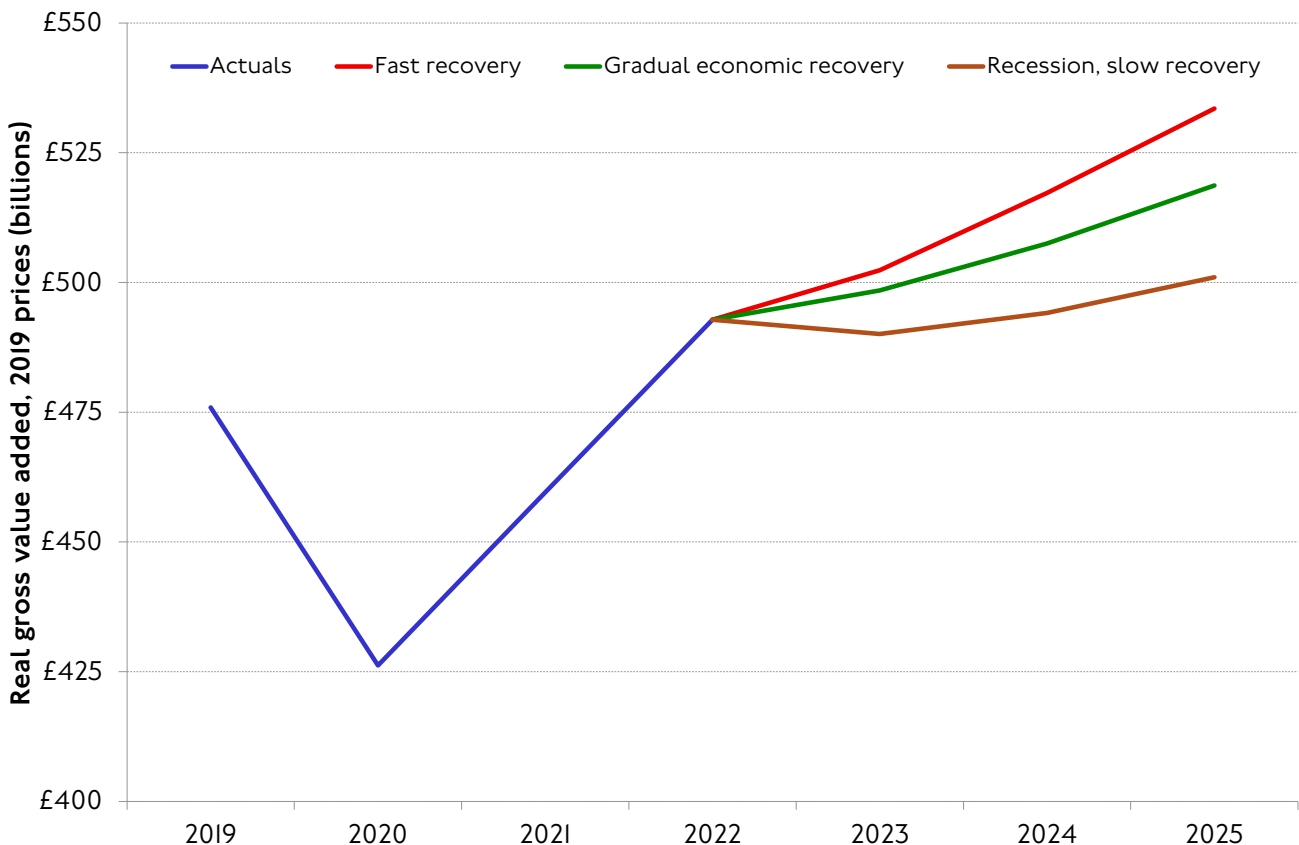
Source: Greater London Authority.

Around 6.4 million workforce jobs are located in London, a figure which has recovered strongly since the pandemic. Workforce jobs in London were 6.6 per cent higher in June 2023 compared to December 2019 and in the context of 2.8 per cent growth nationally over the same period. The growth in workforce jobs in London over this period varied by sector, with jobs in some sectors (information and communication and finance and

insurance) increasing by over 15 per cent compared to a 1.8 per cent increase in others such as the accommodation and food services sector.

In August 2023, a fifth of Londoners were reported to be financially struggling. This increases to 30 per cent of Londoners aged 25 to 34. Low-income Londoners are facing the largest squeeze on their finances, with 45 per cent of low-income households (those with household incomes below £20,000) reporting to be struggling financially.

Londoners are adapting their habits to cope with cost-of-living pressures. Some 26 per cent are buying less food and essentials, with 34 per cent buying less and 59 per cent spending less on non-essentials. Nationally, 43 per cent of people report reducing social or leisure activities and 34 per cent reduced travel or petrol use.

This squeeze on disposable incomes will impact retail and entertainment industries in London, and this will likely impact travel demand as well. This is particularly important since the return of leisure travel has been a key feature of post-pandemic travel patterns. For example, London Underground demand data categorised by trip purpose (figure 6) shows that (at mid-October 2023) trips made for commute purposes were 10 per cent higher than in mid-April 2023. Trips for leisure purposes remained at a similar level to mid-April and on weekends they have fallen by seven per cent.

Figure 6   London Underground demand by journey type, seven-day moving average, Apr–Oct 2023.
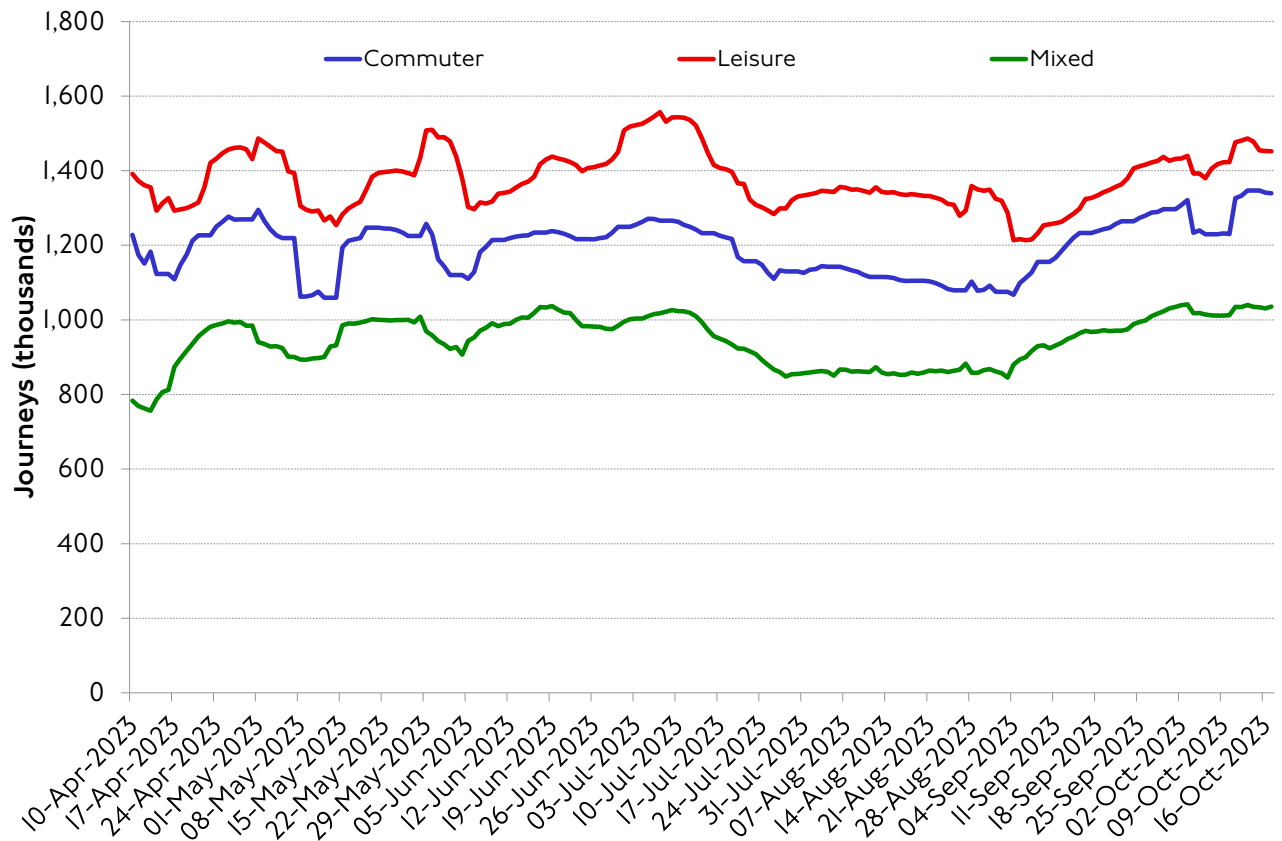
Source: TfL Data & Analytics, Technology & Data.

Travel behaviour of London residents

TfL conducts a rolling annual survey of London residents' travel behaviour (the London Travel Demand Survey (LTDS)). This provides a detailed view of London residents' travel alongside comprehensive socio-demographic data, allowing trends to be examined by social group. Pandemic-related restrictions meant that the full survey could not be conducted in 2020/21 and 2021/22, although data from a revised version of the survey for these years is described in previous Travel in London reports (this data is not comparable with the established series).

The year 2022/23 was the first in which the full survey methodology was restored and data from this year therefore gives a good view of post-pandemic conditions. However, the year itself was marked by several factors unrelated to the pandemic that would have affected travel demand and it is not clear that fully representative post-pandemic conditions had been achieved. This data can be compared to the last full pre-pandemic year (2019/20) and to the longer historic series.

During 2022/23, overall travel by London residents began to approach pre-pandemic levels. However, there remained distinct shortfalls in some areas and there is evidence that some adaptations, intensified by the pandemic, were continuing to persist.

Trip rates and trip lengths

During the pandemic, trip rates reached unprecedented lows. The recovery has not yet been complete, with average trip rates in 2022/23 being 6.2 per cent lower than in 2019/20 and 22 per cent lower than in 2006/07. This latter comparison also reflects a background trend of falling demand for travel overall going back approximately two decades (figure 7), and so the proportion of the shortfall associated with the pandemic is not clear.

The average distance travelled per London resident per day in 2022/23 was 11.9km, this including all trips to/from/within London. This was a reduction of nine per cent compared with 2019/20. For trips wholly within London, the average distance travelled per person decreased by 15 per cent to 7.0km per day, with the average distance per trip decreasing by eight per cent (figure 8).

Figure 7   Trip rate among London residents, LTDS, 2005/06-2022/23.
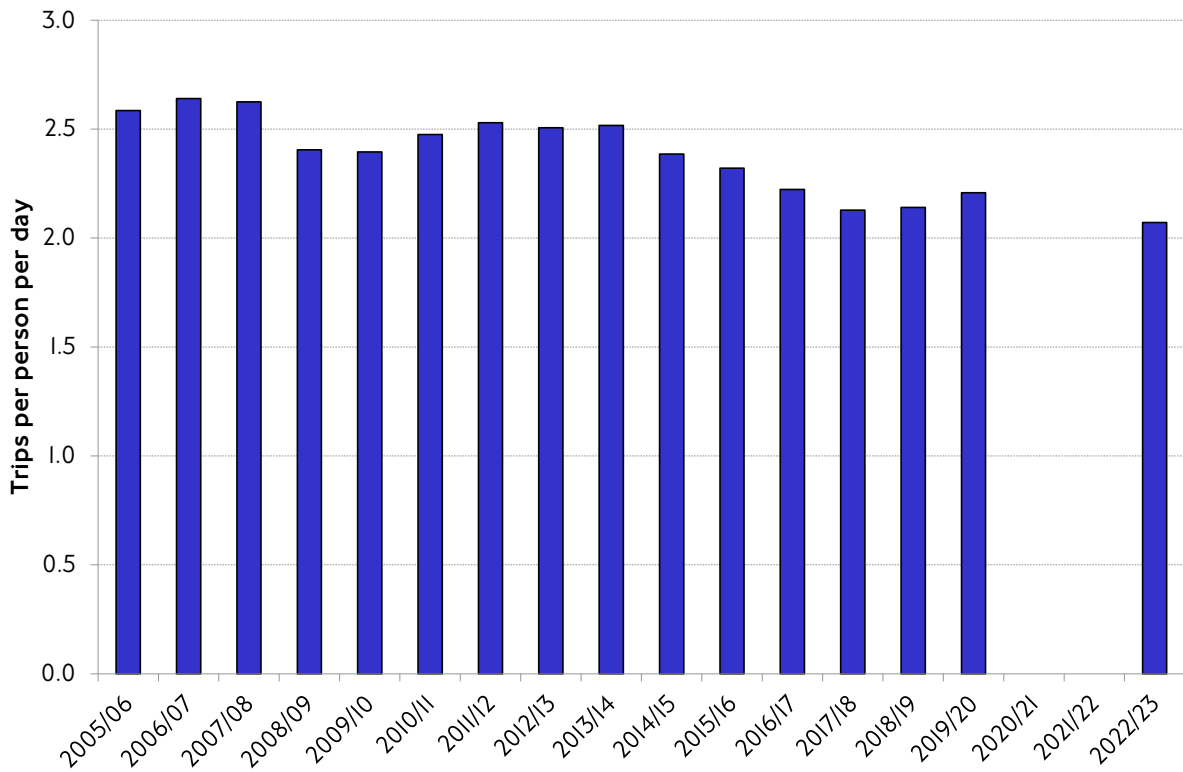
Source: TfL Strategic Analysis, Transport Strategy & Policy.
Note: Comparable data is missing for 2020/2I and 202I/22 due to the disruptions that the coronavirus pandemic caused on the LTDS on those two years.

Figure 8   Proportion of trips to/from/within London, by length, LTDS, 2019/20 versus 2022/23.
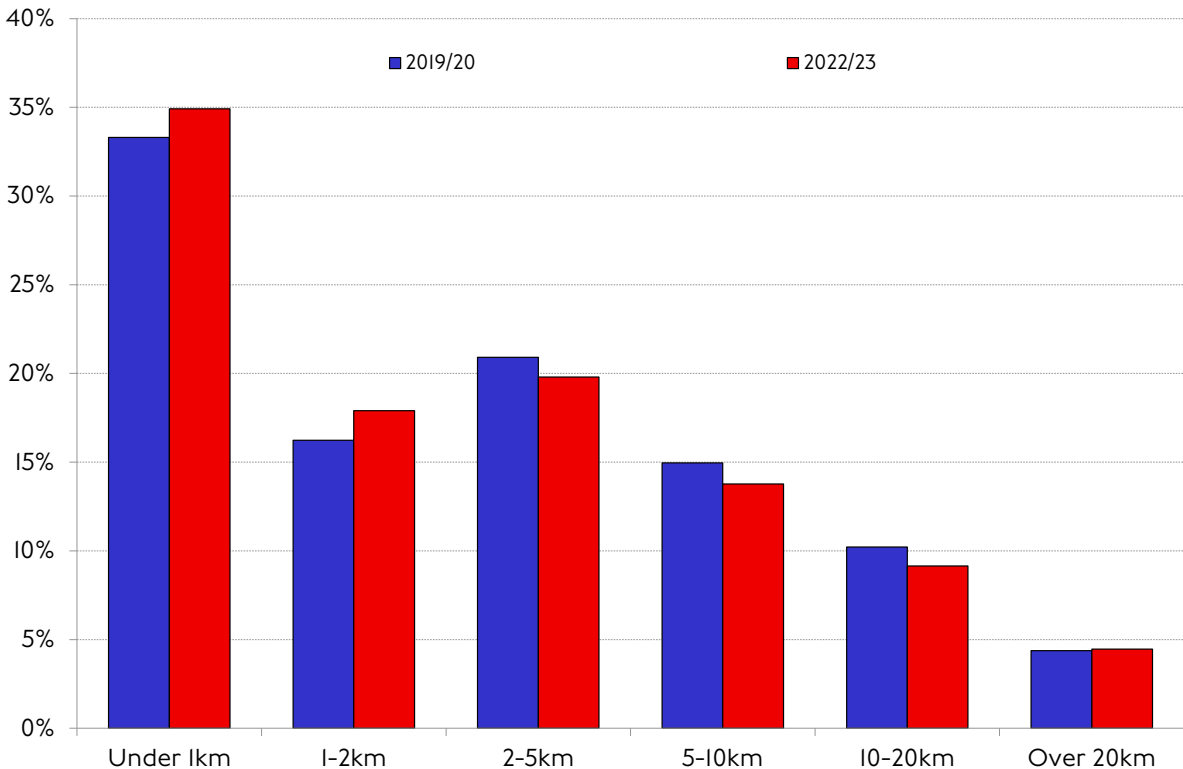
Source: TfL Strategic Analysis, Transport Strategy & Policy.

Mode shares for London residents' travel

Inner London residents now make 11 per cent more trips per day than outer London residents. Before the pandemic the difference was only three per cent, and up to 2009/10 outer London residents' trip rates were higher than those of inner London residents. This may reflect hybrid working by outer London residents.

In 2022/23 there was a slight increase in London residents' active, efficient and sustainable mode share, up to 66.7 per cent from 66.6 per cent in 2019/20. Note however that this is not the same as the MTS Tracker measure, which relates to all trips in London.

The key changes for London residents in travel by mode in 2022/23 compared to before the pandemic were a decrease in public transport mode share, no change in the share of trips made by private modes and an increase in the share of trips made by active modes, particularly walking, all within a reduced overall number of trips. Increased relative active travel (walking and cycling) was a key feature of the pandemic, although wider restrictions on mobility meant that there were fewer trips overall.

Figure 9 shows this at the borough level (for trips by London residents only that start in each borough) and highlights the scope that exists to improve this measure. The proportion of residents' trips made by active, efficient and sustainable modes starting in inner London boroughs ranges from 70 to 87 per cent, while in outer London boroughs the range is 39 to 73 per cent. Although each borough has a unique set of circumstances that determine these shares and affect the ability to change them, the scope for change, from smallest to largest, is evident.

Hybrid working

Figure 10 shows the ability of London residents to work from home. There has been a substantial increase in the proportion of residents who are able and encouraged to work from home at least on some days of the week and a corresponding decrease in those for whom this was not possible before the pandemic. While the post-pandemic increase in the ability to work in a hybrid manner remains a significant influence on travel patterns in London, particularly on weekdays and for trips to/from central London, it should be seen in the context that only 26 per cent of all London residents have the option to work from home, reflecting a 'blue collar' versus 'white collar' difference on this issue.

Figure 9 Indicative trip-based active, efficient and sustainable mode share by borough, trips starting in the borough, LTDS, 2022/23.
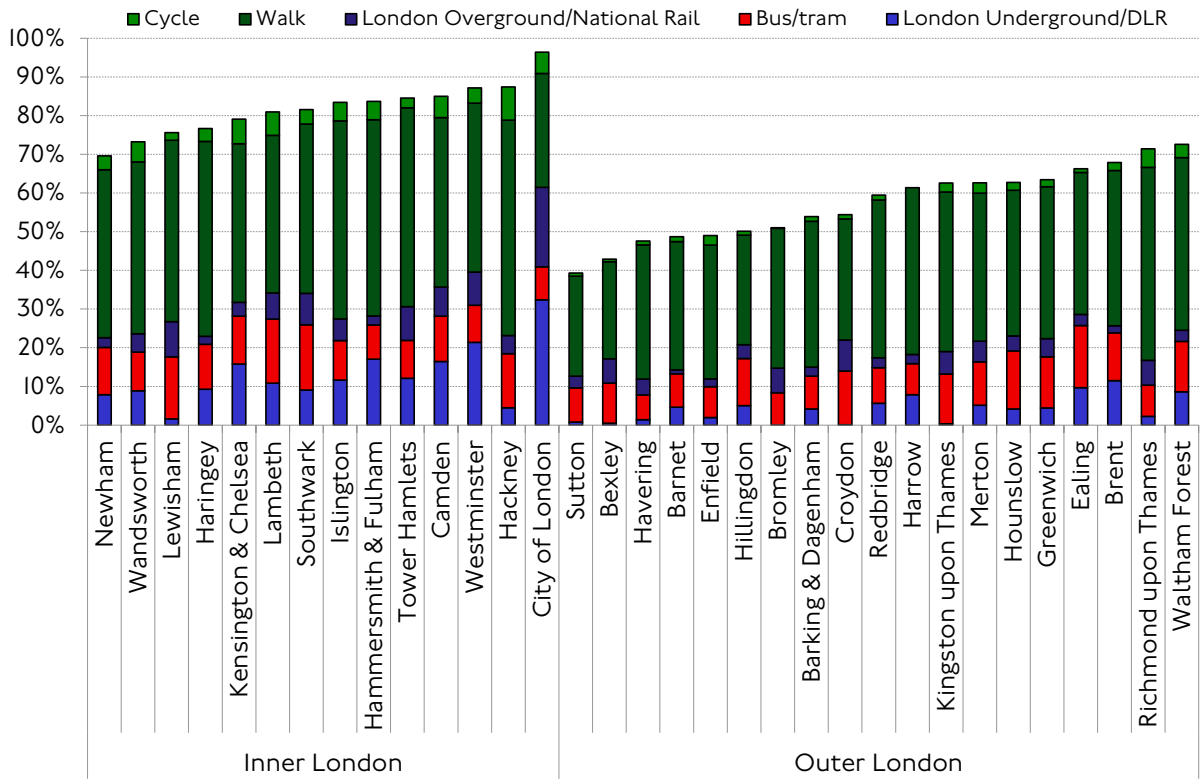
Source: TfL Strategic Analysis, Transport Strategy & Policy.

Figure 10 Ability of London resident workers to work from home, LTDS, 2019/20 versus 2022/23.
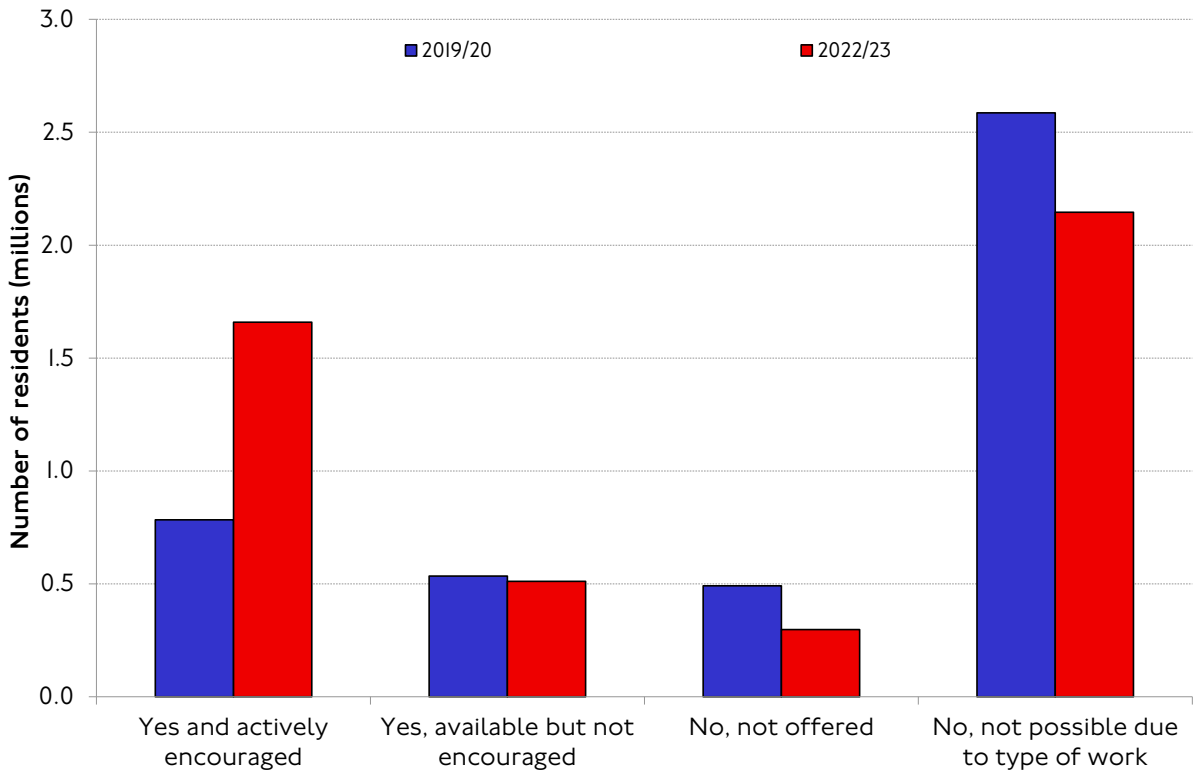
Source: TfL Strategic Analysis, Transport Strategy & Policy.

Healthy streets and healthy people

Active travel

Active travel is good for both the environment and people's health. The Mayor aims for 70 per cent of all Londoners to do 20 minutes of active travel (defined as walking or cycling) per day by 2041. Walking and cycling can be used exclusively for many trips, but walking is often used incidentally to access public transport, for example on the daily walk to the local station to catch a train as part of a longer trip for which the train would be the main mode.

Physical activity and travel

Even in the context of significant investment, historically this measure has been around 40 per cent. The pandemic itself had a mixed effect on this indicator. A relative uplift in local and active travel, most notably as part of permitted activities during periods of lockdown, was countered by more general restrictions on mobility, particularly a dramatic reduction in public transport trips. So, achievement against this measure fell slightly during the pandemic, although this reflected a resilient performance in the circumstances (figure 11).

Figure 11   Proportion of London residents achieving at least 20 minutes of active travel per day, 2010–2030.
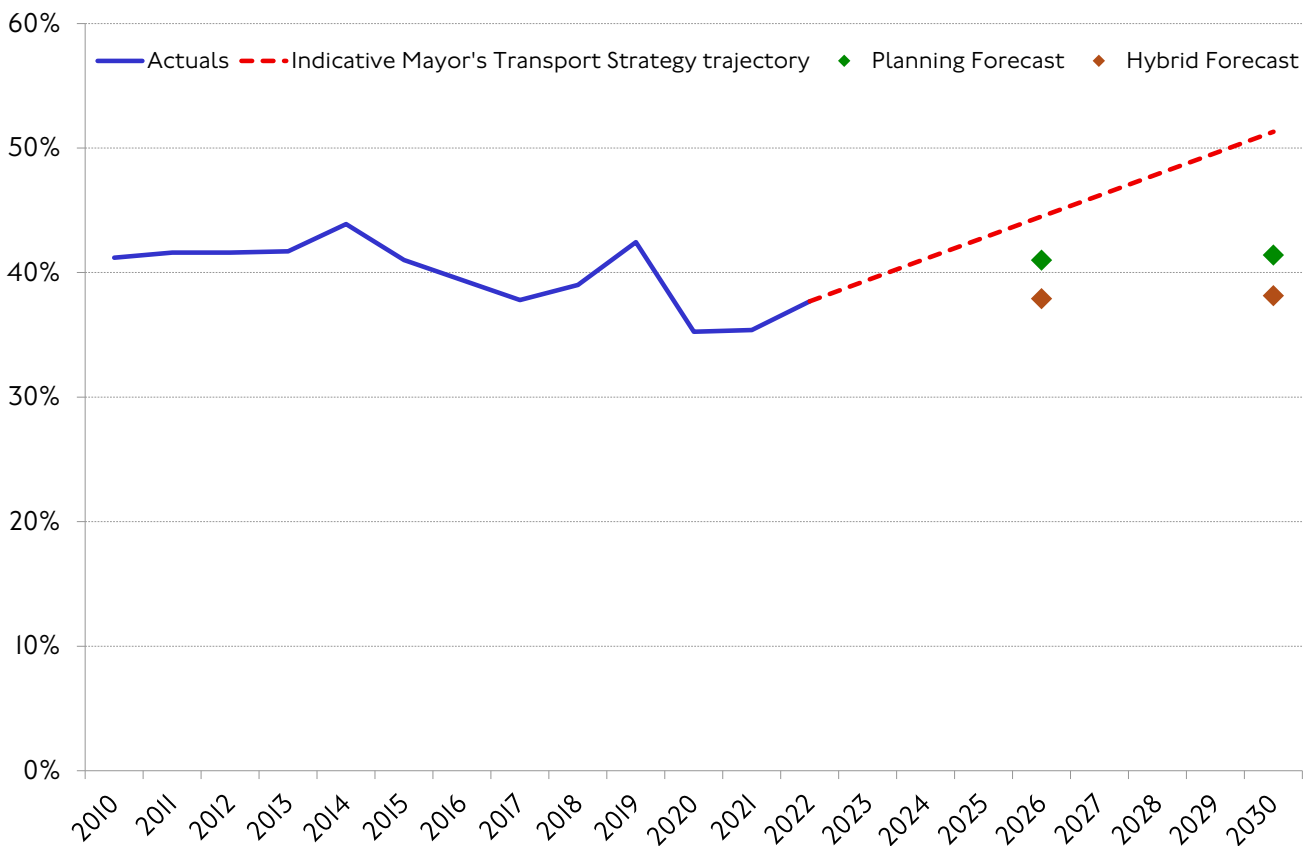
Source: TfL Strategic Analysis, Transport Strategy & Policy.
Note: For a definition of the Planning and Hybrid Forecast see note on figure 3.

Recovery from the pandemic has again been incomplete, with the value for 2022/23 being 38 per cent of Londoners despite advances made during the pandemic in promoting and facilitating increased walking and cycling, as described in previous Travel in London reports.

This indicator is thought to be particularly affected by the continuing relative shortfall of public transport trips, which often include an active travel component. The LTDS suggests that, where these trips are not made, for example as part of a hybrid working pattern, other trips made at equivalent times are not sufficient to compensate in terms of daily recommended active travel overall, and this development should be viewed as a particular concern for achievement of the Mayor's aim.

More detailed data on walking and cycling is described below, where it is seen that there have been sustained increases in cycling across the pandemic, and that there are signs of a small but potentially significant shift towards more local travel which could be beneficial in other ways.

Cycling

Cycling levels in London rapidly increased in the 2000s and early 2010s, and then plateaued in the late 2010s. However, the coronavirus pandemic acted as a catalyst for cycling, boosting growth again in 2020 and helping many people rediscover this mode.

The year 2022 saw a consolidation of this trend, with the most recent data from 2023 showing a 20 per cent increase in cycling in 2023 from the 2019 pre-pandemic baseline.

However, there have been important changes in the characteristics of those journeys (for example, shorter average length) and some pandemic legacies persist, particularly subdued cycling volumes in central London (likely related to reductions in commuter cycling reflecting hybrid working practices) and relatively less 'peakiness' in the daily demand profile, which shows relatively higher off-peak travel than before the pandemic.

Overall trends in cycling

Our best estimates of cycling in London stem from a programme of representative cycle counts across London from which it is possible to derive estimates of daily cycle journeys (journey stages), which is the agreed metric to monitor cycling against the target set in the [Cycling Action Plan 2](#) published in June 2023.

Figure 12 shows the trend in daily cycle stages by area since 2015. Note that due to the severe disruptions and rapid changes in travel caused by the successive coronavirus pandemic waves in 2020 and 2021 the estimates for these years are tentative.

In 2023, daily cycle stages across London increased by 6.3 per cent from 1.19 million in 2022 to 1.26 million, a level of growth not seen before the pandemic. This corresponds to a 20 per cent increase since 2019.

Looking at each area separately, between 2022 and 2023 there was an increase of 1.7 per cent in daily cycle stages in central London, 8.2 per cent in inner London (where for the first time the daily number of cycle stages exceeded 600,000) and 5.5 per cent in outer London.

Figure 12   Daily cycle stages in London by area, seven day-week average, 2015-2023.
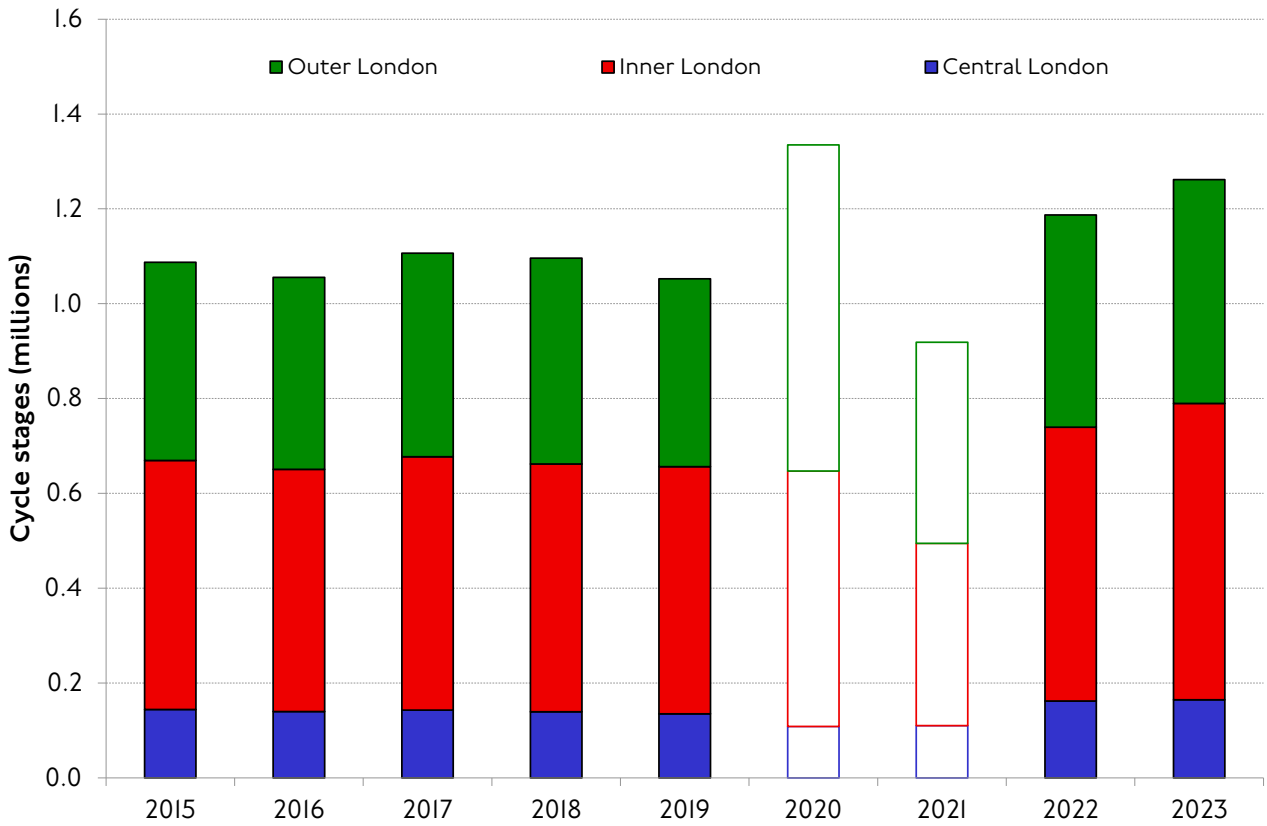
Source: TfL Strategic Analysis, Transport Strategy & Policy.

Figure 13   Annual demand on Santander Cycles by user type, 2011-2022.
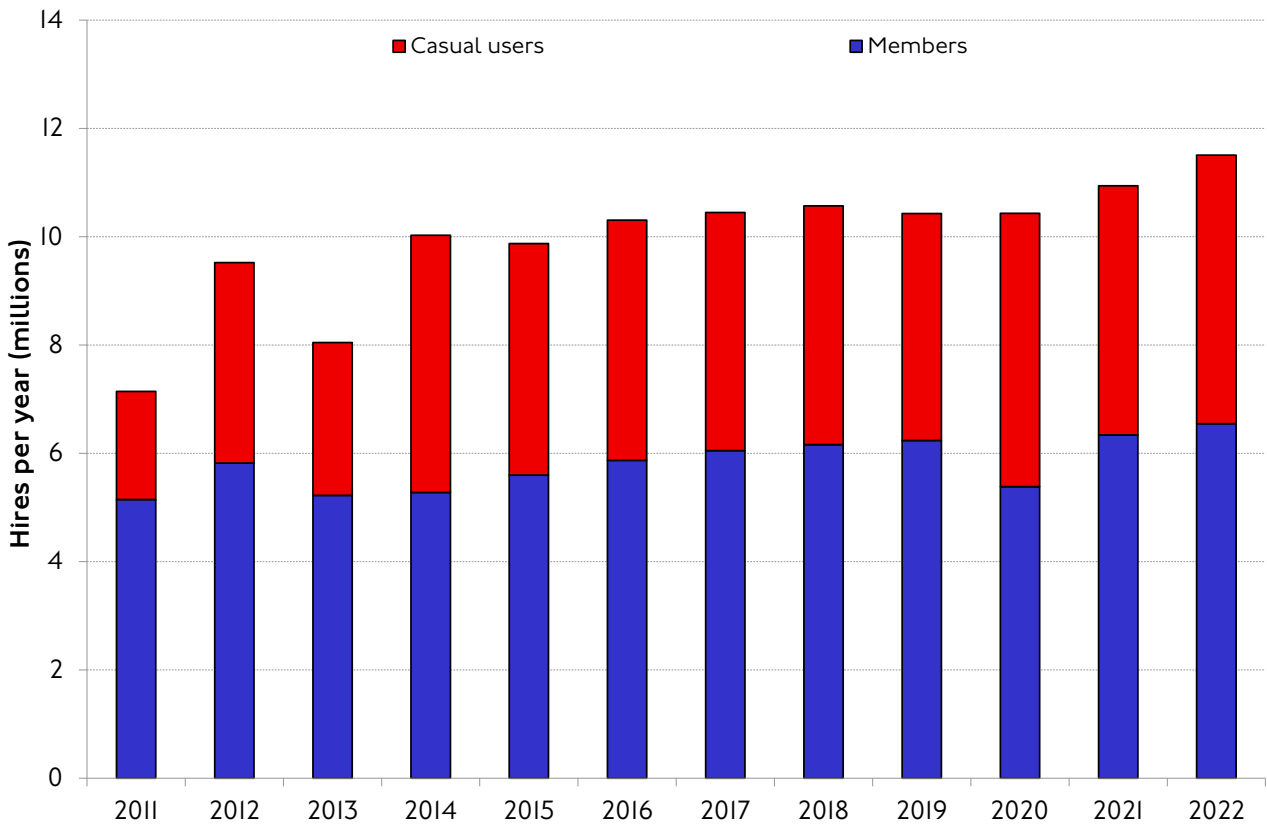
Source: TfL Cycle Hire.

Santander Cycles

TfL's cycle hire scheme (currently under the Santander Cycles brand) continued to expand in 2022 (see figure 13).

In 2022 as a whole the annual demand on Santander Cycles increased by five per cent from 2021 (an equivalent of 10 per cent since before the pandemic in 2019), making it another record-breaking year. There was no significant change in the proportion of casual users and members.

In autumn 2022 some changes were made to the scheme:

- The introduction of e-bikes for hire by members
- A restructure of the fare system (the first since 2013), including:
  - A flat fare for each 30-minutes ride, replacing the prior daily access charge which allowed unlimited rides of up to 30 minutes within 24 hours.
  - A monthly membership option, allowing unlimited 60-minutes rides in the month.
  - An increase in the allowance of annual memberships to unlimited 60-minutes rides (previously 30 minutes), with an increase in the membership price.

These changes appear to have led to a drop in overall demand from autumn 2022, largely driven by a reduction in casual user hires, with hires by members remaining at a similar or slightly higher level than before.

However, the introduction of e-bikes has proven to be a success with customers. In the first year since their introduction in autumn 2022 more than 684,000 trips have been made on e-bikes by more than 50,000 different customers (with 65 per cent of trips done by annual members). This represents an average of more than four trips per e-bike per day compared to around two for conventional cycles.

While the fare changes are likely to have been a contributing factor in this recent drop in demand on Santander Cycles, there are other compounding factors, notably the increased competition from private operators of dockless e-bike rental schemes. These services have been growing in popularity in recent years, although TfL does not have access to demand data on them.

Alongside Santander Cycles, TfL is jointly running an e-scooter trial scheme with London Councils and authorised by the department for Transport. The scheme currently covers 10 boroughs and has enabled over 3.1 million journeys through a fleet of over 5,200 e-scooters and more than 780 parking bays.

Access to the Cycleway network

The [Cycling Action Plan 2](#), published in June 2023, sets a target for 40 per cent of Londoners to live within 400 metres of the strategic cycle network by 2030. As of November 2023, 24.2 per cent of Londoners lived within 400 metres of the strategic cycle network, up from 21.9 per cent in autumn 2022 and an estimated five per cent in 2016.

Figure 14 shows the current extent of the network, which has more than tripled in size since 2016, from an estimated 90 kilometres in 2016 to 352 kilometres in 2023.

Figure 14   London's strategic cycle network, autumn 2023.
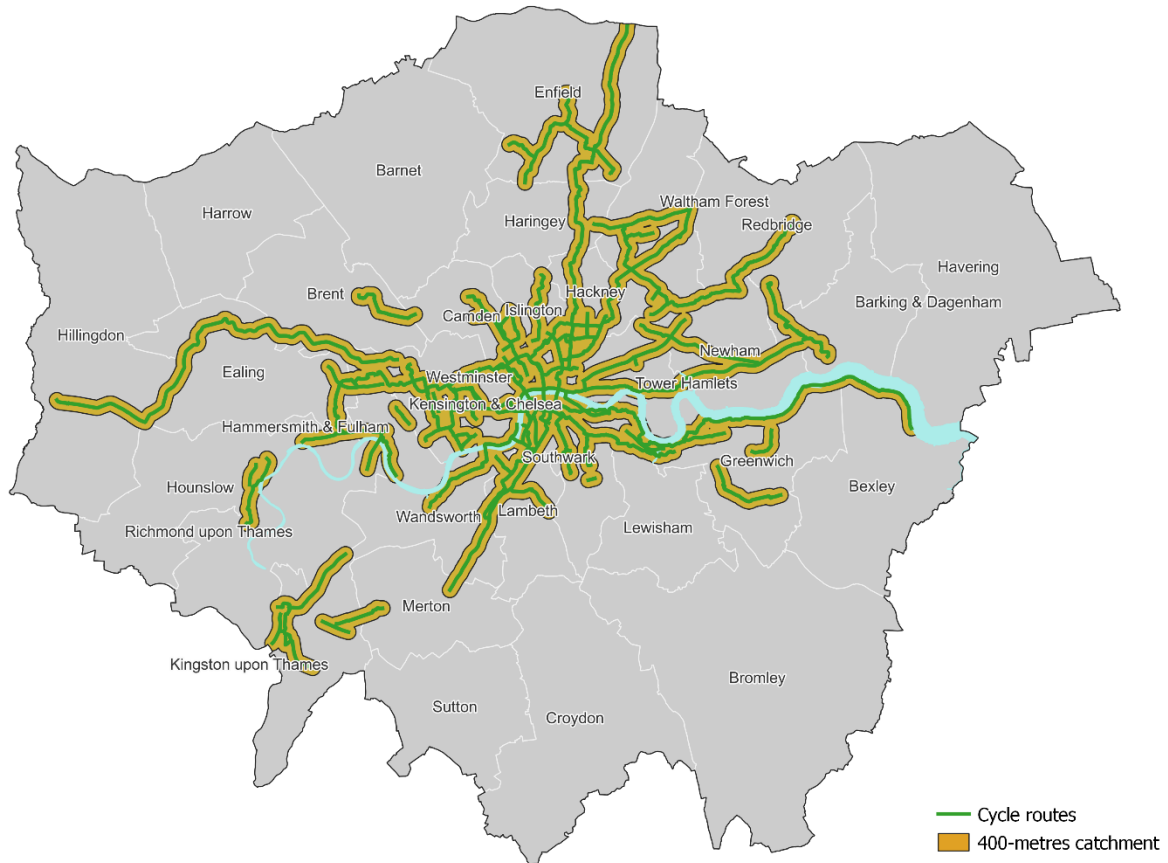
Source: TfL Strategic Analysis, Transport Strategy & Policy.

Sociodemographic profile of people who cycle

The LTDS allows exploration of the sociodemographic attributes of those London residents who cycle. Figure 15 shows the proportion of people from various sociodemographic groups who cycled at least once a year in 2022/23 compared to the immediate pre-pandemic baseline (2019/20) and a reference year at the beginning of the previous decade (2010/11).

Figure 15   Proportion of London residents who cycled at least once in the last year, by selected sociodemographic groups, LTDS, 2010/11, 2019/20 and 2022/23.

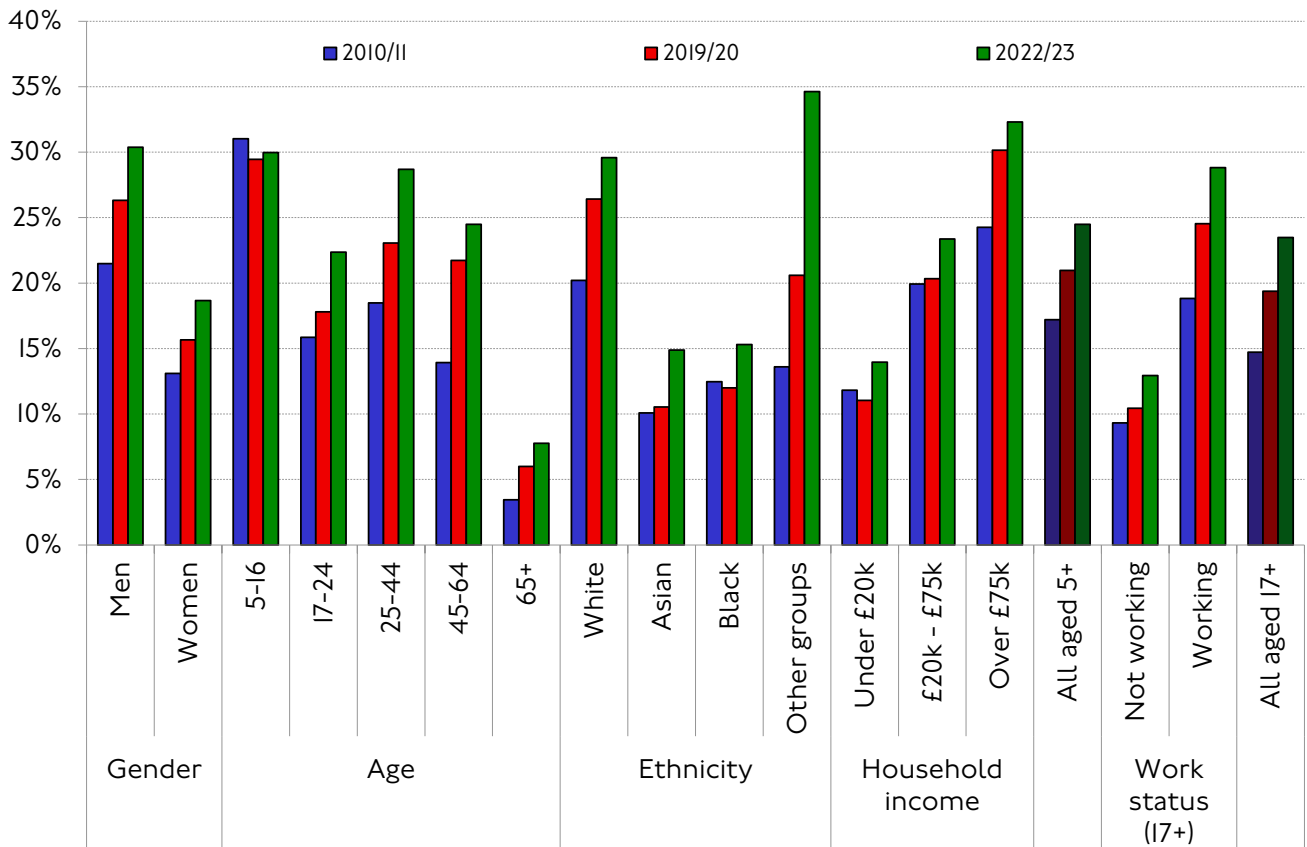Source: TfL Strategic Analysis, Transport Strategy & Policy.
Note: For all sociodemographic categories except work status the base is all LTDS respondents (that is, London residents aged five and over). For work status the base is those in working age (London residents aged 17 and over). The 2010/11 cycling frequencies stem from an LTDS question that specifies cycling 'in summer', while in later years the question is phrased in general terms that are not season specific.

The main feature is that over time the proportion of London residents who cycle at least once a year has increased across all demographic groups. However, in relation to the sociodemographic profile of all London residents there is still under-representation of many of these groups and cycling continues to be more prevalent among men, White people and people who are working.
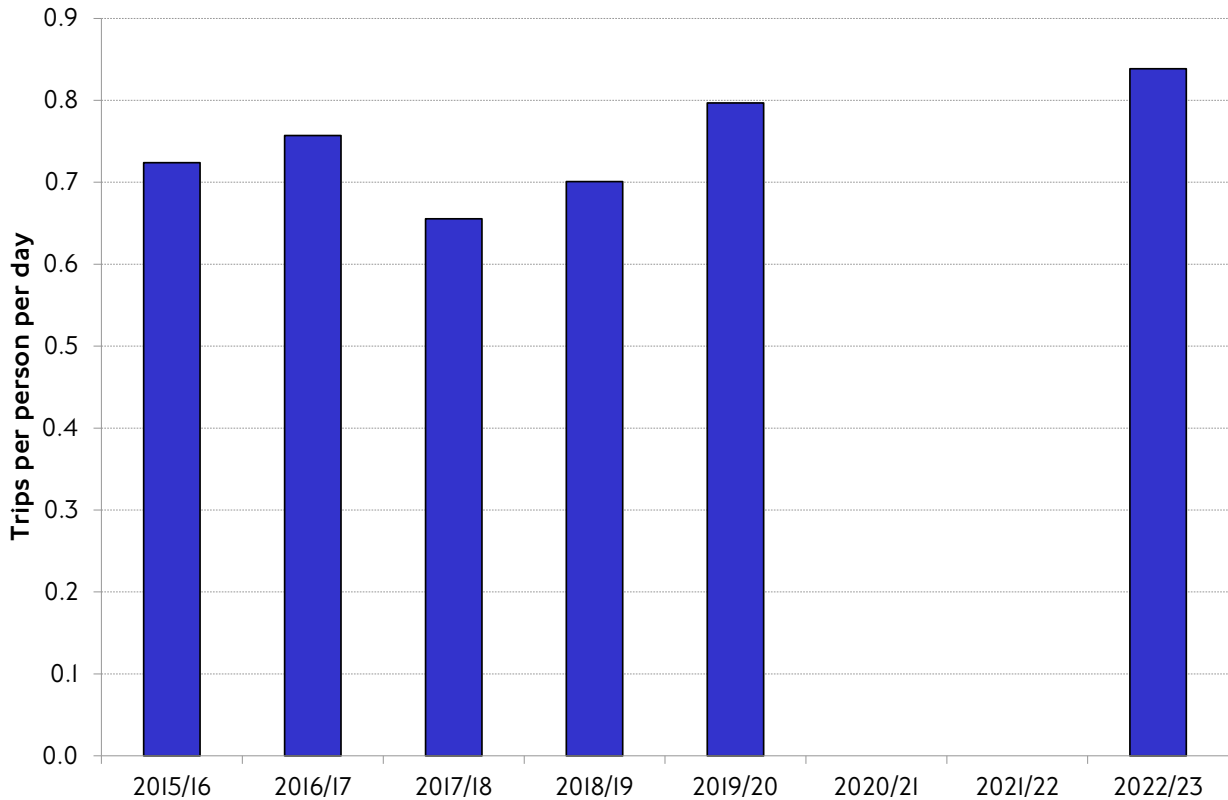
Walking

Walking is the most frequently used mode in London, accounting for an estimated 39 per cent of all trips by London residents. About half of all walking in London takes place as part of a longer public transport journey, for example walking to a bus stop.

Walking by London residents

Trip rates (the average number of trips made per person on an average day) are a useful indicator of walking demand. Despite fluctuations between 2015/16 and 2017/18, since 2017/18 there has been a consistent increase in walking (all the way) trip rates from 0.66 trips per person per day on average in 2017/18 to 0.84 in 2022/23, but the growth rate has slowed down since the pandemic (figure 16).

Figure 16　　Walking trip rate among London residents, LTDS, 2015/16-2022/23.

Source: TfL Strategic Analysis, Transport Strategy & Policy.
Note: Comparable data is missing for 2020/21 and 2021/22 due to the disruptions that the coronavirus pandemic caused on the LTDS on those two years.

Walking demographics

Given the importance of walking as the most frequently used mode by London residents, it is of interest to understand its sociodemographic aspects (figure 17).

Over time, London residents' walking trip rates have been increasing among most groups, the only exception being Black residents whose trip rate has remained constant. Several groups saw fluctuations in 2019/20, still resulting in a longer-term increase. These groups being 17-24, 45-64, Asian, part-time and non-workers and retired, perhaps indicating underlying behaviour change.

In terms of gender, women continue to do more walking trips than men.

Among the different age groups, those between 25 and 44 years of age have the highest walking trip rates, followed by those in the 5-16 and 45-64 groups. Walking trip rates have remained fairly constant over time among young adults (17-24) and since the pandemic among people of retirement age (over 65).

Ethnicity shows disparities among groups, with White London residents showing the greatest increase in walking trip rates, of which only 'Other groups' saw a similar increase in walking trip rates over time.

In terms of employment, part-time and non-workers have higher walking trip rates than any other group, although both groups have seen reductions compared to before the pandemic, which may be correlated with changes in travel behaviour arising from the pandemic.

Finally, by disability, London residents with or without a disability have seen an increase in walking trip rates since the pandemic.

Figure 17   Walking trip rates among London residents, by selected sociodemographic groups, LTDS, 2015/16, 2019/20 and 2022/23.
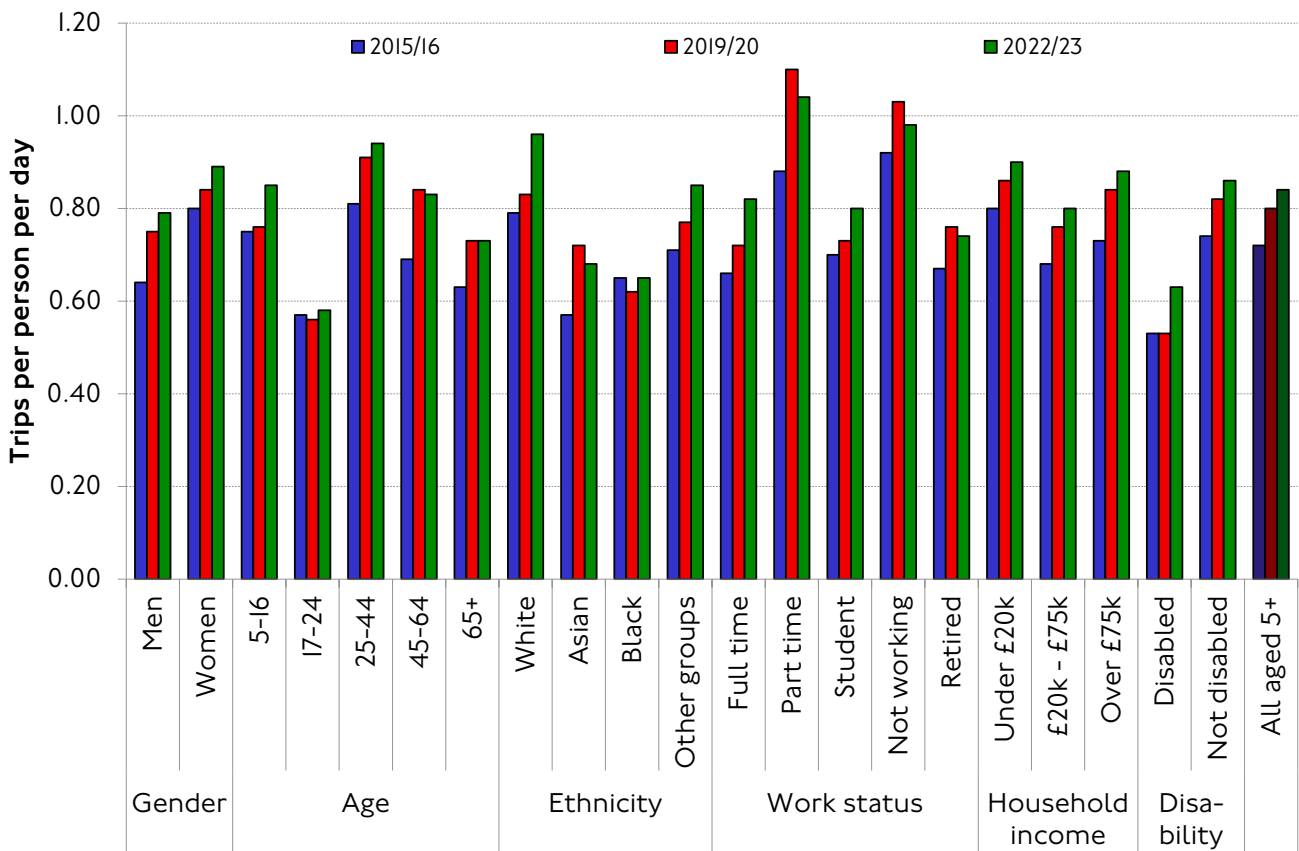
Source: TfL Strategic Analysis, Transport Strategy & Policy.

Pedestrian activity in central London

Travel to and around central London was particularly affected by the pandemic. Our continuing (quarterly) survey of pedestrian activity in central London provides an interesting trend view of both the pandemic impact and the recovery (figure 18). During 2023, the number of pedestrians observed in central London settled at about 15 per cent short of pre-pandemic levels, comparable to the ongoing relative patronage shortfall on public transport.

Figure 18

Figure 18   Average hourly pedestrian flow per site in central London, by quarter, 2019–2023.
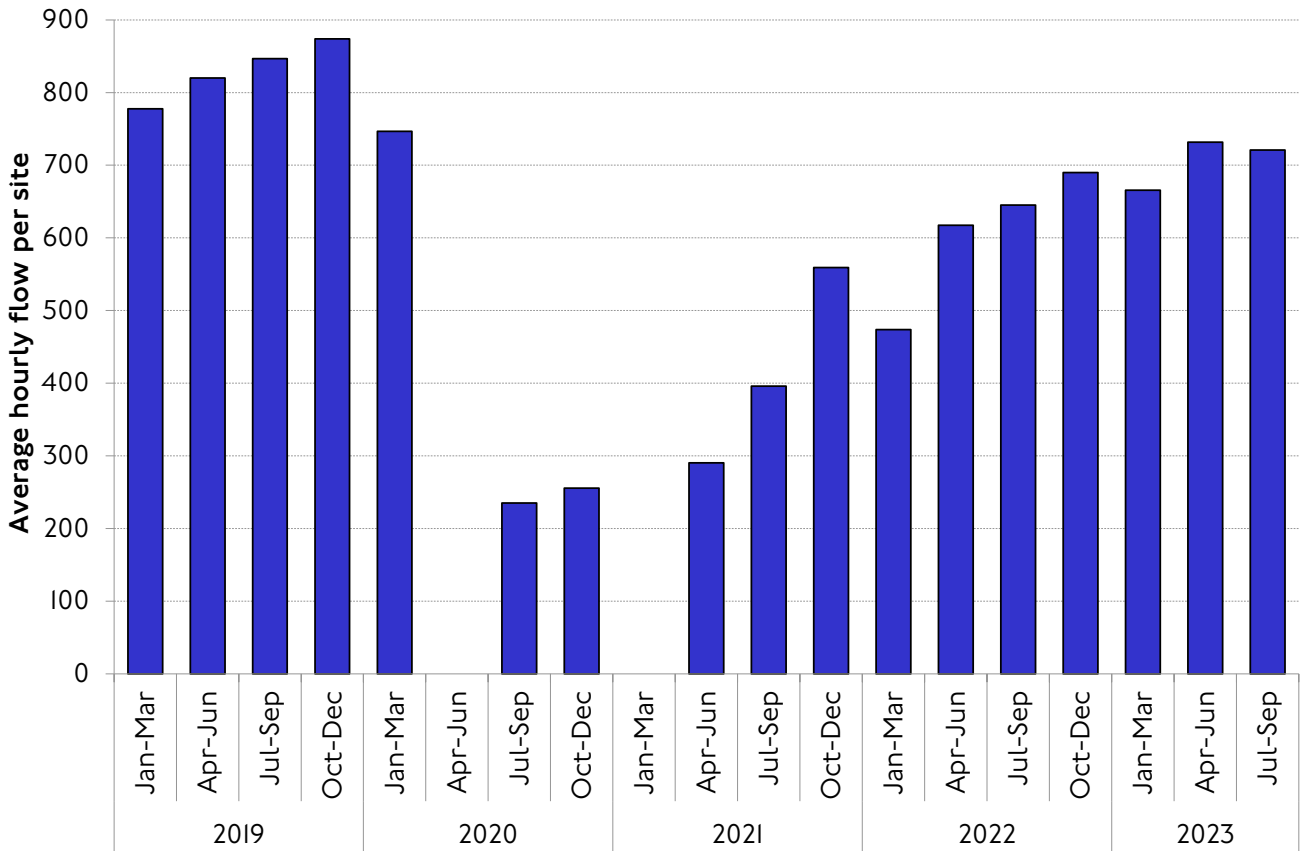
Source: TfL Strategic Analysis, Transport Strategy & Policy.

Reducing road danger

Vision Zero

The Mayor's Vision Zero Action Plan sets out the ambition to reduce road danger in London by eliminating all deaths and serious injuries from London's streets by 2041.

Interim targets have been set to reduce road deaths and serious injuries by 65 per cent by 2022 (against a 2005-09 baseline) and 70 per cent by 2030 (against a 2010-14 baseline). Even more ambitious targets have been set for buses, including the 2022 interim target to reduce the number of people killed or seriously injured on or by a bus by 70 per cent against a 2005-09 baseline and a 2030 target to reduce the number of people killed in, or by, London buses to zero. Progress towards this aim is tracked through collision and casualty statistics collated on an annual basis and published as an annual Factsheet.

Trend in casualties to 2022

In 2022, deaths and serious injuries compared to the 2005-09 baseline were 38 per cent lower for all casualties (figure 19) and 54 per cent lower for those on or involving a London bus (figure 20). While this is positive and welcome progress, it did not reach our ambitious targets of a 65 and 70 per cent reduction, respectively.
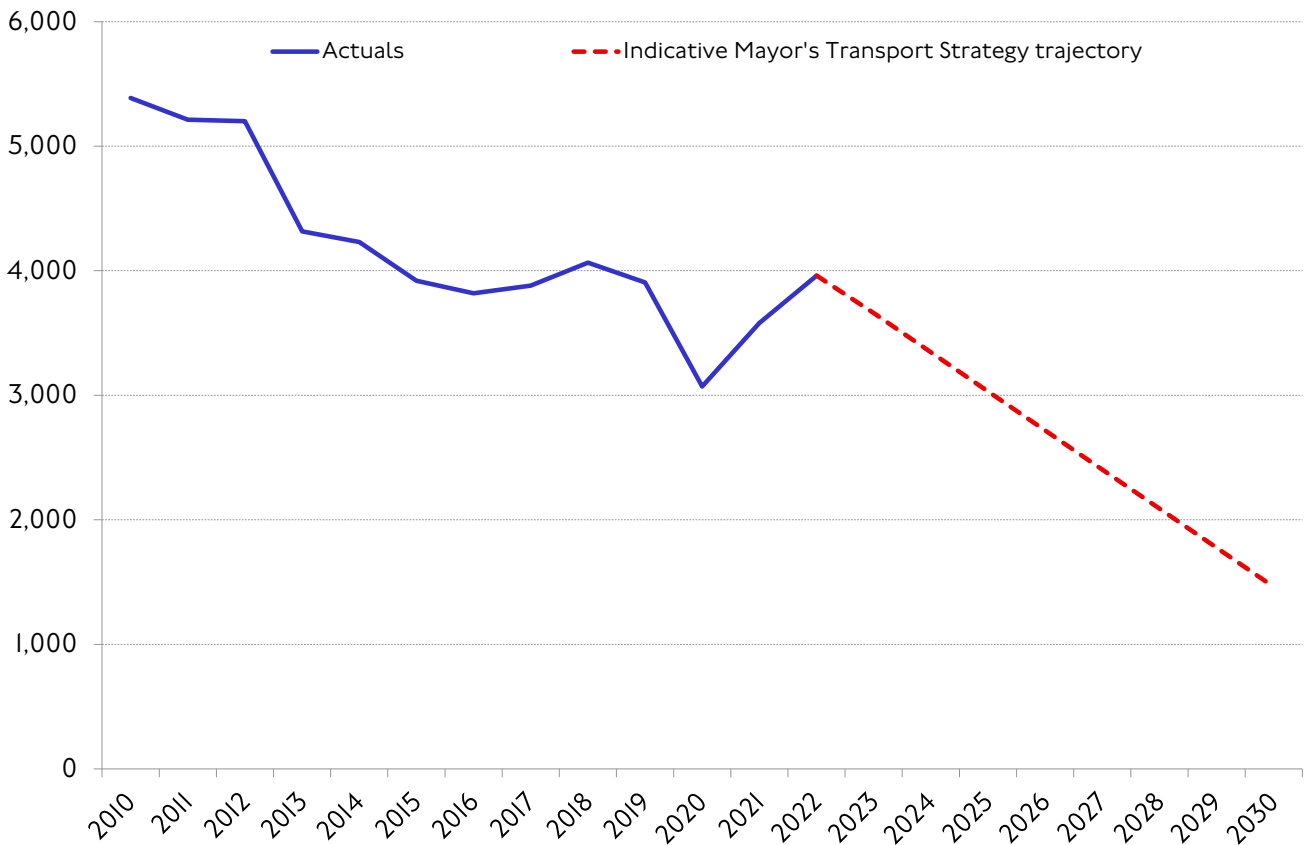
Source: TfL Insights & Direction, Safety, Health & Environment.

During 2022 there were 23,465 reported collisions in London, resulting in 102 people being killed, 3,859 being seriously injured and 23,246 being slightly injured. Within the overall performance there were some particularly positive areas including (against a 2005-09 baseline):

- The number of people killed in collisions reduced by 52 per cent and was the lowest on record, excepting the pandemic-affected years of 2020 and 2021.
- The number of people killed in collisions involving London buses reduced by 61 per cent.
- The number of children killed or seriously injured reduced by 63 per cent.
- The number of people killed or seriously injured in collisions involving car occupants reduced by 70 per cent.

During the pandemic in 2020 and 2021, traffic levels dropped significantly and therefore so did the number of people killed and seriously injured on London's roads. However, 2022 has seen a reversion to more typical numbers and patterns of injury as travel has recovered. These changes led to a two per cent increase in the number of people injured (all severities) in road traffic collisions in London relative to 2021. The number of people that were killed or seriously injured increased by 11 per cent compared to 2021. However, compared to the pre-pandemic 2017-19 average, the number of people killed reduced by 17 per cent and the total number of injuries was down by 12 per cent.

Casualties involving TfL buses

For 2022, the number of people killed or seriously injured in or by a London bus was 54 per cent lower than the 2005-09 baseline (figure 20), with the number of bus occupants injured down by 41 per cent.

In 2022 nine people were killed in or by a London bus compared to the 2005-09 baseline average of 23, a reduction of 61 per cent. In 2022, people killed or seriously injured resulting from collisions involving buses increased by 14 per cent against the 2017-19 pre-pandemic average. This has been driven largely by bus passengers who suffered serious injuries, often from slips, trips and falls. More information on TfL's initiatives to improve bus safety, including the design of bus interiors, is set out in our new Bus Safety Strategy.

Figure 20   People killed or seriously injured on or by a London bus, 2010–2030.
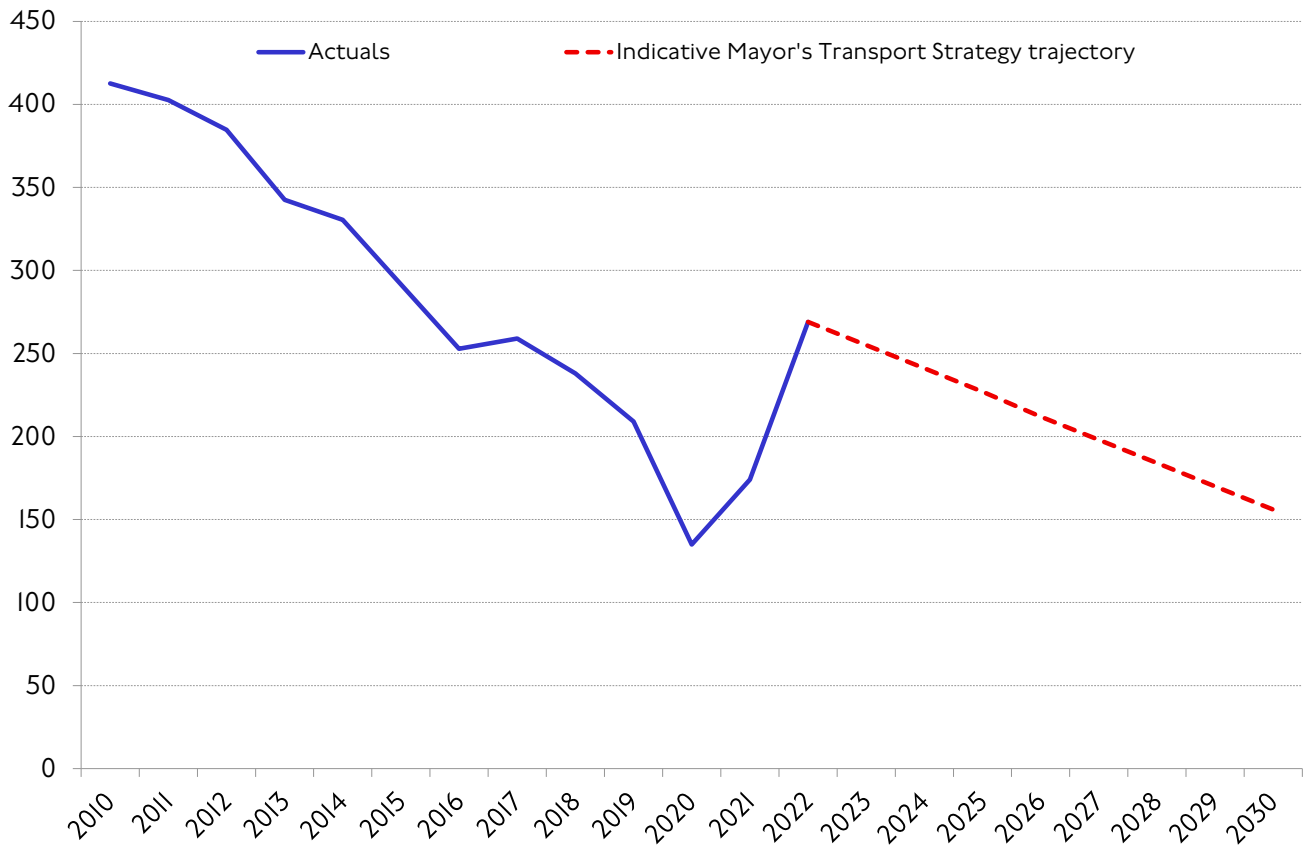
Source: TfL Insights & Direction, Safety, Health & Environment.

Air quality

London's air quality remains a threat to the health of all Londoners, particularly some of the more vulnerable or otherwise disadvantaged. Although significant improvements have been made in recent years following the general clean-up of the vehicle fleet encouraged by policies such as the Ultra Low Emission Zone (ULEZ), there is still much to do, particularly in light of the new recommendations by the World Health Organization (WHO) for more stringent limits on a range of ambient air pollutants, including nitrogen dioxide (NO_2), set out in the WHO global air quality guidelines.

Expansion of the Ultra Low Emission Zone (ULEZ) to outer London

On 29 August 2023 TfL expanded the ULEZ across all London boroughs. The London-wide zone measures 1,500km^2 and covers nine million people, making it the largest zone of its kind in the world.

A [First month report](#) provides an evaluation of the extended scheme based on one month of operation. At this early stage, key indicators relate primarily to the compliance rate of vehicles that are subject to ULEZ standards travelling in the zone. The compliance rate is the proportion of vehicles detected in the zone that meet the ULEZ standards. The higher the compliance rate, the more successful the scheme has been in accelerating the transition to cleaner vehicles. Key findings from the first month report include:

- A larger proportion of vehicles driving in London are cleaner. The London-wide compliance rate for vehicles subject to the ULEZ standards during the first month of operation was 95.3 per cent, up from 91.6 per cent in June 2023 and 39 per cent in February 2017 when changes associated with the ULEZ began (confirmation of the introduction of the T Charge to central London from October that year).
- Compliance rates have increased for both cars and vans. Some 96.4 per cent of cars and 86.2 per cent of vans driving in London met the standards in the first month of operation, up from 93 and 80.2 per cent respectively in June 2023 and 44 and 12 per cent in February 2017.
- There are fewer older, more polluting vehicles driving in the zone. On an average day there were 77,000 fewer unique non-compliant vehicles driving in the zone compared to June 2023, a 45 per cent reduction in the number of non-compliant vehicles.
- In the expanded outer London area, vehicle compliance increased by 10 percentage points since the launch of the consultation to expand the ULEZ to the whole of London. Vehicle compliance in the expanded outer London area is now 95.2 per cent, up from 85.1 per cent in May 2022 when the consultation on proposals to expand the ULEZ to the whole of London began, and from 90.9 per cent in June 2023 (figure 21).
- On an average day, of all vehicles subject to the ULEZ standards driving in London, only 2.9 per cent pay the charge, 1.7 per cent are non-chargeable and 0.2 per cent are issued with a warning notice or, from 26 September 2023, a penalty charge notice. The rest meet the ULEZ standards.

Trend in ambient concentrations of nitrogen dioxide (NO₂)

Figure 22 shows historic progress in reducing concentrations of nitrogen dioxide at roadside monitoring sites. The working aim is to reduce these concentrations by between 60 and 70 per cent against 2016 levels by 2040 (note that the figure does not yet include the impacts of the most recent expansion of the ULEZ to outer London, which happened in August 2023).

Average concentrations reduced from 92 μg·m^{-3} in 2016 to 39 μg·m^{-3} in 2022 at roadside sites in central London (58 per cent), despite the recovery from the pandemic leading to a small increase in concentrations from 2021. The expansion of the ULEZ to inner London in 2021 resulted in an estimated reduction of 21 per cent in roadside nitrogen dioxide concentrations here, this also benefiting concentrations more widely across London. Nitrogen dioxide concentrations at roadside monitoring sites in inner London reduced from 61 μg·m^{-3} in 2016 to 32 μg·m^{-3} in 2022 (47 per cent). During the same period, nitrogen dioxide concentrations at roadside sites in outer London reduced from 47 μg·m^{-3} to 30 μg·m^{-3} (37 per cent).

Figure 21   Monthly average ULEZ compliance rates by area, vehicles subject to the ULEZ standards, May 2019-Oct 2023.
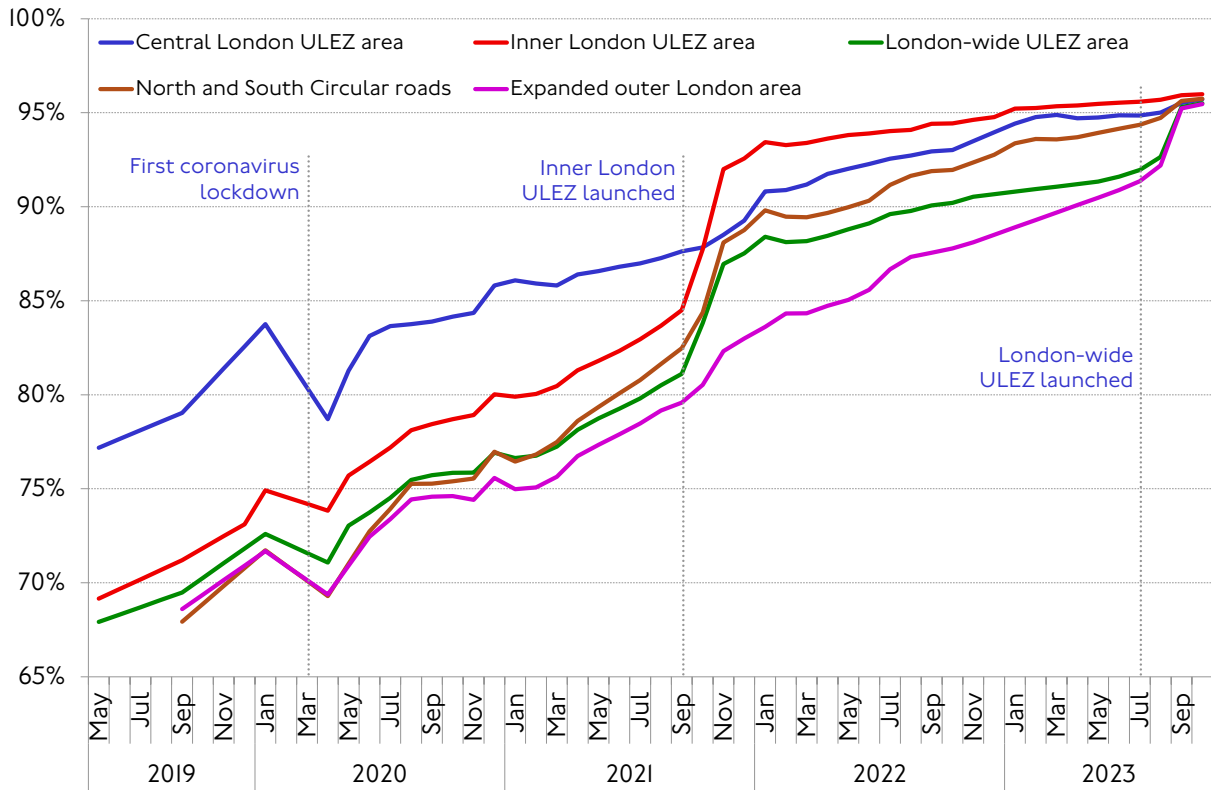
Source: Greater London Authority.

Figure 22   Average roadside nitrogen dioxide (NO_2) concentrations in London, by area, 2010-2030.
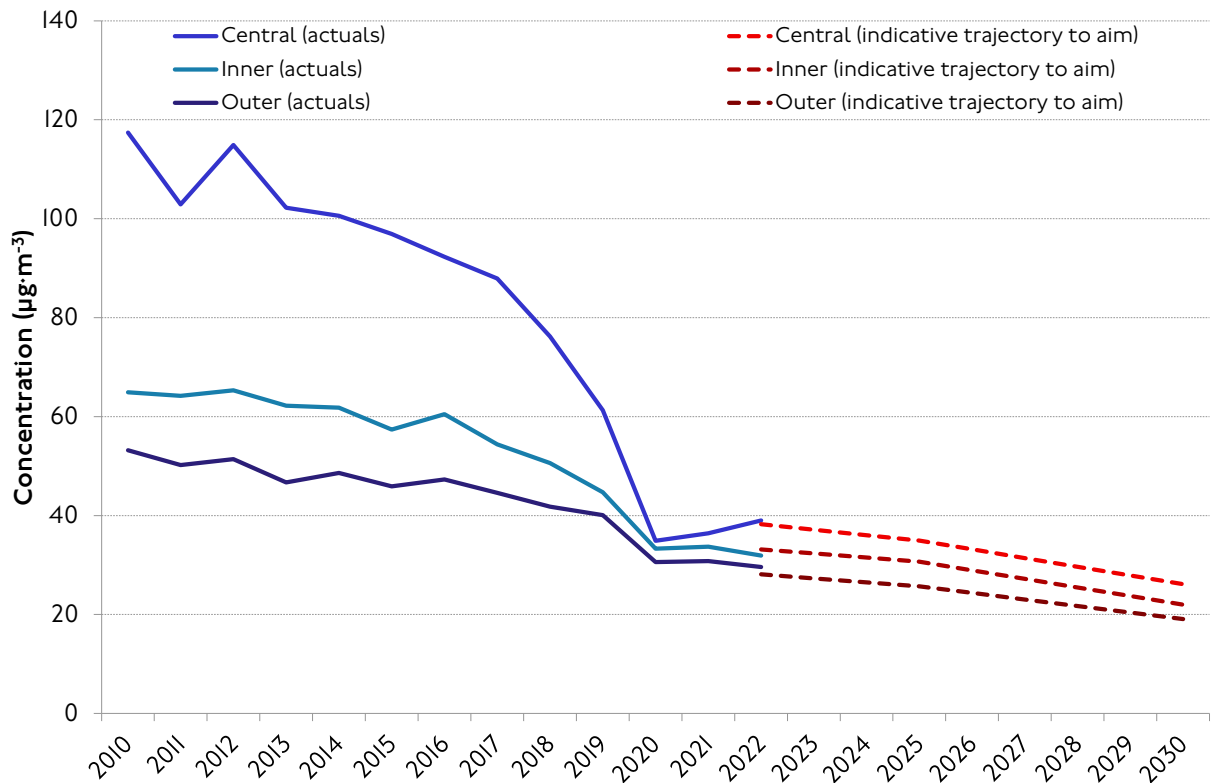
Source: TfL Strategic Analysis, Transport Strategy & Policy, based on TfL traffic data.

Carbon net zero 2030

The MTS set a target for London to be a zero-carbon city by 2050. However, the Mayor has stated his ambition for London to be net zero by 2030, recognising the urgency of the climate change emergency. Addressing carbon dioxide (CO_2) emissions generated by road transport will be central to meeting the 2030 net-zero target, as road transport is the second largest contributor to London's carbon dioxide emissions.

Overall trend in carbon dioxide (CO_2) emissions

Figure 23 shows the trend in total carbon dioxide emissions from transport activities in London. While we are broadly on track to meet the original 2050 ambition, urgent and large-scale action at all levels of Government is needed to meet the accelerated 2030 target. In the interim, we are continuing to cut carbon emissions from our operations and estate, as reported in our Safety, health and environment annual report 2022/23.

Figure 23   Carbon dioxide (CO_2) emissions from surface transport in London (excludes aviation), London Energy and Greenhouse Gases Inventory (LEGGI), 2010-2030.
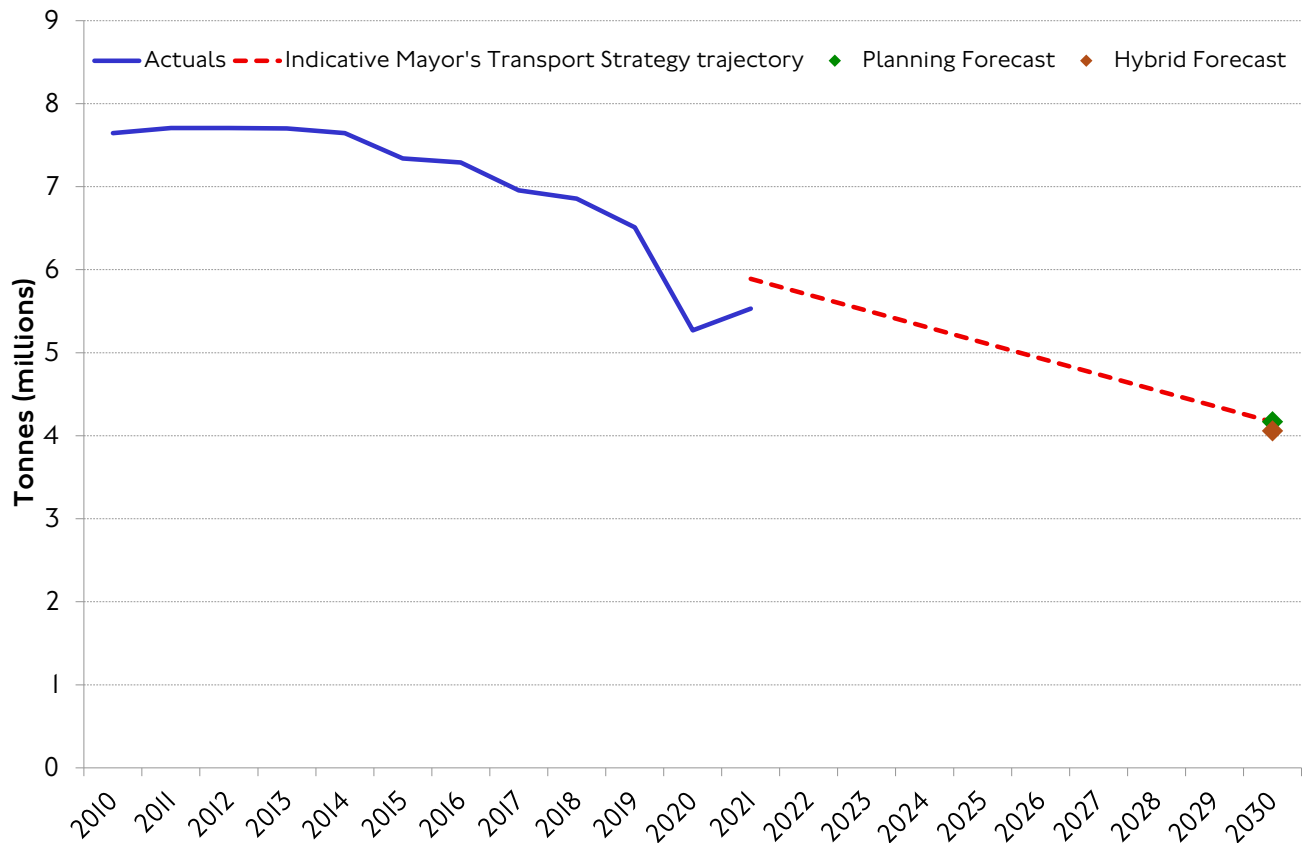
Source: TfL Strategic Analysis, Transport Strategy & Policy, based on Greater London Authority data.
Note: The data in this graph includes transport emissions from road, rail and shipping, but not aviation. For a definition of the Planning and Hybrid Forecast see note on figure 3.

London's transport carbon dioxide equivalent (CO₂e) emissions

Figure 24 shows the principal components of London's transport carbon dioxide equivalent emissions and how they have changed over recent years.

Figure 24   Carbon dioxide equivalent (CO₂e) emissions from transport in London, by sector, London Energy and Greenhouse Gases Inventory (LEGGI), 2013–2021.
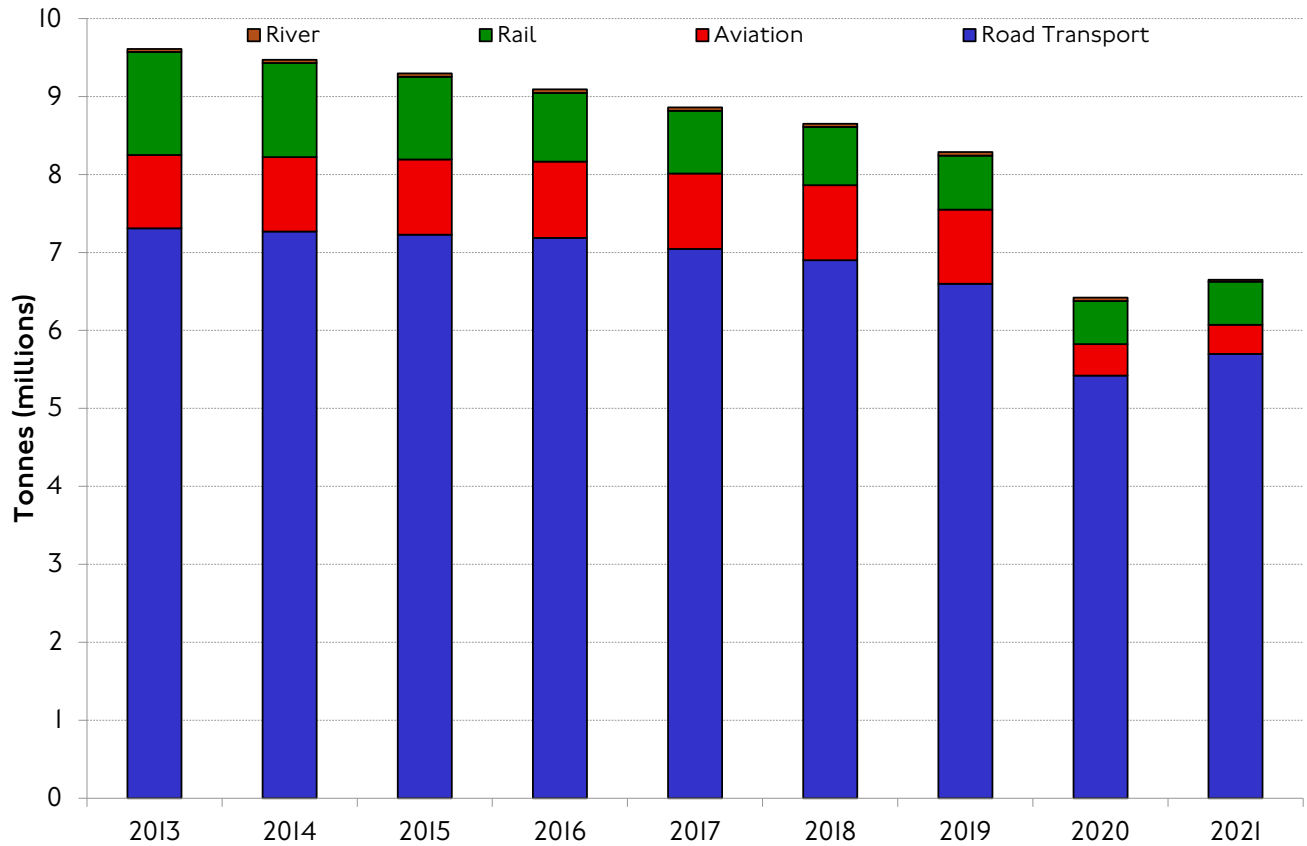
Source: Greater London Authority.

London's road transport carbon dioxide equivalent emissions have gradually reduced since 2013 from 7.3 million tonnes to 5.7 million tonnes in 2021, a 22 per cent reduction. However, this significant reduction is partly due to the impact of the pandemic. By comparison, in 2019 road transport emissions were 6.6 million tonnes (a 10 per cent reduction compared to 2013), and the 2021 emissions were up by five per cent compared to 2020.

Carbon dioxide equivalent (CO₂e) emissions per passenger kilometre on TfL services

Figure 25 shows the emissions of carbon dioxide equivalent (CO2e) by passenger kilometre for each TfL service, over the past 12 financial years. During the 2022/23 financial year, bus services emitted the most (about 80 g CO2e/passenger.km), compared to other services, all emitting within the range 25-30 g CO2e/passenger.km. Average emissions per passenger kilometre from bus and London Overground services have remained constant over the years, while the London Underground and DLR emission trend shows a reduction of about 50 per cent in emissions, from 55-60 g CO2e/passenger.km in 2011/12 to 25-30 g CO2e/passenger.km in 2019/20, before the pandemic.

The impact of the coronavirus lockdowns is clearly visible during the 2020/21 financial year, where a peak in emissions can be seen for all TfL services, especially for buses (180 g CO2e/passenger.km), the Elizabeth Line (130 g CO2e/passenger.km) and the London Underground (100 g CO2e/passenger.km), as services continued operating with much lower passenger numbers. All services progressively reverted to their pre-pandemic emission levels over the past couple of years.

Figure 25   Carbon dioxide equivalent (CO_2e) emissions per passenger kilometre on TfL public transport services, 2011/12-2022/23.
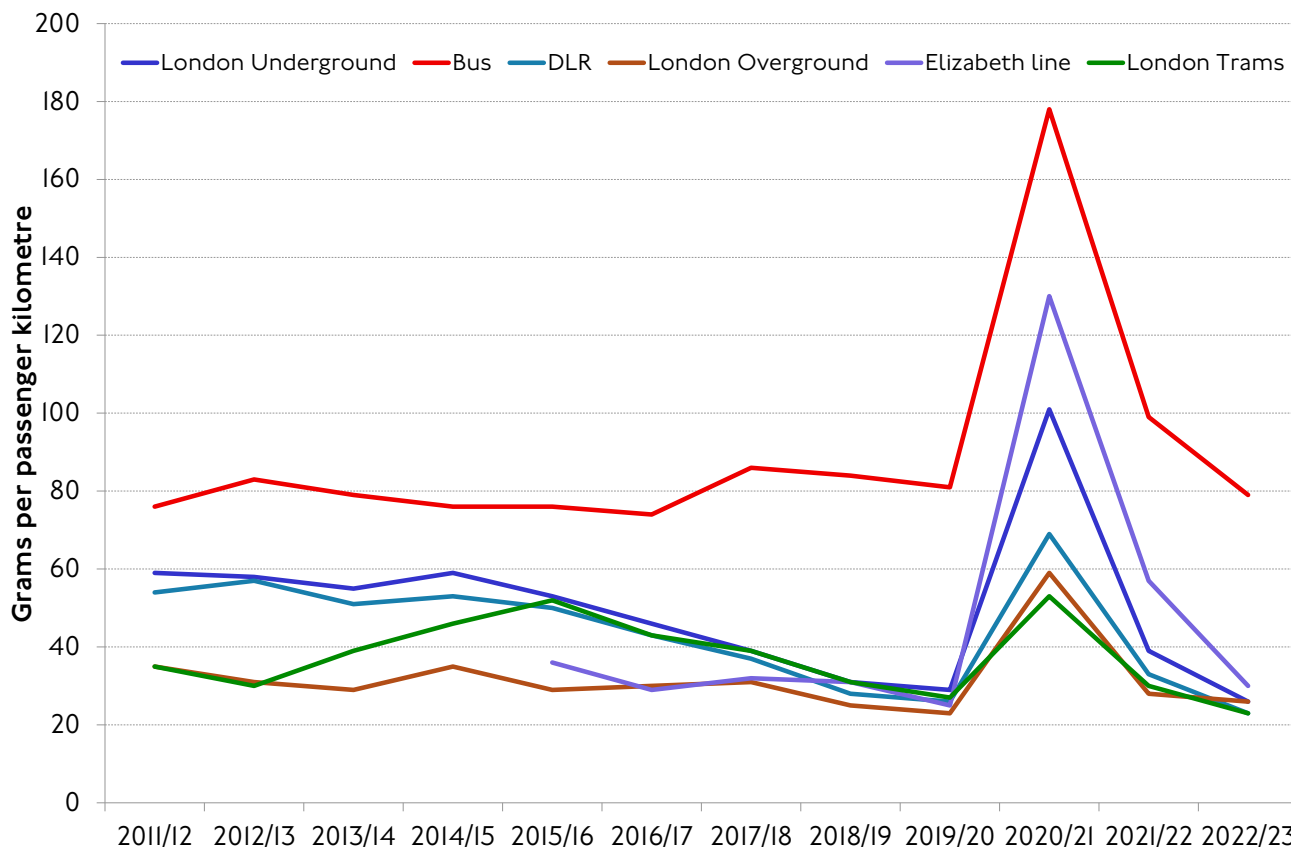
Source: TfL Strategic Analysis, Transport Strategy & Policy, based on TfL operational data.

Supporting the transition to electric vehicles

Electrification of the vehicle fleet will be a key mechanism helping to achieve net zero and TfL is working to help support and accelerate progress. Battery electric vehicles (BEVs) vehicles make up an increasing proportion of vehicles being registered for the first time in London. BEV cars accounted for 23.2 per cent of cars registered for the first time in 2022, up from 1.3 per cent in 2018. First-time registrations of petrol and diesel cars have continued to fall, with diesel cars making up 4.6 per cent of new registrations in 2022 compared to 23.6 per cent in 2018.

Providing suitable charging infrastructure is key to underpinning this transition. Our electric vehicle infrastructure strategy sets out that London will need between 40,000 and 60,000 public charge points by 2030. In October 2023, there were almost 17,000 public electric vehicle charging points in London, around one third of all public charging points in the UK, which is a 235 per cent increase in charging infrastructure since April 2020 (figure 26).

Figure 26   Number of electric vehicle charge points, by type, 2019-2022.
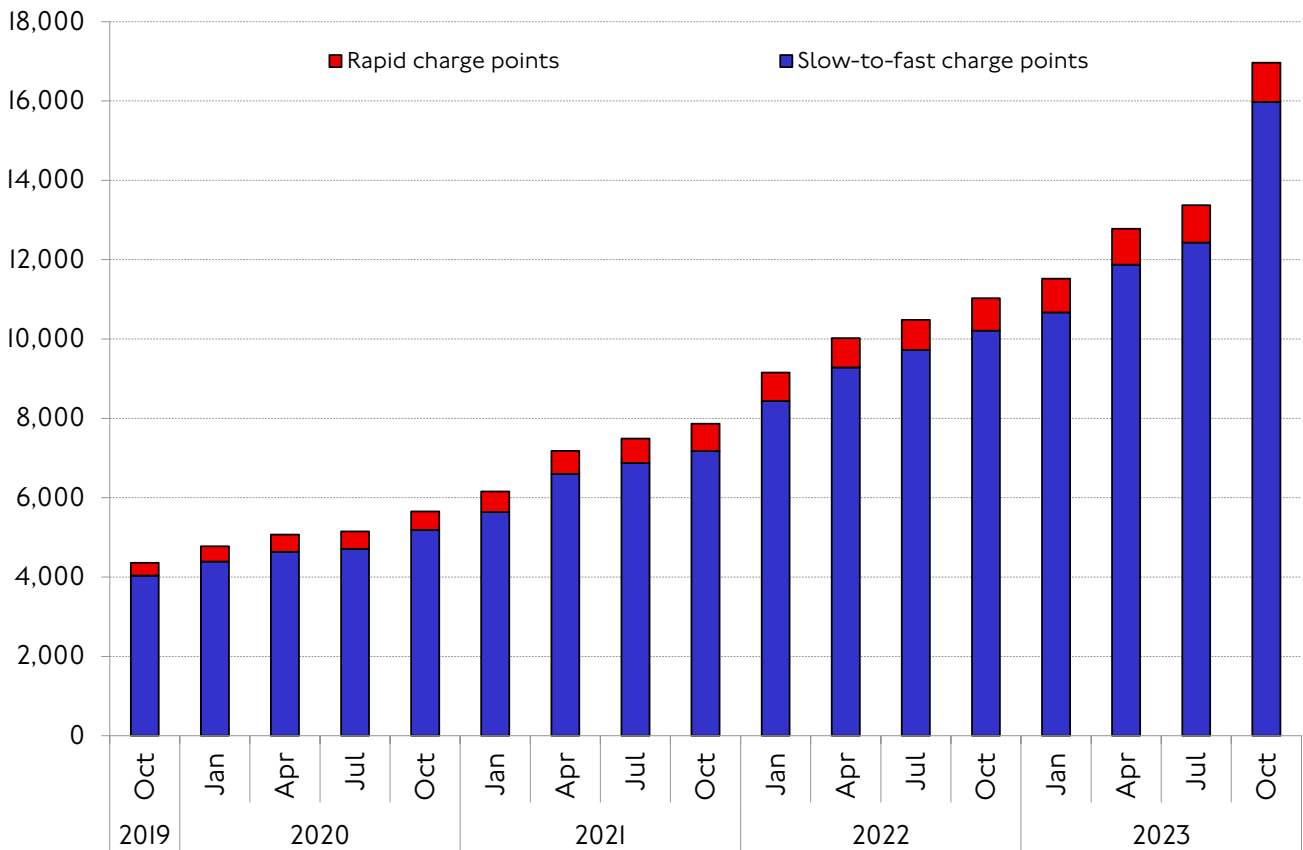
Source: Zapmap, via Department for Transport.

London has been allocated almost £39 million from the Government's Local Electric Vehicle Infrastructure fund. This funding will enable London boroughs to substantially increase delivery of local, primarily low-power, on-street charging infrastructure, meeting the needs of drivers without access to home charging, and addressing existing unequal charge point deployment across London. Funding will be made available to boroughs in either 2023/24 or 2024/25.

TfL is also continuing its delivery of rapid and ultra-rapid charge points, with contracts awarded to deliver 100 electric vehicle charging bays on the TfL Road Network and plans for electric vehicle charging hubs on TfL land.

Zero-emission bus and taxi fleets

We are also continuing to expand our zero-emission bus fleet, which is now one of the largest in western Europe. By the end of 2023, we expect to have over 1,180 zero-emission buses on 73 bus routes. London is expected to have a fully zero-emission bus fleet by 2034, which could be accelerated with additional government funding to be completed by 2030.

We are also continuing to expand our zero emissions-capable taxi fleet. By the end of 2023, we expect to have nearly 8,000 zero emission-capable plug-in taxis operating across London, about half the taxi fleet. London is rapidly working towards delivering a zero emissions-capable taxi fleet and we continue to work with the taxi industry to deliver cleaner taxis.

Road traffic

Despite rising population, road traffic volumes in London have been broadly stable over the last couple of decades. Towards the end of the decade however, traffic growth started to reassert itself particularly in outer London (which hosts over two thirds of London's traffic by distance driven) and in relation to certain types of vehicles, most notably vans. During the pandemic, traffic volumes fell in line with restrictions but to a much lesser extent than public transport demand, reflecting long periods of working from home and the relative attractions of private transport in the pandemic context. Road traffic volumes also recovered much more rapidly once pandemic restrictions were eased. However, they also soon levelled out at just below pre-pandemic levels and have been relatively stable since.

**Overall trends in road traffic**

The most comprehensive indicator of road traffic volumes in London is provided by the Department for Transport (DfT). Travel in London report 15 described how this series had recently been re-based, resulting in an increase to the vehicle kilometres assessed to have been driven in London relative to previous estimates from 2009. It is important to recognise that the revisions to the DfT's estimates were mostly due to methodological improvements in the calculation of benchmark estimates for 2009 and 2019, and not due to a change in observed year-on-year trends.

Figure 27 shows the revised long-term trend indexed to year 2000. The relative stability of the amount of traffic in London through the early part of the period and increases around the end of the last decade are visible. Values for 2022 had not yet recovered fully from the pandemic, total traffic in London being six per cent lower than in 2019.

Of particular interest is the diverging trend in traffic growth between different areas of London. Traffic volumes in central London (using a definition different to, and larger than, the central London Congestion Charge zone) have fallen relatively consistently year on year, and in 2022 were 35 per cent below 2000 and 19 per cent below 2016 levels. Equivalent values were 19 and seven per cent for inner London. Traffic volumes in outer London were one per cent higher than 2000 levels in 2022 and four per cent below 2016. Although incomplete recovery from the pandemic in 2022 was a factor, the tendency for traffic growth to reassert itself, particularly in outer London, is evident.

Another measure of traffic trends in London is provided by TfL's counting cordons, surrounding central (again, a definition larger than, and not aligned to, the Congestion Charge zone), inner and outer London. Data from these cordons contribute to an MTS Tracker metric and is shown in figure 28, with an aim to reduce the number of car journeys by three million on an average day by 2041. Although these are less-comprehensive measures than those provided by the DfT, the long-term picture is broadly similar.

Figure 27   Change in vehicle kilometres driven by motorised modes, by London area and Great Britain, 2000-2022.
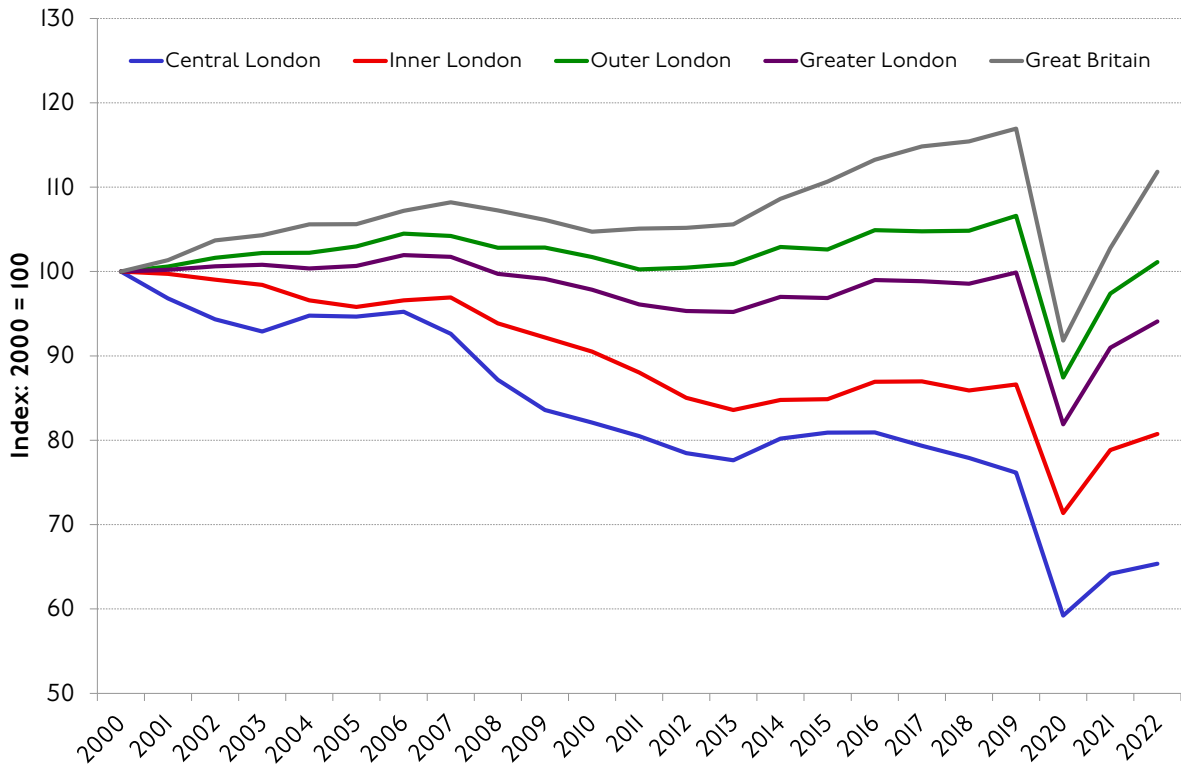
Source: Department for Transport.

Figure 28   Cars crossing London's strategic cordons per day, 2010-2030.
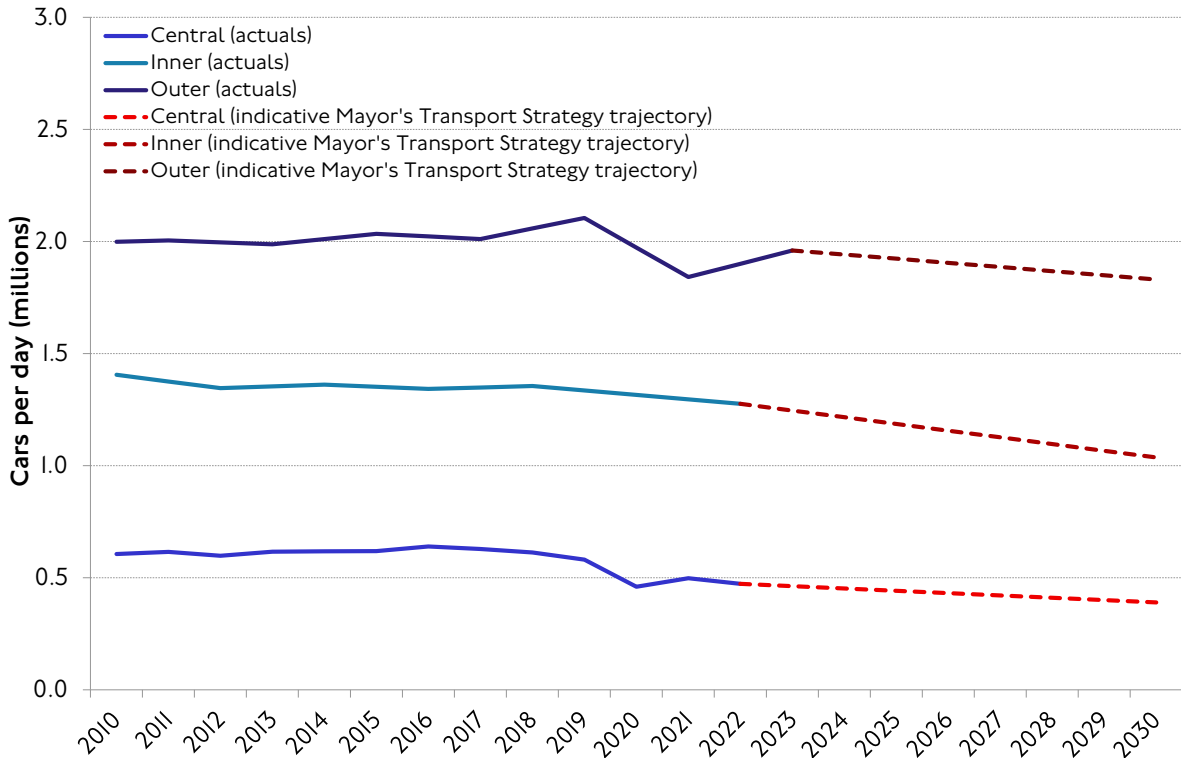
Source: TfL Strategic Analysis, Transport Strategy & Policy, based on TfL traffic data.
Note: Counts were not undertaken in 2020 across the outer cordon and in 2020 or 2021 across the inner cordon, therefore the data reported are interpolated from adjacent years.

Freight vehicles entering central London in the weekday morning peak

A specific aim of the MTS is to reduce the number of goods vehicles (HGVs and LGVs) circulating in the central London Congestion Charge zone during the weekday morning peak by 10 per cent from 2016 levels by 2026. This reflects pressures on the road network at this time and would help to reduce road danger.

Figure 29 shows the observed trend over recent years and sets this in the context of the nominal trajectory required to meet the target. The impact of the pandemic is clearly visible but, as traffic recovered, the number of freight vehicles remained well below the 2026 target. During 2023, the number of goods vehicles entering central London in the weekday morning peak started to decline again, with the reduction currently greater than 25 per cent.

Figure 29   Change in freight vehicles entering the Congestion Charge zone compared to 2016, 13-period moving average, 2017/18-2023/24.
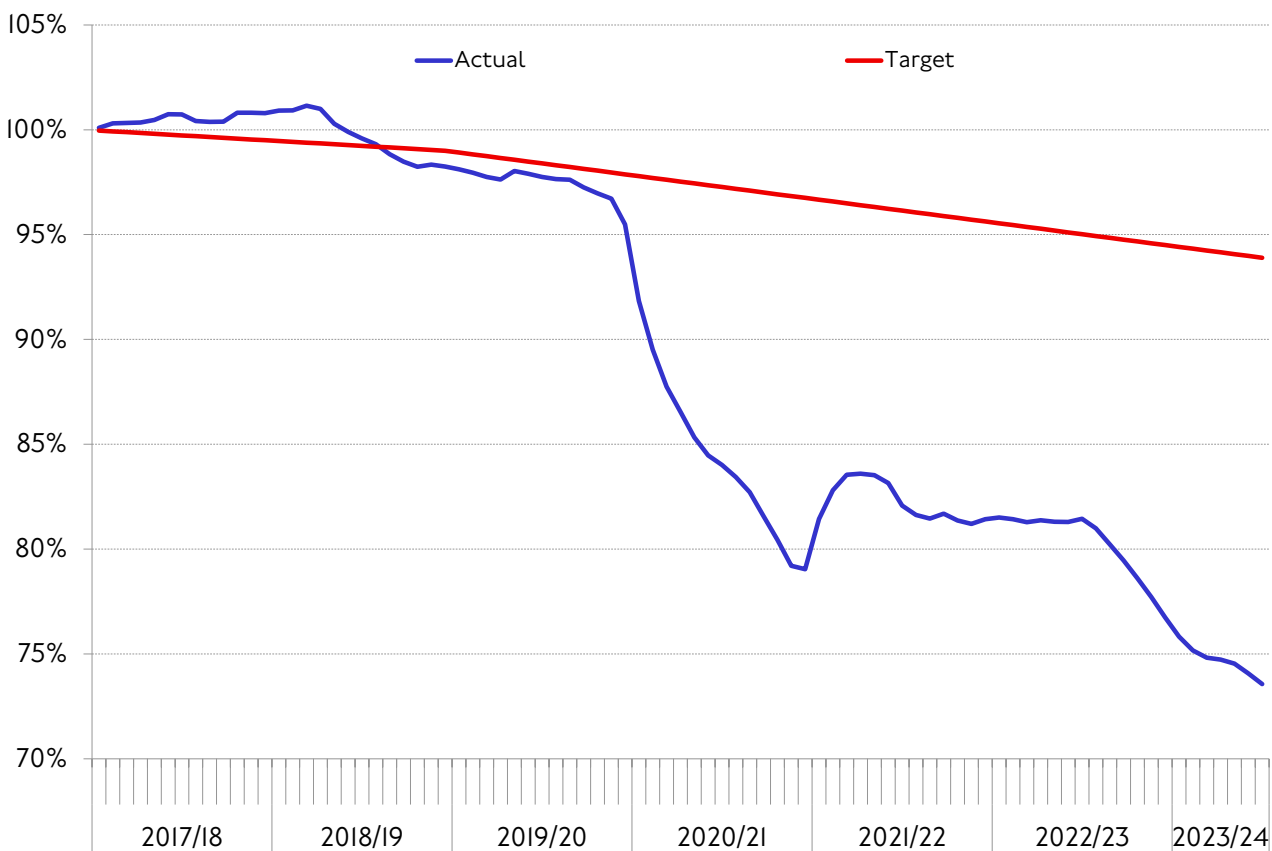
Source: TfL Strategic Analysis, Transport Strategy & Policy, based on TfL traffic data.

Road traffic congestion

Travel in London report 15 described how a re-basing of the DfT's congestion dataset had interrupted the continuity of the long-term time series, with the previous series running until 2020 and the new series starting from 2019. Congestion is conventionally defined in terms of a travel rate (minutes per kilometre) over and above that which might be expected if the network operated under free-flow conditions (for practical reasons this is taken as the night-time period), that is, an excess delay.

Figure 30 shows a re-based long-term trend for congestion by area of London. While the absolute values between the two data sources should not be regarded as strictly comparable, the long-term trends are of interest. They show a sustained rise in congestion in all parts of London during the years leading up to the pandemic. Following reductions associated with the pandemic, with lower traffic levels, the trend over more recent years has been slowly upward. It is not yet clear from the available time series of data whether the relatively lower values shown by the more recent dataset are reflective of lower overall road traffic demand following the pandemic or recent operational initiatives designed to better manage congestion.

Figure 30   Morning peak average weighted road vehicle excess delay, by area, 2008–2023.
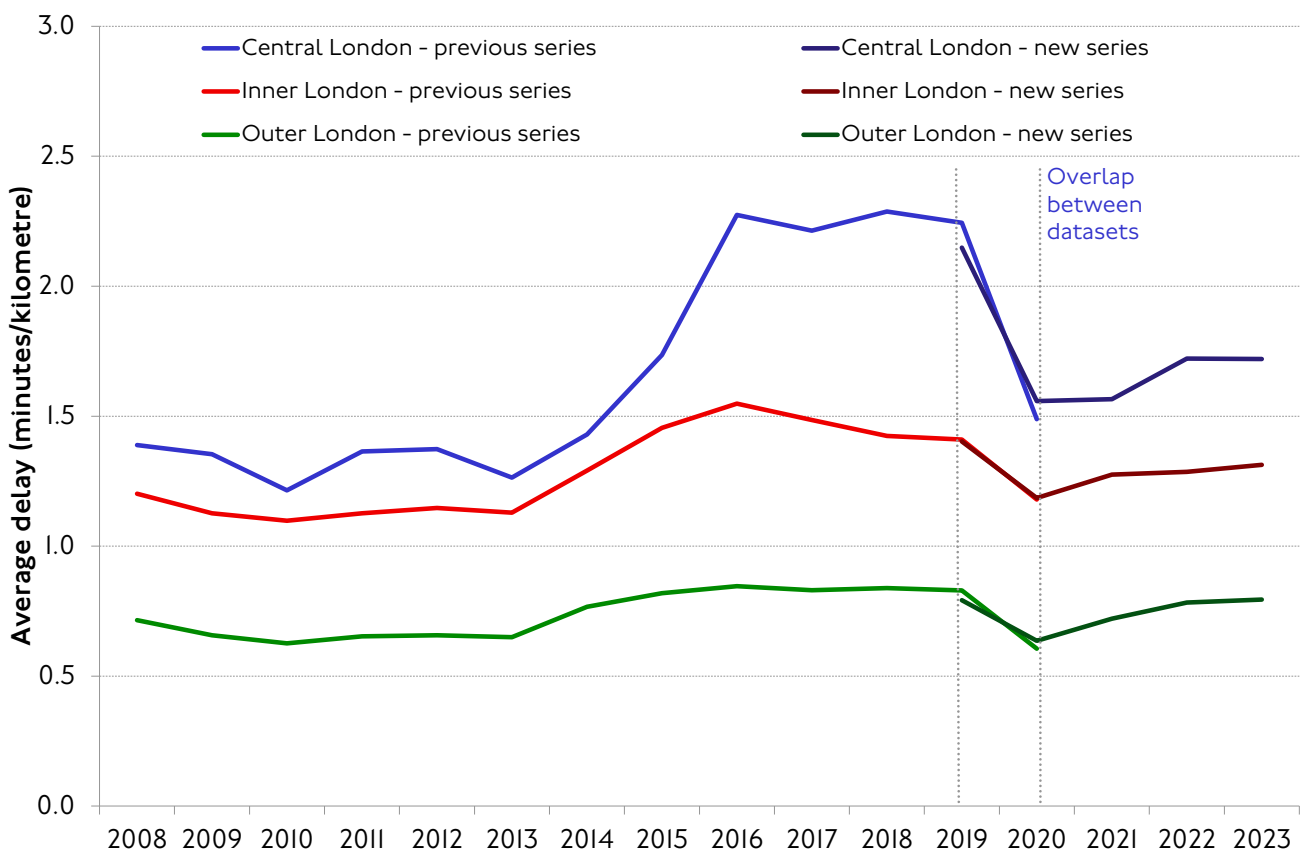
Source: TfL Operational Analysis, Network Performance.

A good public transport experience

Public transport demand and operational performance trends

Pandemic recovery and legacy

The 2022/23 financial year was the first since the pandemic in which travel demand in London had the opportunity to reach a stable post-pandemic state. However, it was atypical for other reasons affecting public transport availability and demand, including the opening of the Elizabeth line, the cost-of-living crisis, widespread industrial action on several public transport networks across the country and periods of extreme weather (for example, a historically very hot summer in 2022). Nevertheless, the broad dimensions of post-pandemic demand, and the differences to pre-pandemic patterns, became increasingly clear.

Over the previous decade, public transport demand had fluctuated within a small margin of around four billion journeys per year. It peaked around 2015/16 at 4.03 billion journeys and then decreased slightly until 2019/20, this thought to reflect primarily a combination of cost-of-living pressures and some reductions in service provision, most notably affecting buses. With the outbreak of the pandemic in 2020, public transport demand fell to historic lows and pandemic disruption continued throughout 2021, so that recovery only started in earnest in early 2022.

Across 2022/23 (averages), public transport journeys recovered to 87 per cent of the 2019/20 pre-pandemic baseline, with individual modes within a range from 77 to 89 per cent. Data from recent weeks (figure 31) shows most modes around 80-90 per cent, which is a positive sign of consolidation and continuing demand recovery.

Particularly notable over this period was the phased opening of the Elizabeth line. A summary of the key transport impacts of this line, reflecting approximately one year of full operation, is given below.

These aggregate demand statistics, however, conceal some important post-pandemic trends in terms of the way that people travel. This includes a consolidation of weekday travel on Tuesdays to Thursdays, where demand is typically higher than on Mondays and Fridays (particularly on rail modes). There is also more travel on weekends than on some weekdays, and slightly longer average journey lengths, all of which appear to be becoming established features of post-pandemic demand.

Finally, the Department for Transport reports that, as of October 2023, rail journeys across Great Britain had recovered to around 80 to 90 per cent of the pre-pandemic baseline, having fluctuated around this range since the beginning of the year. However, the impact of industrial action should also be noted.

Figure 31   Average weekly demand on TfL's rail networks compared to the equivalent week before the pandemic, Mar 2020–Oct 2023.
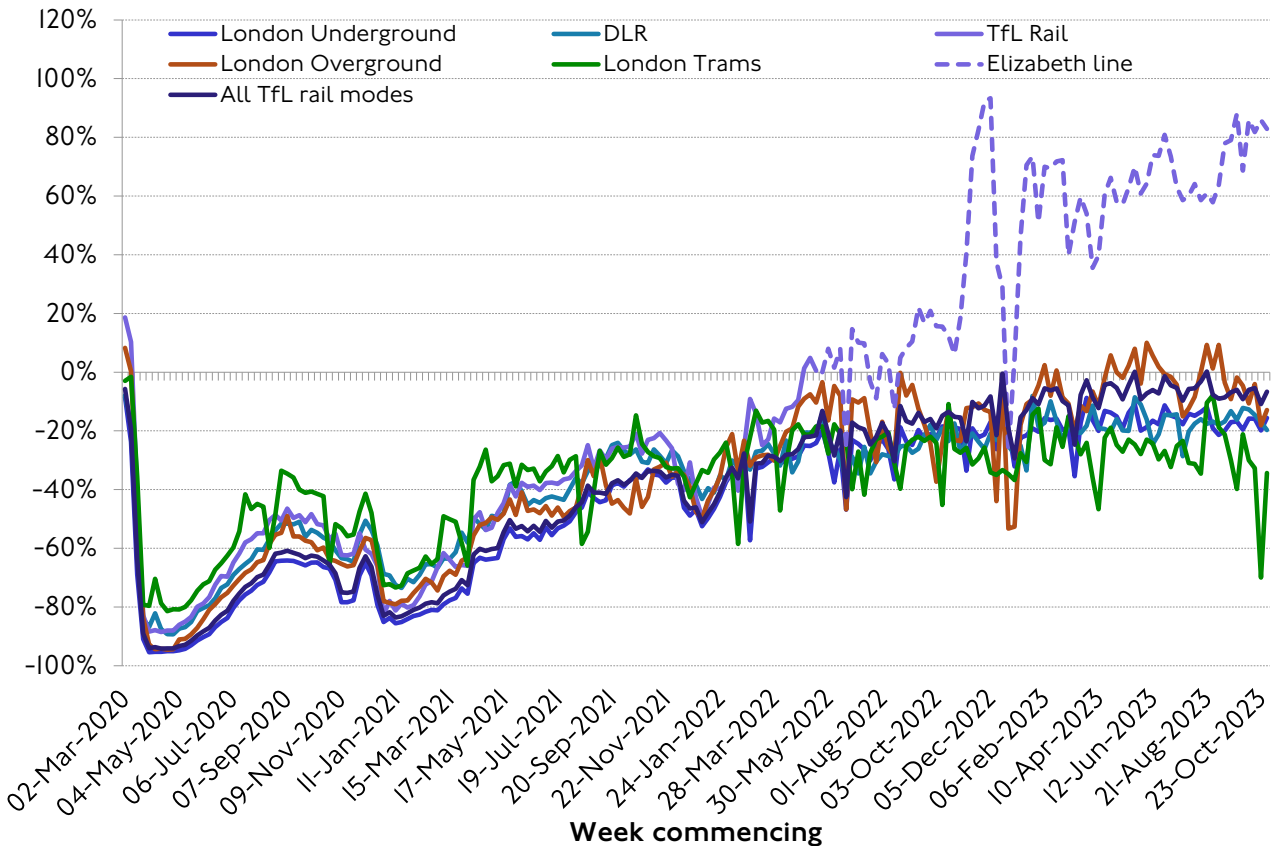
Source: TfL Strategic Analysis, Transport Strategy & Policy, based on TfL operational data.
Note: The TfL Rail trend is provided until the opening of the Elizabeth line in May 2022, where a comparison with a pre-pandemic baseline is no longer relevant. The Elizabeth line trend uses the demand on its first week of operation as a basis for the relative comparison.

Key trends in the 2022/23 financial year

Looking at averages for the 2022/23 financial year, and bearing in mind the continuing pandemic recovery, total journeys on TfL's main public transport networks recovered to 87 per cent of the 2019/20 pre-pandemic level (passenger kilometres to 88 per cent). However, this aggregate figure includes the opening of the **Elizabeth line**, which unlocked new journey opportunities, meaning that the recovery on established modes was relatively lower.

- On **buses**, the number of journeys in 2022/23 recovered to 84 per cent of the pre-pandemic baseline (passenger kilometres to 88 per cent).
- **London Underground** journeys in 2022/23 were at 80 per cent of the pre-pandemic baseline (passenger kilometres at 81 per cent).
- On the **DLR**, journeys in 2022/23 were 79 per cent of the pre-pandemic baseline (passenger kilometres 74 per cent).
- On **London Overground**, both journeys and passenger kilometres had recovered to 84 per cent of the pre-pandemic level in 2022/23.
- **London Trams** journeys and passenger kilometres both were at 77 per cent of the pre-pandemic baseline in 2022/23.

- On **London River Services**, the number of journeys recovered to 89 per cent of the pre-pandemic baseline.
- Finally, the **IFS Cloud Cable Car** reports a full patronage recovery, with 25 per cent more journeys in 2022/23 than before the pandemic.

Table 2   Demand (million journeys) on TfL's public transport modes, 2012/13-2022/23.

Year	Buses	LU	DLR	LO[1]	EL[1,2]	Trams	Total[3]	River Services	IFS Cloud Cable Car
2012/13	2,311	1,229	100	125	-	30	**3,795**	6.3	2.0
2013/14	2,382	1,265	102	136	-	31	**3,916**	8.4	1.5
2014/15	2,385	1,305	110	140	-	31	**3,972**	10.0	1.5
2015/16	2,314	1,349	117	183	37	27	**4,028**	10.2	1.5
2016/17	2,262	1,378	122	189	45	30	**4,025**	10.4	1.5
2017/18	2,247	1,357	120	190	42	29	**3,985**	10.0	1.4
2018/19	2,220	1,385	122	188	51	29	**3,995**	9.8	1.4
2019/20	2,112	1,337	117	186	56	27	**3,835**	9.6	1.2
2020/21	865	296	40	59	18	12	**1,290**	1.6	0.4
2021/22	1,491	748	77	127	37	19	**2,499**	5.3	1.4
2022/23	1,785	1,065	92	157	204	21	**3,324**	8.5	1.5
Change 2019/20-2022/23	-16%	-20%	-21%	-16%	+268%	-23%	**-13%**	-11%	+25%

Source: TfL Strategic Analysis, Transport Strategy & Policy, based on TfL operational data and Office of Rail and Road.

1: The demand figures on London Overground and the Elizabeth line are estimates from the Office of Rail and Road based on National Rail's LENNON ticketing system. There are known limitations with this method for the Elizabeth line in particular, and therefore these estimates should be considered only as indicative. However, TfL estimates for the Elizabeth line are only available from 2022/23 onwards and for comparability with the historic trend the Office of Rail and Road series is useful. Official TfL estimates of journeys on the Elizabeth line have been provided elsewhere in this report.

2: The Elizabeth line opened in May 2022 so the results up to 2021/22 refer to the previous TfL Rail services.

3: This total is calculated for the main modes only for easier comparison of the overall change with table 2 below, given that passenger kilometres values are only available for a subset of modes.

Changes in the distribution of travel demand throughout the week and the day

One of the main post-pandemic legacies is the change in public transport demand across the week (particularly on rail modes), likely arising from the consolidation of hybrid working patterns among the section of the travelling public for which this is available.

Figure 32 shows this in terms of the absolute demand on each weekday of a recent week compared to the equivalent week before the pandemic. The percentages inside the bars for the most recent week represent the relative recovery against that same day in the baseline week.

Figure 32   London Underground and bus demand by day of week, week commencing 16 Oct 2023 versus week commencing 14 Oct 2019.
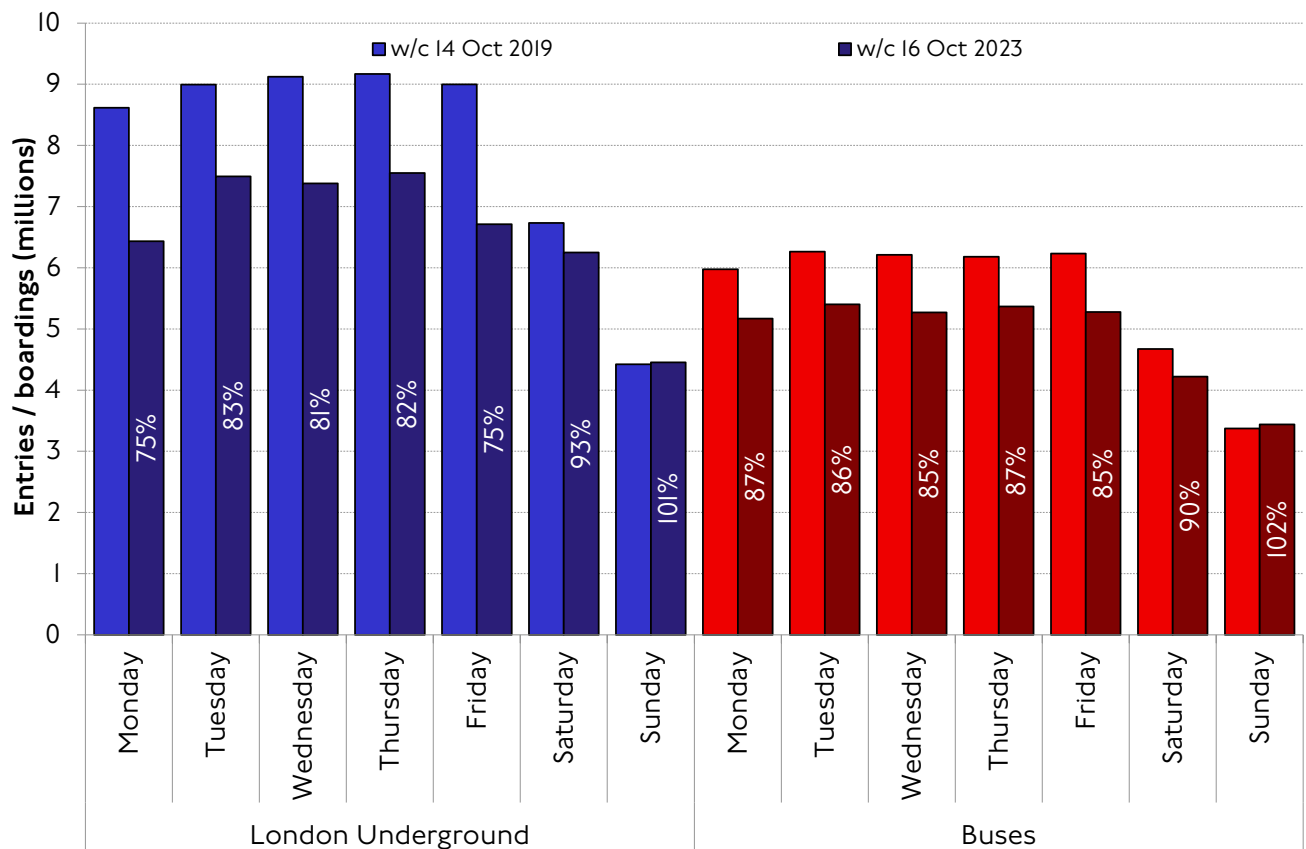
Source: TfL Data & Analytics, Technology & Data.

Alongside the shortfall in demand that persists across both modes on all days of the week (except Sunday for the sample weeks), it is noteworthy that the relative recovery has been largest on weekends, which exceed 90 per cent. This is in line with the observation of a faster and more consolidated recovery in the leisure travel market.

Shifts in the timing of travel since the pandemic can also be seen when looking at demand throughout the day. For the London Underground, figures 33, 34 and 35 contrast the demand profiles before and after the pandemic on Mondays, Tuesday-Thursday and Fridays, respectively, based on representative weeks in each year.

Figure 33 Monday London Underground entries, by quarter hour, week commencing 16 Oct 2023 versus week commencing 14 Oct 2019.
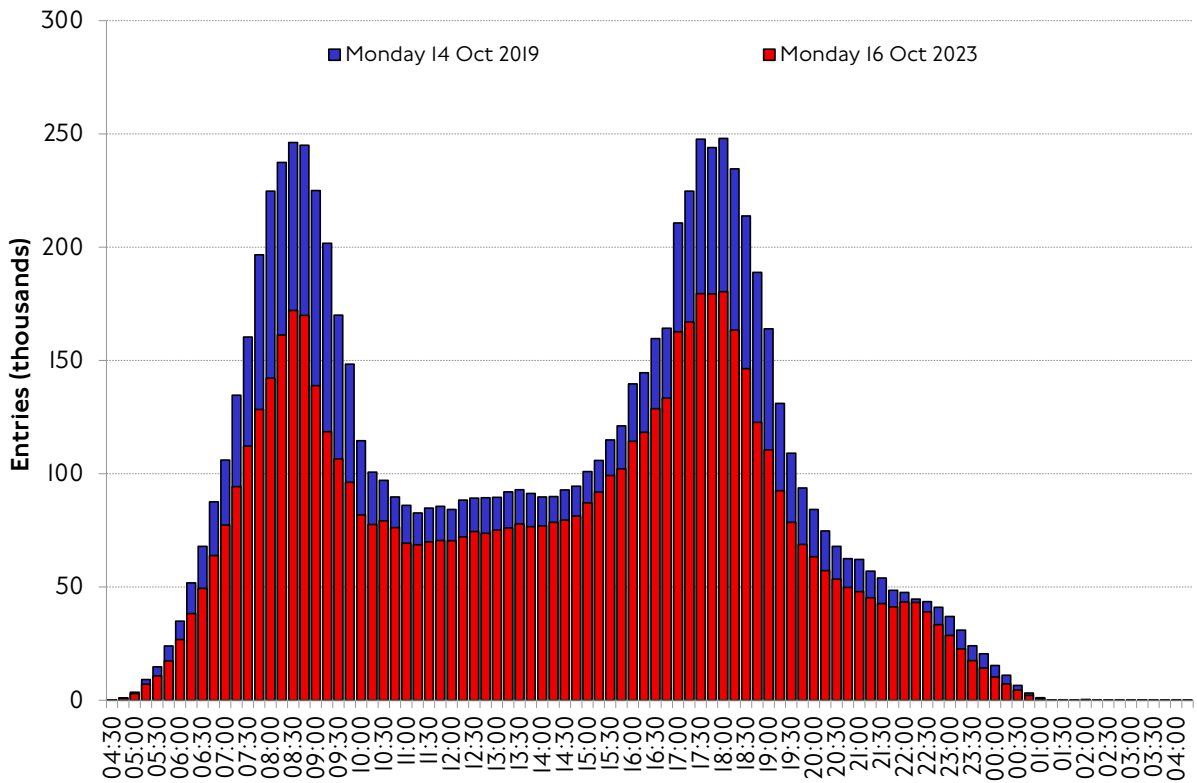
Source: TfL Data & Analytics, Technology & Data.

Figure 34 Tuesday to Thursday London Underground entries, by quarter hour, week commencing 16 Oct 2023 versus week commencing 14 Oct 2019.
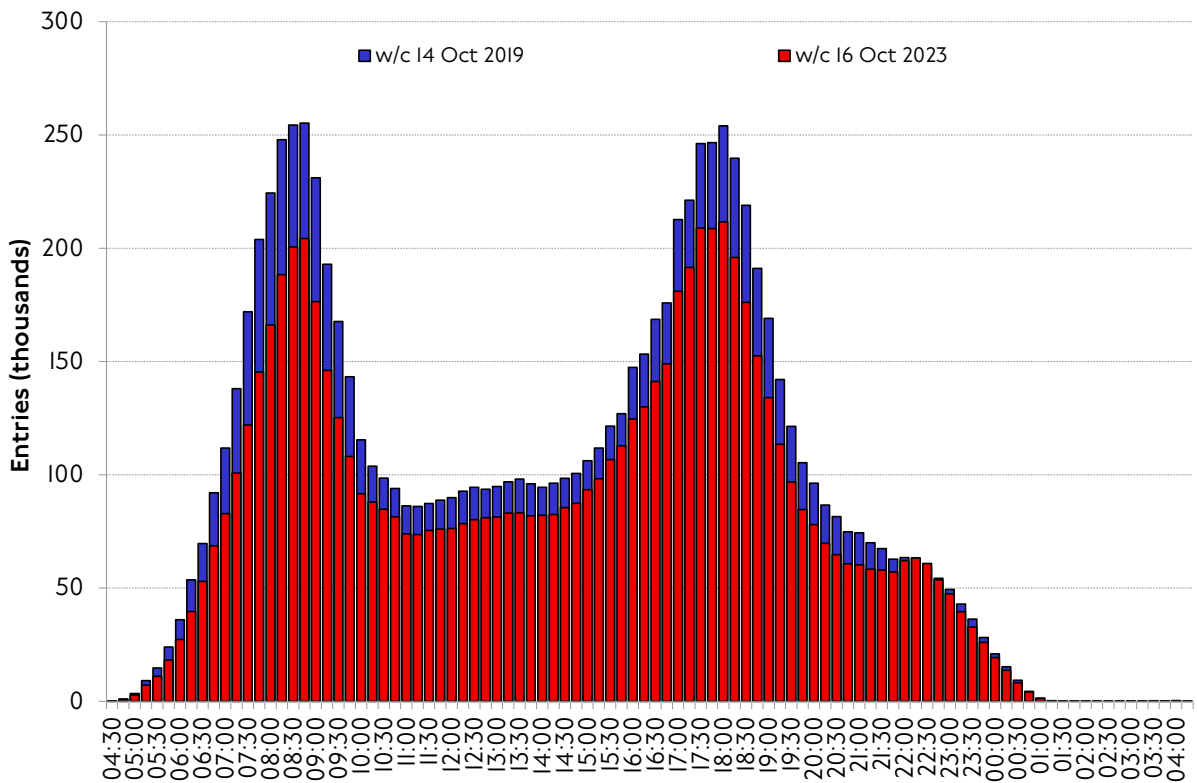
Source: TfL Data & Analytics, Technology & Data.

Figure 35　　　Friday London Underground entries, by quarter hour, week commencing 16 Oct 2023 versus week commencing 14 Oct 2019.

Source: TfL Data & Analytics, Technology & Data.

Service provision

Public transport service provision was maintained at a relatively high level on TfL services during the pandemic to cater for essential journeys and to facilitate social distancing, and rapidly returned to pre-pandemic levels following the removal of pandemic restrictions.
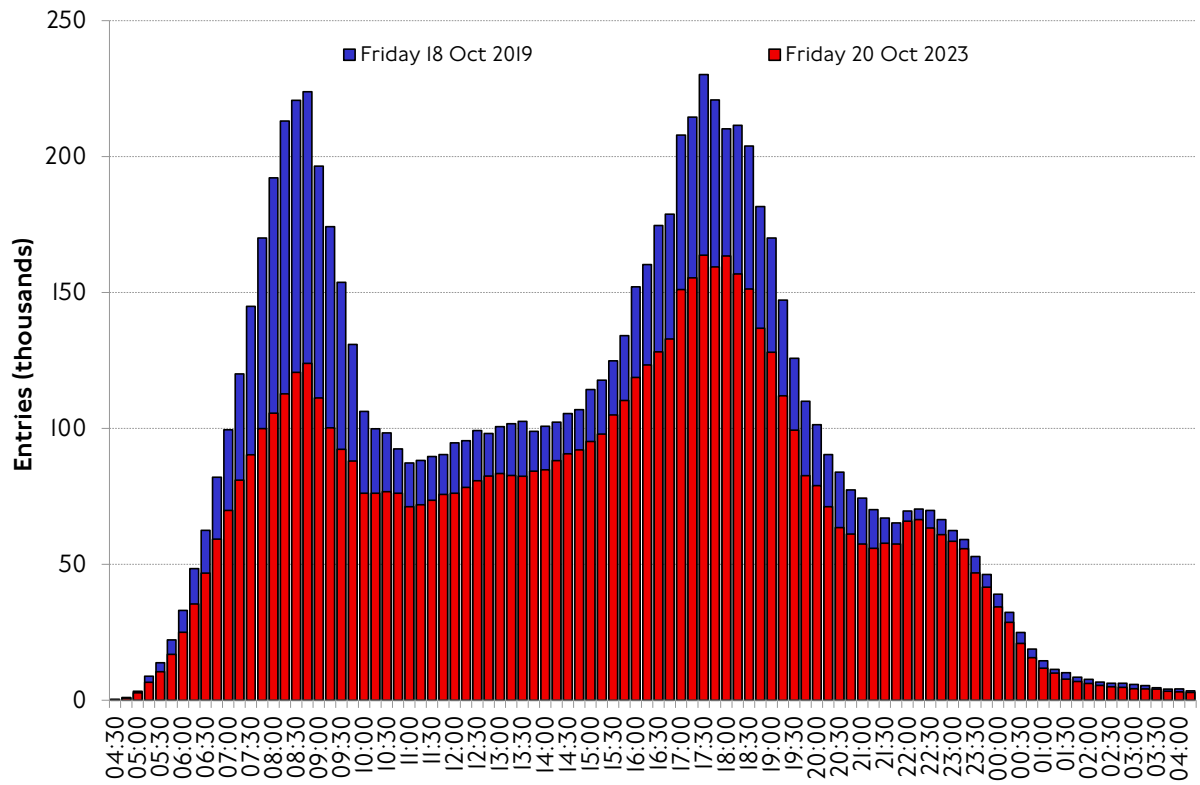
The year 2022/23 was, however, a particularly challenging one for operational performance, with a small net decline across most modes due to several factors, including long-running industrial action on public transport networks across the country as well as other staff- and asset-related causes.

Table 3 provides a summary of selected performance indicators (mostly proportion of kilometres or services operated over those scheduled, unless stated otherwise) on TfL-operated public transport modes. In general, and although all indicators show positive signs of recovery towards the pre-pandemic baseline, there remain some gaps in both demand, service provision and performance against pre-pandemic norms.

Table 3   Selected indicators of service provision and reliability on TfL-operated public transport modes, 2012/13-2022/23.

Year	Buses: km operated	Buses: Average speed (mph)	LU: km operated	DLR: Services operated	Trams: Services operated	LO: PPM[I]	EL: PPM[I]
2012/13	97.6%	-	97.6%	98.5%	97.3%	96.1%	
2013/14	97.7%	9.6	97.5%	99.2%	98.9%	95.8%	
2014/15	97.1%	9.5	97.6%	99.3%	97.9%	95.0%	
2015/16	97.2%	9.3	97.5%	98.5%	99.0%	94.4%	91.4%
2016/17	97.4%	9.2	96.9%	99.0%	97.1%	94.5%	91.8%
2017/18	98.1%	9.3	96.6%	98.4%	98.5%	94.4%	89.8%
2018/19	98.1%	9.3	96.8%	99.0%	98.5%	93.8%	93.8%
2019/20	97.8%	9.3	94.0%	99.0%	98.2%	92.6%	95.2%
2020/21	98.7%	10.3	87.2%	99.3%	98.3%	96.2%	96.0%
2021/22	97.9%	9.6	88.2%	98.5%	98.5%	95.2%	94.2%
2022/23	96.0%	9.4	88.3%	98.3%	92.2%	93.5%	92.8%

Source: TfL Strategic Analysis, Transport Strategy & Policy, based on TfL service performance data and Office of Rail and Road.
I: Annual average of the Public Performance Measure (PPM), which is a metric that combines punctuality and reliability to represent the proportion of all scheduled trains that are 'on time', which for operators in the London and South-East region means arriving at the destination no later than five minutes after the scheduled arrival time.

Connectivity

The key connectivity metric we use for public transport is the proportion of Londoners living within 400m of a bus stop, which represents the ability of Londoners to access bus services within five minutes of where they live. The Mayor's aim is to maintain this broadly at the high level of 96.5 per cent seen in 2016. As this is a population-dependent measure there was no effective change in the period up to 2023. Re-calculation of this measure using population data for 2023 has however slightly increased the proportion of Londoners meeting this criterion, to 96.65 per cent.

Our Public Transport Access Level PTAL metric provides a wider measure of Londoner's access to public transport (figure 36). The familiar pattern of relatively higher connectivity towards inner and central London, town centres and radial rail lines is visible. As of October 2023, 33 per cent of London's population lived in areas with a PTAL connectivity score of four or above, which is considered to represent 'high' connectivity.

Figure 36   Public Transport Access Levels (PTALs) in London, autumn 2023.
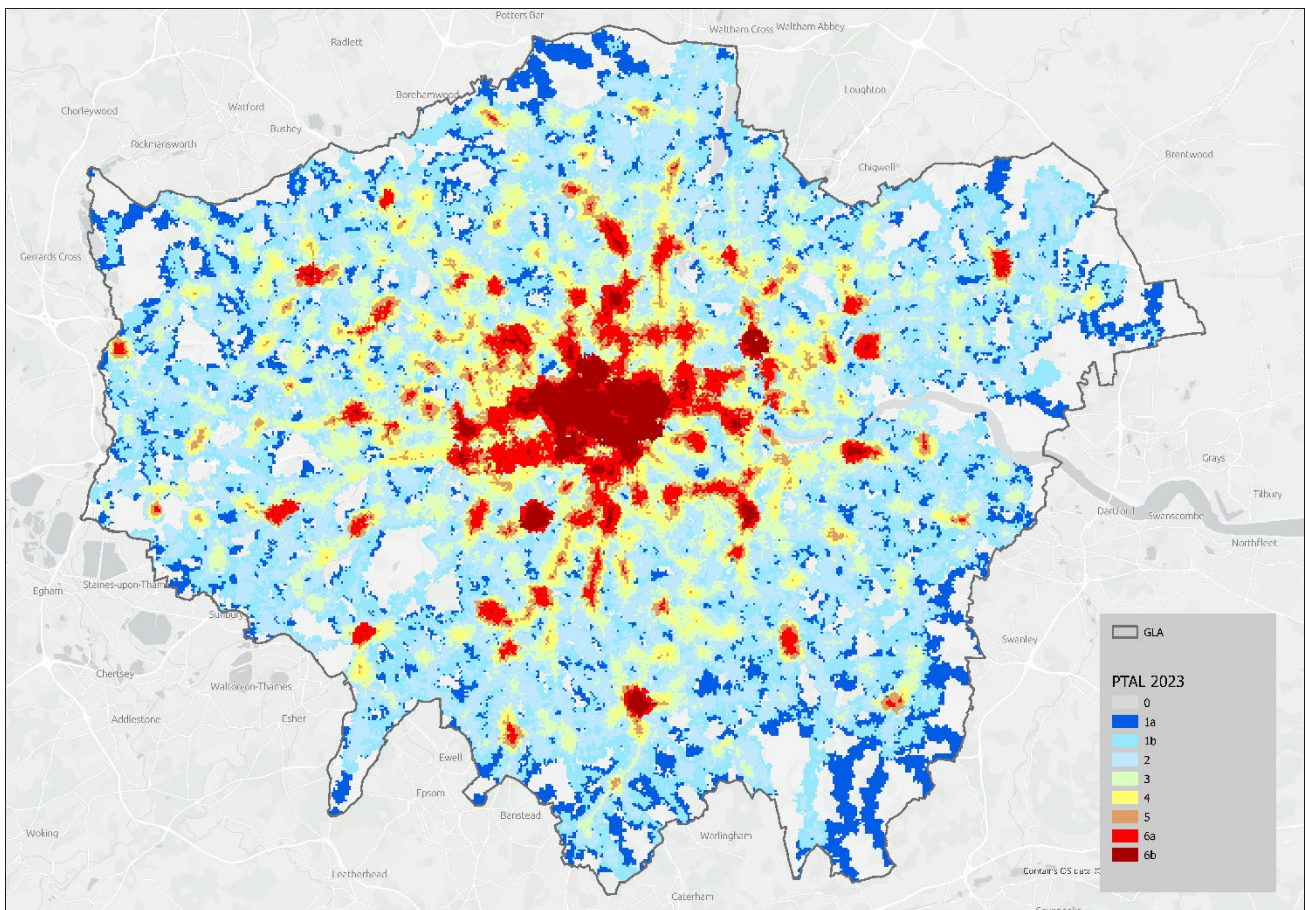
Source: TfL Strategic Analysis, Transport Strategy & Policy.

Public transport safety

Customer and workforce injuries

In 2022/23 there were 8,112 customer injuries and 1,550 injuries among our workforce, both of which remain lower than before the pandemic (figure 37). Eighteen customers were seriously injured, and four customers were killed.

We have focused on understanding the main causes of slips, trips and falls, which account for most injuries. This has resulted in actions to reduce incidents such as improved signage to encourage customers carrying luggage to use lifts. On our bus network, we have started a pilot with several bus operators to gather additional information about slip, trip and fall incidents. This will help to create a more comprehensive dataset to help us understand the common factors that lead to an incident and take appropriate action. We aim to build a shared understanding of why slip, trip and fall incidents happen and what further interventions are feasible. More information about trends in customer and workforce safety as well as recent initiatives to improve both can be found in TfL's Safety, health and environment annual report 2022/23.

Figure 37   Customer and workforce injuries (all severities), 2017/18-2022/23.
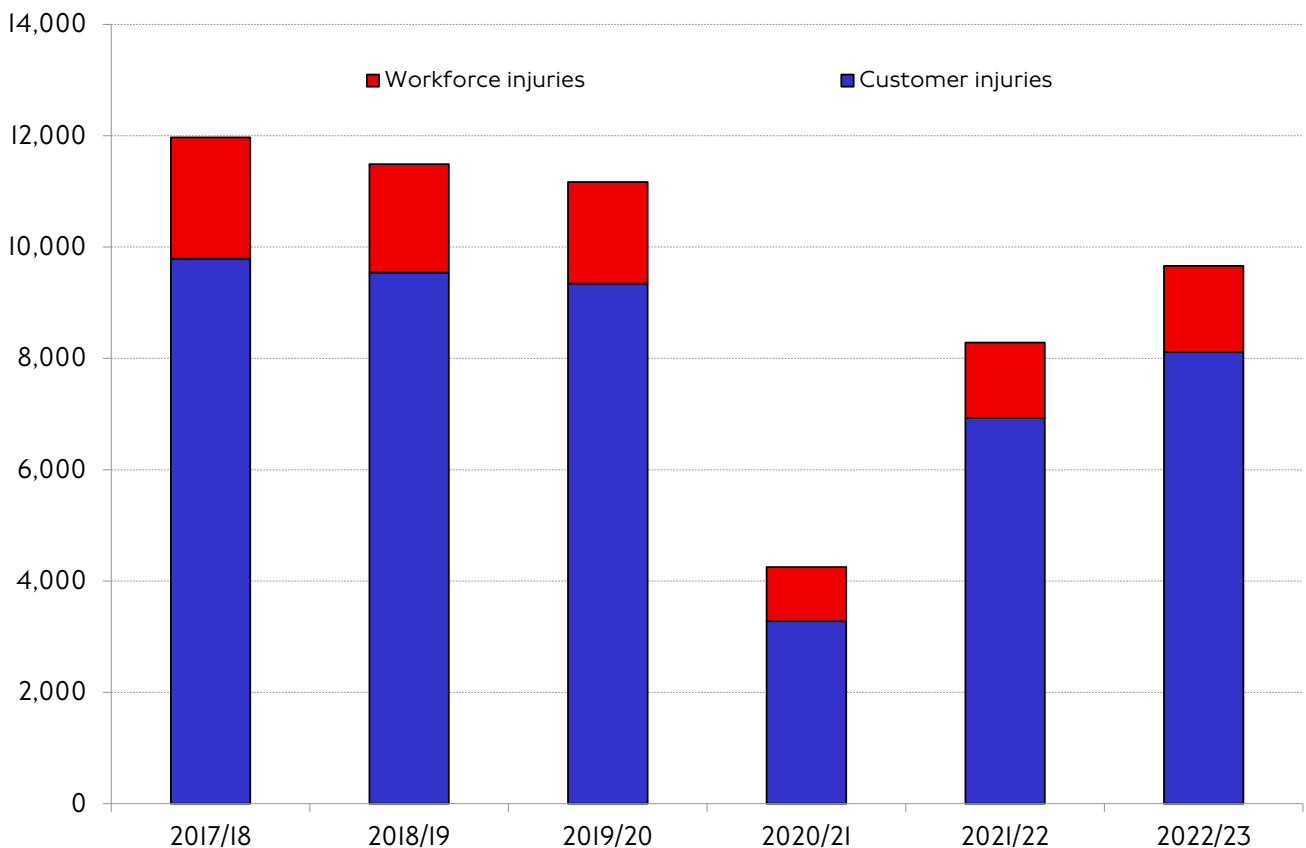
Source: TfL Insights & Direction, Safety, Health & Environment.

Customer Care

Care and customer satisfaction are our primary measures for understanding the quality of the customer experience that TfL delivers, from a customer perspective. They are

complementary elements in determining how TfL is working for our customers, providing a rounded picture of our performance.

'TfL cares about its customers' is the measure used to understand whether TfL is meeting expectations and making Every Journey Matter for our customers. Care measures Londoners' overall perceptions of TfL and is the best reflection of how TfL meets expectations in every interaction with customers (for example all journeys, interactions with the Contact Centre and communications such as email updates), not just the last journey. A continuing focus on Care helps TfL understand, in the short-term, how TfL works for our customers, and in the longer term, how to encourage greater use of active, efficient and sustainable modes.

Our key care measure has maintained an encouraging trend throughout the pandemic, with quarterly results lying in the range of 50 to 60 per cent of our customers agreeing that 'TfL cares about its customers' (figure 38). Longer term, there is a clear trend of improvement, with peaks and troughs tending to reflect new customer-facing initiatives, such as the Night Tube announcement in Q2 2014/15, or events that impact service, such as several industrial action days on the London Underground in 2017.

Figure 38   Agreement with 'TfL cares about its customers' (Care score), by quarter, 2012/13-2023/24.
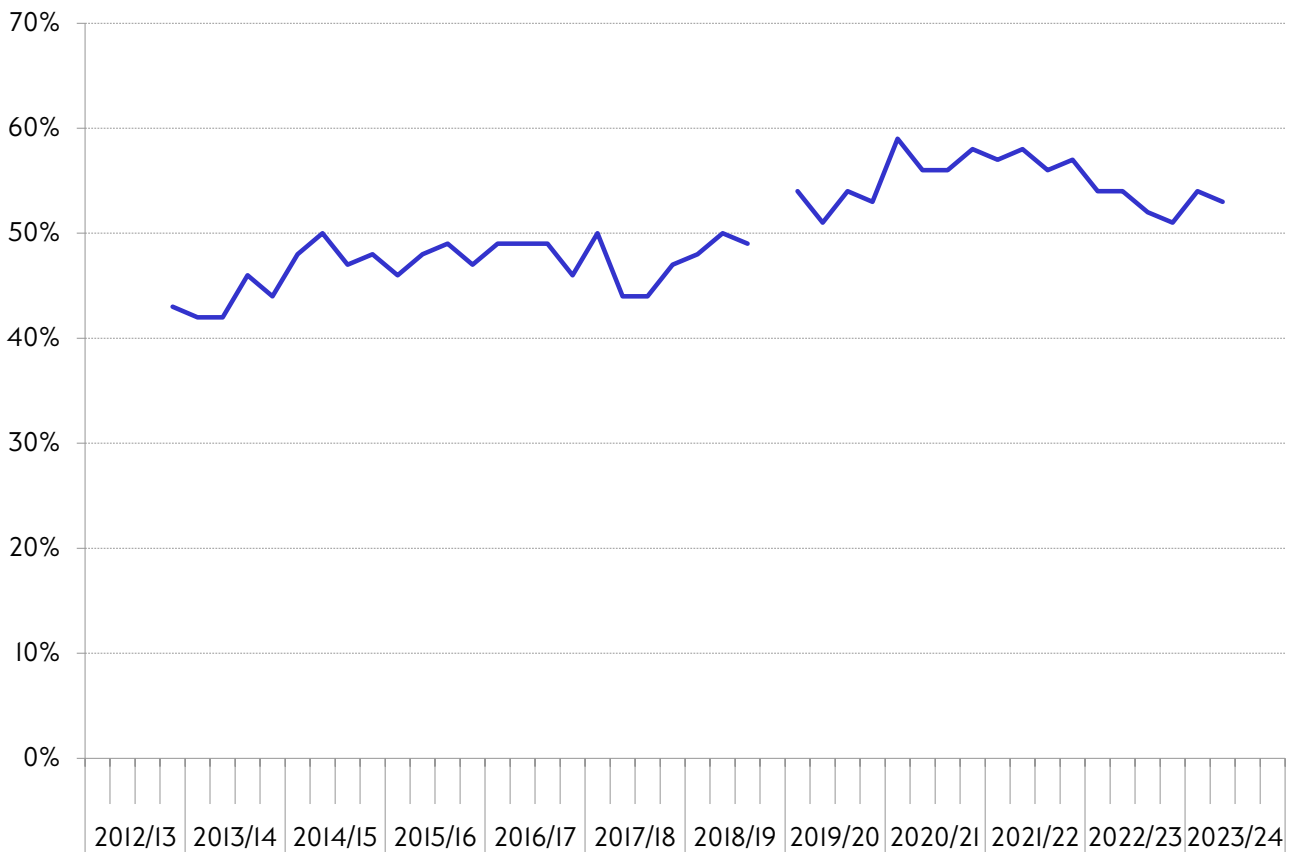

Source: TfL Customer Insight, Customer.
Note: The series break in 2018/19 reflects a change of data supplier.

Physical accessibility

Improving the accessibility of public transport is key to creating a fully inclusive network for all. People who are older or disabled or who are travelling with luggage or young children can sometimes find it hard to get around and often face longer journeys if they are only able to use the step-free network. The MTS aims to reduce this journey time differential, with a working aim of a 50 per cent reduction from a 2016 baseline by 2041. With the launch of the Elizabeth line and other improvements to the London Underground network, the differential has now reduced by 39 per cent (figure 39), placing us ahead of target in terms of the long-term trajectory.

Figure 39   Reduction from the 2016 baseline in the additional journey time using only the step-free transport network, 2016-2030.
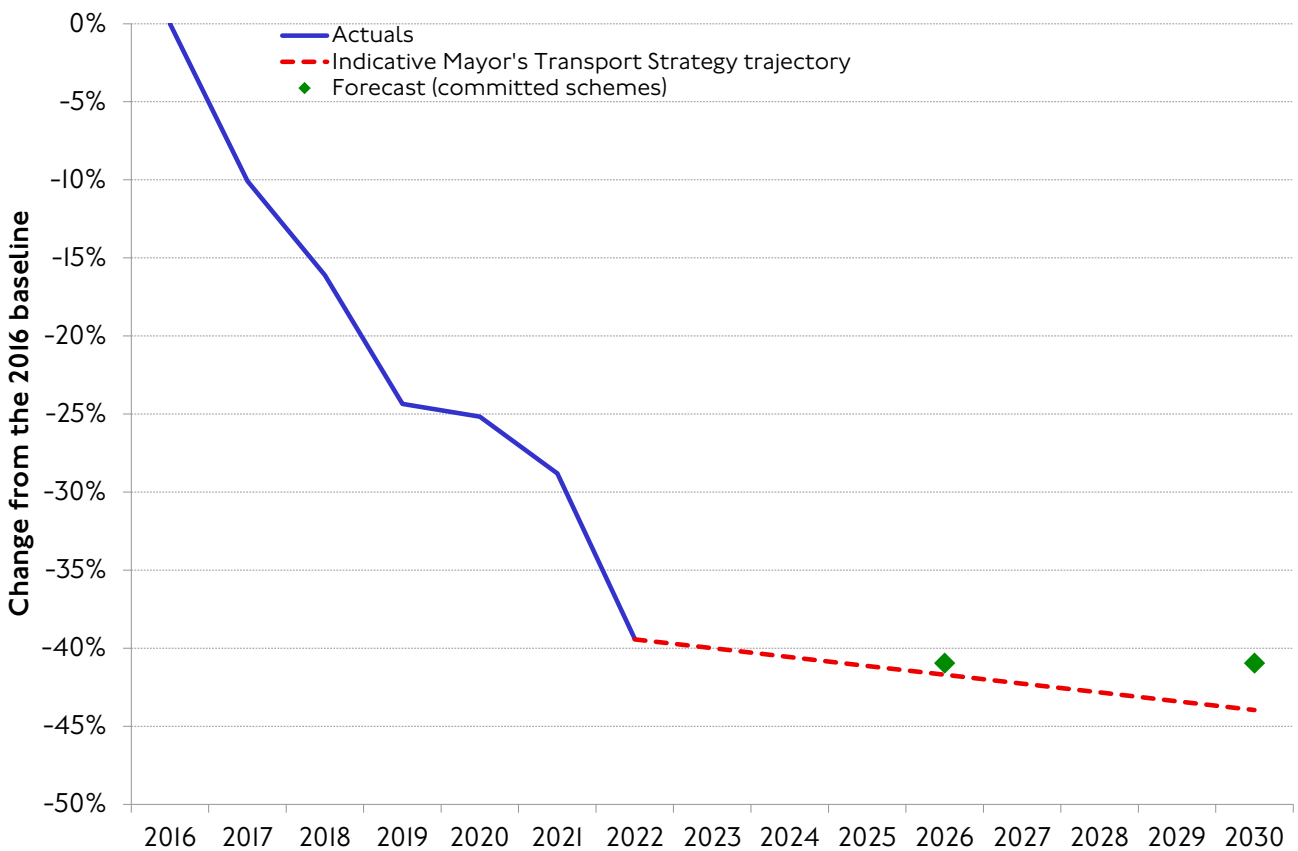
Source: TfL Strategic Analysis, Transport Strategy & Policy.

Table 4 shows the change in step-free provision at stations in 2022/23 and since 2016.

Table 4   Step-free stations on TfL's network.

Network	Current step-free stations	Stations made step free in 2022/23	Proportion of step-free network	Change since 2016
London Underground	92	1	34%	+22 (+8%)
London Overground	62	1	55%	+6 (+5%)
Elizabeth line	41	8	100%	+27 (+60%)
DLR	45	n/a	100%	None
Tram (stops)	39	n/a	100%	None

Source: TfL Strategic Analysis, Transport Strategy & Policy.

Bus speeds

Bus speeds are a key indicator for perceived quality of service and are increasingly affected by general traffic congestion. Figure 40 shows a historical trend of slow decline.

Figure 40   Average bus network speed in London, 2013-2030.
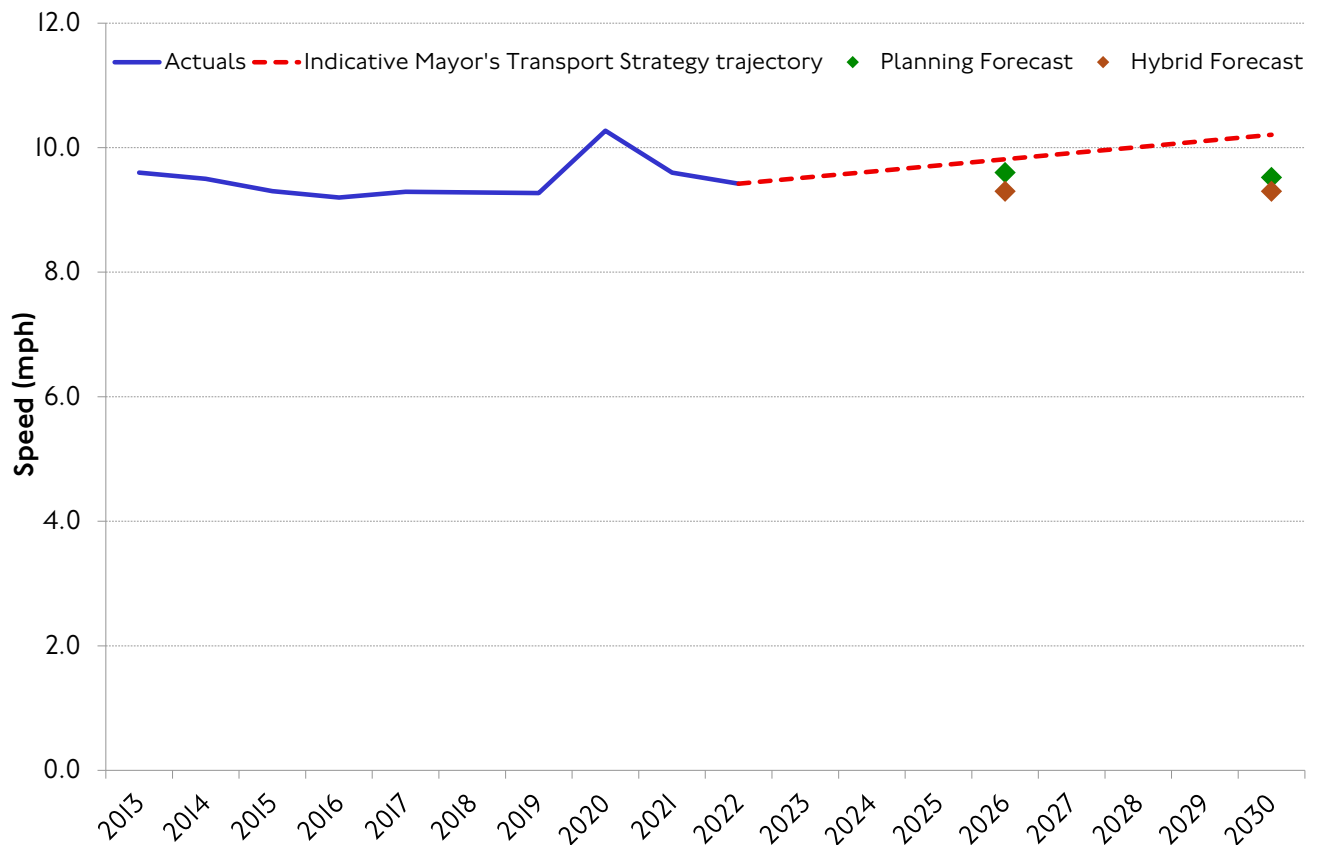
Source: TfL Strategic Analysis, Transport Strategy & Policy, based on TfL service performance data.
Note: For a definition of the Planning and Hybrid Forecast see note on figure 3.

A more holistic measure of bus performance is based on a generalised journey time metric that reflects the customers' perception of the average time taken to make a

journey, including waiting, travel and interchange times, also considering crowding and bus journey time variability. The value of this metric in 2022/23 was 34 minutes, which was slightly higher than our target of 33.5 minutes. This was mainly due to operational and supply constraints, which are now easing.

Falling bus speeds are driven by delays and incidents associated with the impact of street works, traffic congestion, staff shortages, vehicle breakdowns and passenger impacts, among many others. They are improved for example by giving buses priority through techniques such as technology to optimise traffic signal cycles, infrastructure such as dedicated bus lanes for some or all of the day, bus gates or by operating limited-stop services.

Public transport crowding

The MTS sets an ambition to reduce the proportion of rail kilometres travelled in crowded conditions by 10-20 per cent compared to a 2016 baseline. This measure has proven to be highly sensitive to pandemic demand fluctuations. In 2020 it fell to effectively zero, but in 2022 it recovered to three per cent (figure 41).

Figure 41   Proportion of passenger kilometres travelled on TfL rail services in standing densities above two people per square metre, 2016-2030.
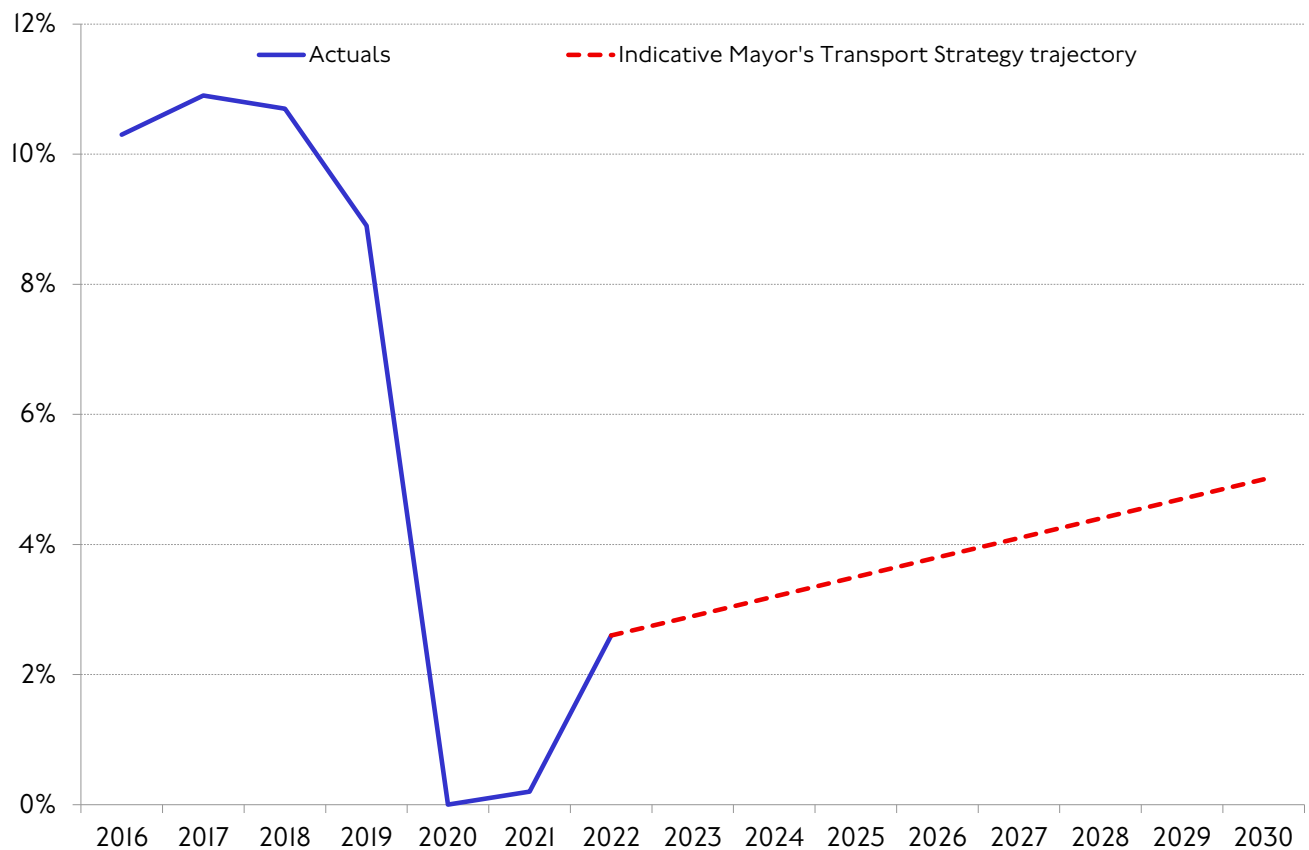
Source: TfL Public Transport Service Planning.
Note: The method for calculating this metric was updated this year and retrospectively applied to the figures for previous years for consistency. This led to a slight decrease in the proportion of passenger kilometres in crowded conditions compared to previously reported figures. Since the 2041 target is based on the 2016 baseline, this has now been revised downwards to account for the method change.

Post-pandemic patterns of customer demand, particularly during the peak period, are driving this reduction in crowding compared to the pre-pandemic levels. Furthermore, the introduction of the Elizabeth line provided additional capacity and is also alleviating crowding on the London Underground network. However, without further investment in capacity on our network, it is expected that crowding will increase with population growth.

New homes and jobs

The Elizabeth line

The central section of the Elizabeth line from Paddington to Abbey Wood opened to passengers on 24 May 2022, marking the start of service of London's newest railway. After that initial milestone, Bond Street station opened on 24 October 2022; regular Sunday services and direct trains between Reading/Heathrow airport and Abbey Wood and between Shenfield and Paddington started on 6 November 2022 and, on 22 May 2023, a full timetable was introduced providing direct services between the outer branches with increased peak frequencies through the central section.

As shown in figure 42, demand has continued to increase since the opening, with noticeable boosts around some of those milestones. Despite the unexpected challenges and disruptions posed by the coronavirus pandemic and other circumstances of the last couple of years (most notably, the impact of prolonged industrial action on rail networks across the country, including those directly interacting with the Elizabeth line), the observed level of demand is broadly in line with what was expected in the original business case. In the first year of operation, the Elizabeth line saw I55.2 million journeys, which is equivalent to I28.5 million journeys in financial year 2022/23. Note that these figures may differ slightly from others previously published. This is due to improvements to our estimates that led to some adjustments applied retrospectively.

Figure 42   Daily journeys on the Elizabeth line, seven-day moving average, May 2022–Nov 2023.
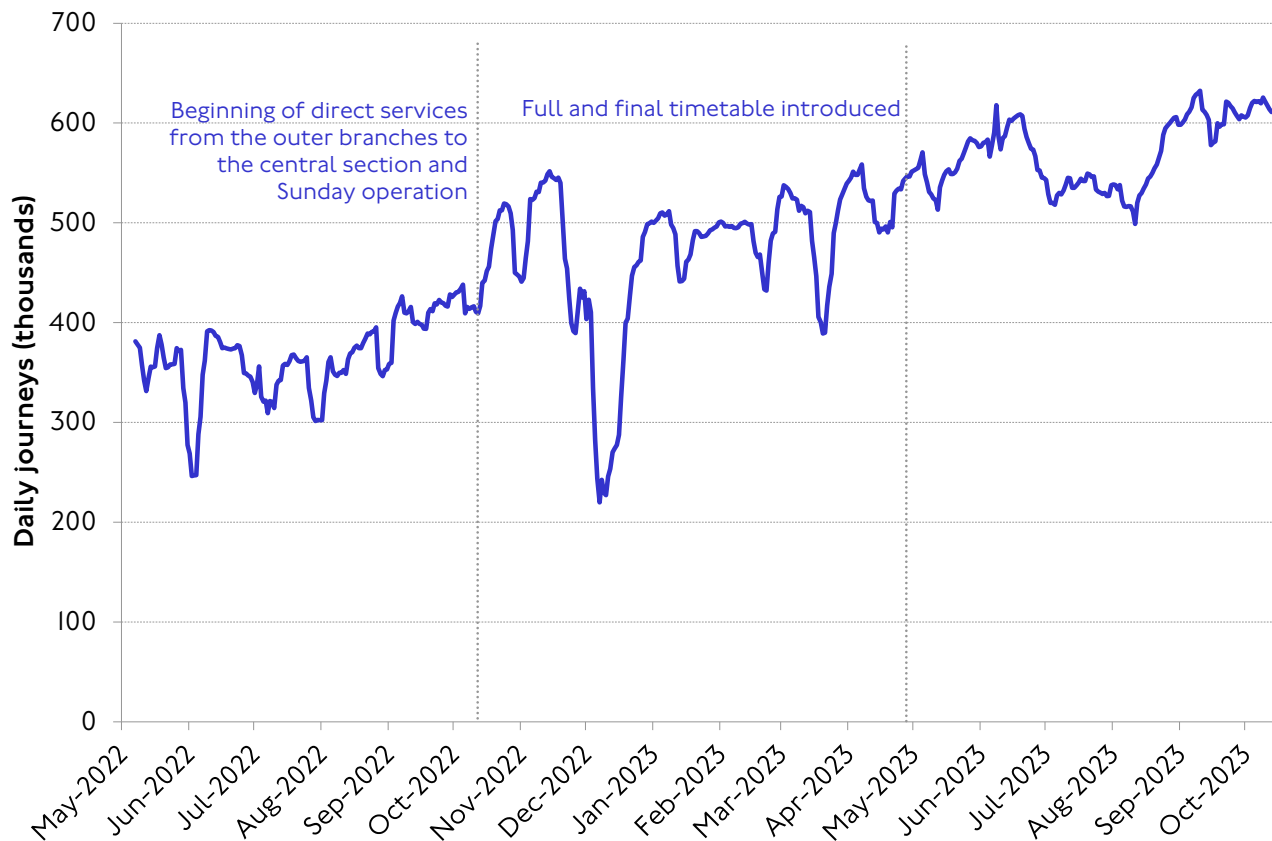
Source: TfL Public Transport Service Planning.

A key part of the evaluation of the Elizabeth line is understanding to what extent (how many trips, in what proportion) the current demand on the Elizabeth line stems from trip generation (new trips that would have otherwise not taken place at all) and trip abstraction (trips that took place before on other rail lines or modes of transport). Figure 43 provides our best estimates of passenger volumes (expressed as passenger kilometres) on the Elizabeth line by source at various stages of the phased opening.

Figure 43   Sources of patronage (passenger kilometres) on the Elizabeth line, Sep 2022, Jan 2023 and Sep 2023.
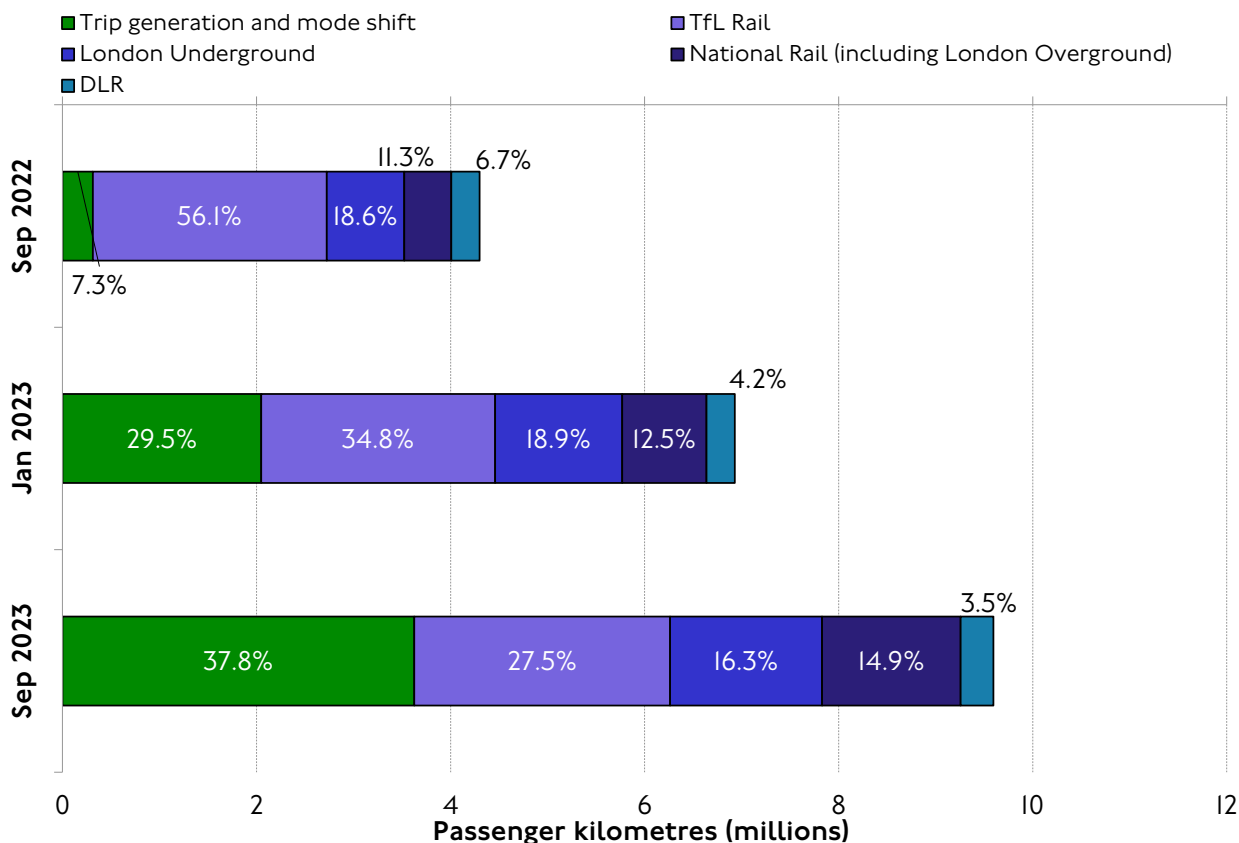
Source: TfL Public Transport Service Planning.

As of September 2023, the largest share (37.8 per cent) of the Elizabeth line's demand is estimated to have been generated or abstracted from other non-rail modes (including buses). In this context, generation includes new demand that did not exist prior to the line being opened as well as 'accelerated pandemic recovery', that is, demand encouraged back on to the network after the pandemic more quickly than it would have otherwise without the Elizabeth line.

As would have been expected, most of the abstraction (27.5 per cent in September 2023) is from the former TfL Rail services, followed by other London Underground lines (in total 16.3 per cent in September 2023), mostly the Central line (5.9 per cent) and the Jubilee line (4.2 per cent). There has also been significant abstraction (14.9 per cent in September 2023) from National Rail operators, in particular Heathrow Express (2.9 per cent) and Southeastern (2.8 per cent), with a smaller proportion of abstraction from other TfL rail services like the DLR (3.5 per cent) or the London Overground (0.3 per cent).

Looking at this over time, the opening milestones triggered step increases in the amount of demand generation and mode shift, which continued and consolidated up to September 2023. Of note is that the total demand in September 2023 exceeds the

forecast, with differences as well in the distribution of the sources of demand whereby there more demand generation and mode shift than expected and less abstraction from London Underground.

In interpreting the results above, it is important to note that during this period, overall travel demand in London continued to increase as part of the pandemic recovery and this would have concealed some of the abstraction. Furthermore, some services (notably the Jubilee and Central lines and the DLR) have had timetable changes at some point through this period (partly in response to demand reductions prompted by the opening of the Elizabeth line) and this would have also affected the estimates.

Another key impact of the Elizabeth line has been its power to unlock development around its catchment area, thanks to the improved connectivity and journey time savings achieved with the new services. This is the subject of a longer-term evaluation study jointly sponsored by TfL and the Department for Transport. Initial findings suggest that, between 2008 and 2021, prior to full opening, 54,725 new homes were delivered within one kilometre of future Elizabeth line stations.

The Northern line extension

In autumn 2021 two new London Underground stations (Battersea Park Station and Nine Elms) opened on a new section of the Northern line from Kennington. Figure 44 shows the trend in weekly station entries and exits at those two new stations since their opening. The main feature of the graph is a step change in entries and exits to both stations (but particularly Battersea Power Station) in October 2022, coinciding with the opening of the renovated Battersea Power Station as a shopping and leisure destination. The impact of the Christmas holiday periods and of the latest coronavirus lockdown in late 2021 and early 2022 are also evident.

The Northern line extension is a good example of the role of transport infrastructure in enabling the development of new homes and jobs, in this case in the Vauxhall Nine Elms Battersea Opportunity Area. Since designation of the opportunity Area in 2004, over 12,000 new homes have been completed, of which 2,530 are affordable, with an indicative London Plan target of 18,500 by 2041.

The Barking Riverside extension

In summer 2022 a new station (Barking Riverside) was opened on the extended London Overground line from Gospel Oak to give service to the district centre at the heart of the Barking Riverside development. This is a further example of the potential of new transport infrastructure to unlock new homes and jobs, with the masterplan for the site including 10,800 new homes, half of which would be affordable. As of mid-2023, 2,000 of these homes had been completed, with 1,400 under construction or due to start shortly, and 3,500 with full planning permission.

Figure 45 shows the trend in weekly station entries and exits at Barking Riverside station since its opening. Save for a period of instability in December 2022 due to the festive period and Network Rail industrial action (affecting this London Overground line which operates on Network Rail infrastructure), the main feature is steadily increasing demand over time.

Figure 44 Weekly entries and exits to the Northern line extension stations, Sep 2021-Nov 2023.
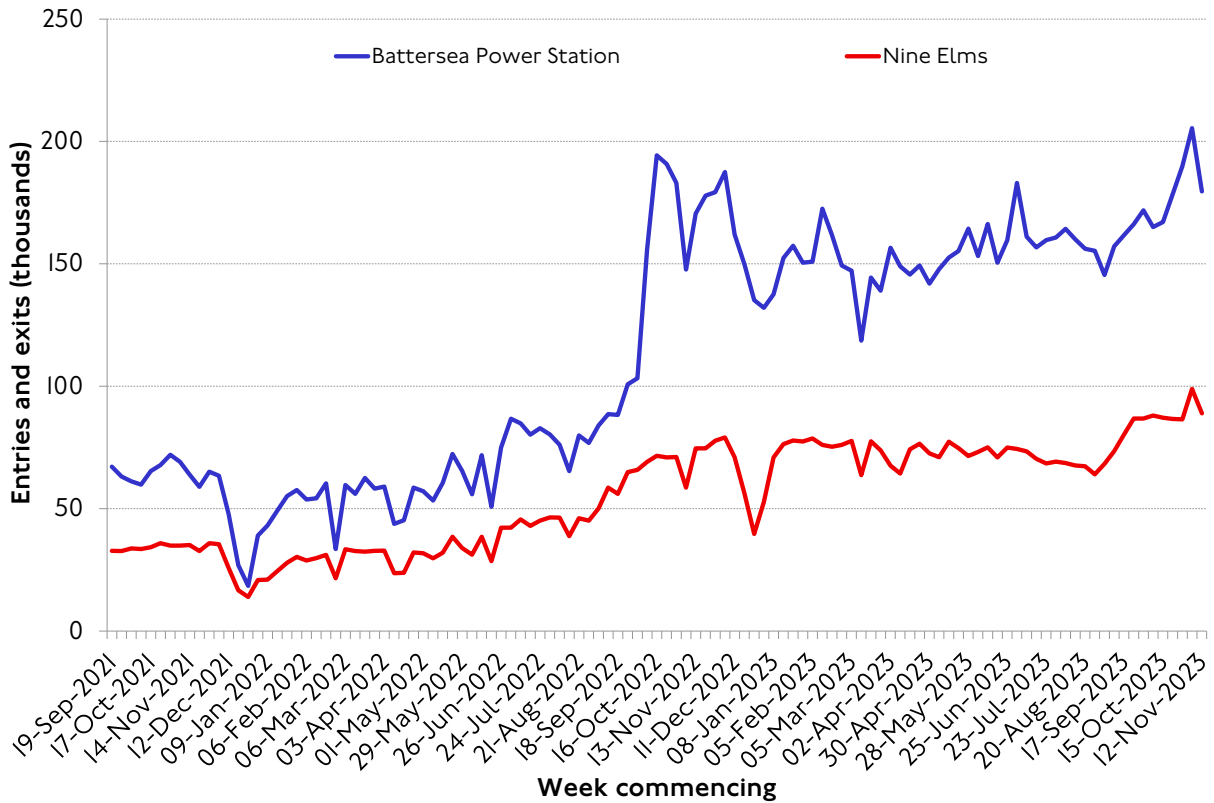
Source: TfL Data & Analytics, Technology & Data.

Figure 45 Weekly entries and exits to Barking Riverside station, Jul 2022-Nov 2023.
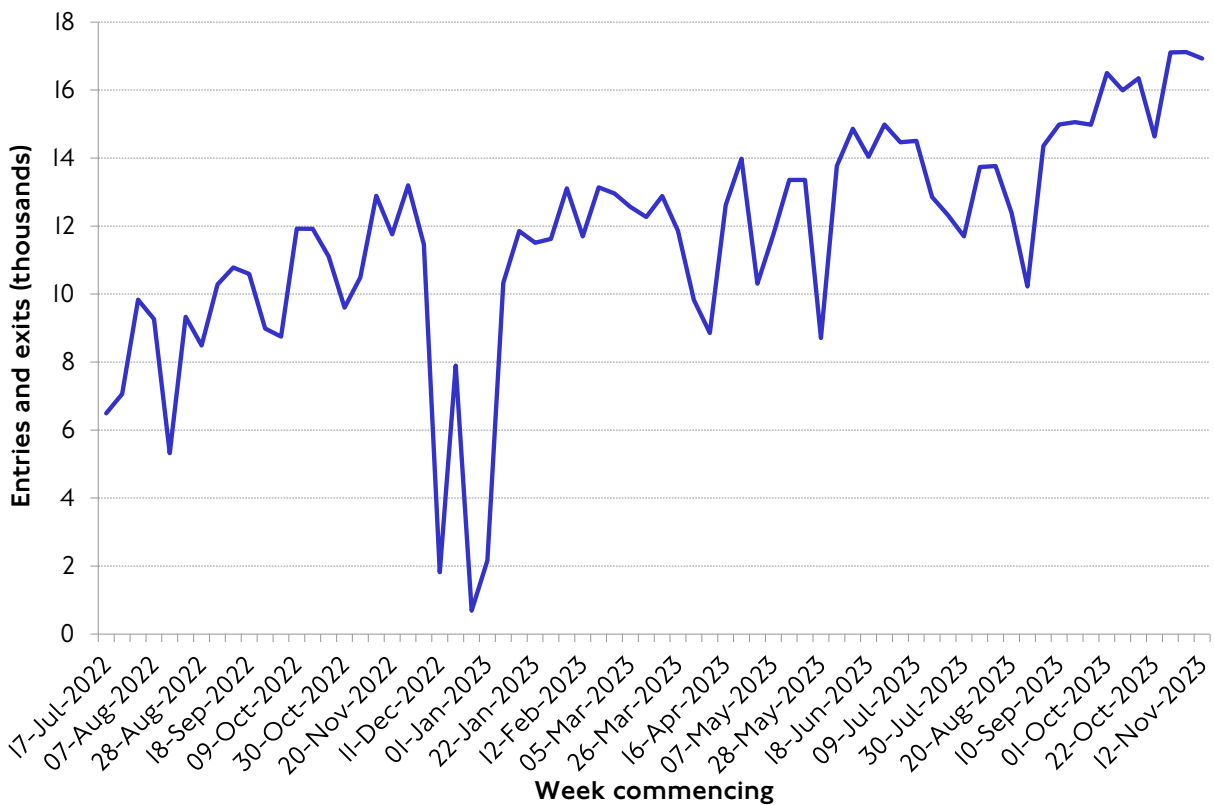
Source: TfL Data & Analytics, Technology & Data.

Opportunity Areas

Opportunity Areas are designated through the London Plan as areas with particular development potential. They have an important role in delivering the 66,000 extra homes per year that London needs. TfL's monitoring work in Opportunity Areas is based around the MTS principles of Good Growth, focusing on housing delivery, access to public transport and travel by active, efficient and sustainable modes.

Mode shares

Figure 46 shows the active, efficient and sustainable mode share of London resident trips with an origin or destination in an Opportunity Area. Prior to the pandemic, there was a steady increase in the walk mode share in Opportunity Areas. By 2022/23 there was a noticeable step change compared to 2019/20, increasing by four percentage points to 35 per cent. Cycle mode share in Opportunity Areas also increased slightly compared to 2019/20, comprising 3.5 per cent of trips in 2022/23, which compares to three per cent in London as a whole. Public transport mode share fell in 2022/23 compared to before the pandemic, following the London-wide trend.

Overall, the active, efficient and sustainable mode share in 2022/23 was 75 per cent, a slight decrease compared to 2019/20 (76 per cent), but higher than the London resident trip mode share of 67 per cent.

Figure 46   Walking, cycling and public transport mode share in London's Opportunity Areas, LTDS, 2017/18-2022/23.
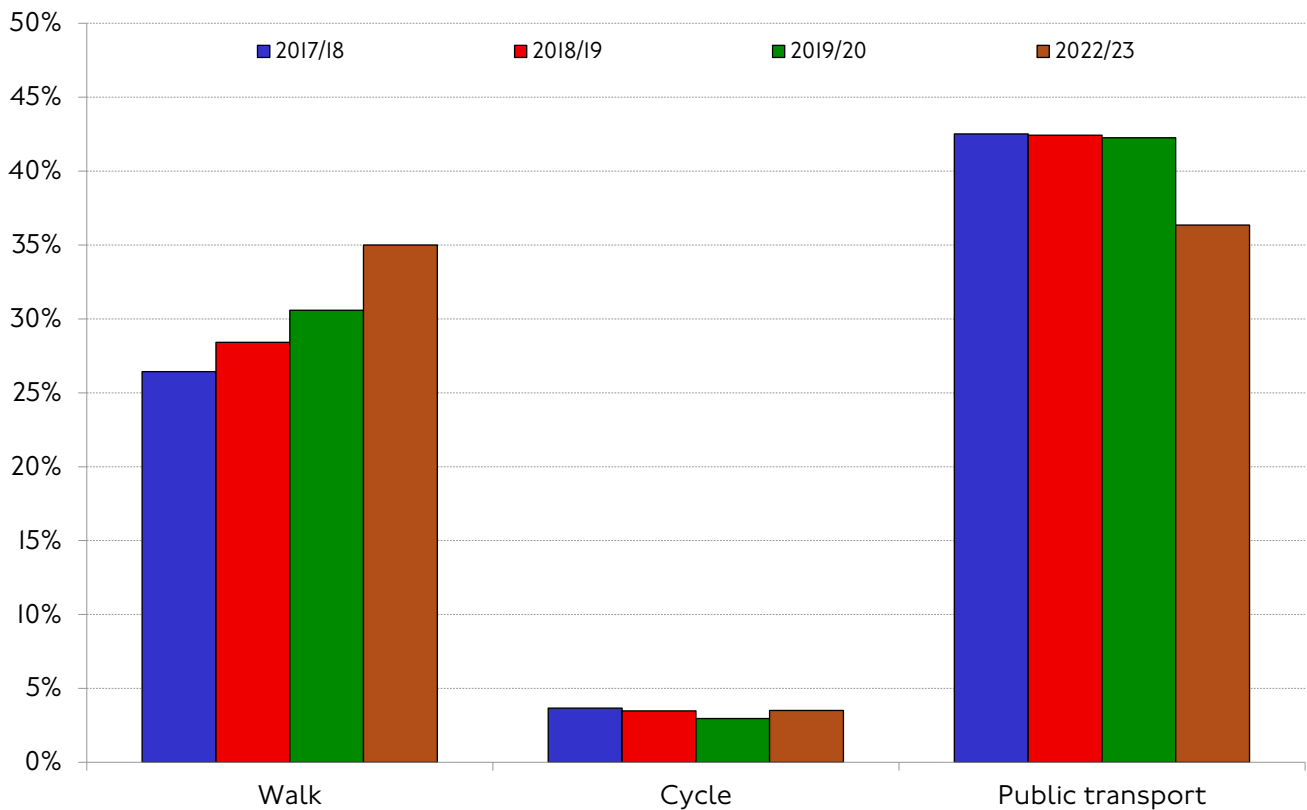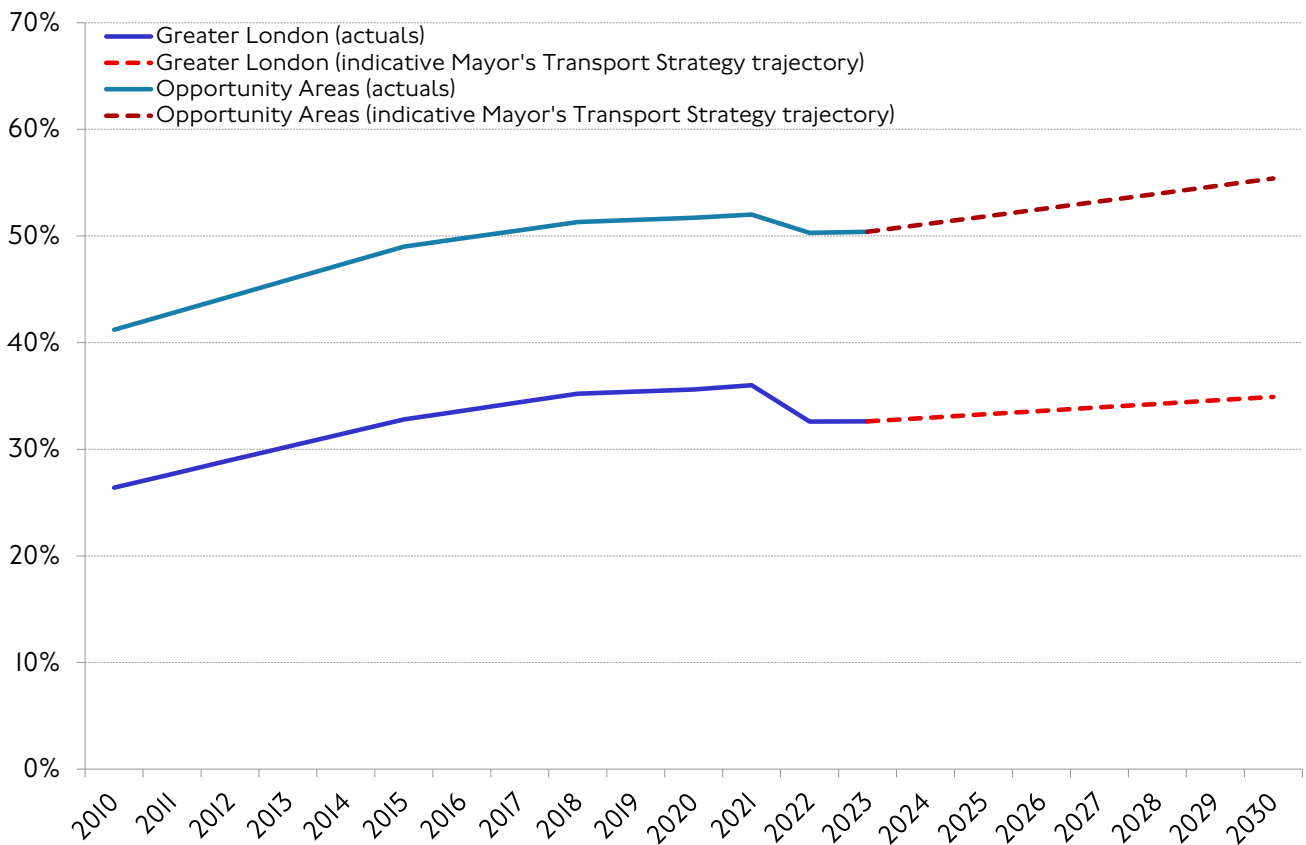

Source: TfL Strategic Analysis, Transport Strategy & Policy.

Public Transport Access Level

The Mayor's ambition is to increase the number of Londoners living in areas that are well connected by public transport, as measured by PTAL. To monitor this, we have developed a measure of the proportion of Londoners living in areas with 'high' PTAL (four or higher), both in London and specifically in Opportunity Areas, where substantial housing growth is expected, and the principles of Good Growth should be applied to new developments.

Figure 47 shows that, prior to 2022, the proportion of London residents and residents of Opportunity Areas living in high PTAL areas had been steadily increasing due to improvements to the public transport network as well as delivery of homes in well-connected locations. However, in 2022 the proportion of Londoners living in areas with a high PTAL decreased, mainly due to timetable changes on the National Rail network and, to a lesser degree, on the bus network. This continued into 2023, resulting in a similar proportion of Londoners living in high PTAL areas as in 2022.

Figure 47   Proportion of the population living in areas of high (4-6) PTAL, London's Opportunity Areas versus Greater London, 2010-2030.

Source: TfL Strategic Analysis, Transport Strategy & Policy.

Housing delivery

A total of 49,369 homes have been delivered in adopted Opportunity Areas over the period from April 2019 to March 2022, which represents 14 per cent of the 2041 London Plan indicative capacity for new homes in adopted Opportunity Areas. This is in line with the rate required to deliver this by 2041.

The Opportunity Areas with the highest number of homes delivered over this period are Isle of Dogs (6,494), Olympic Legacy (5,188), Wembley (4,753) and Lee Valley (4,715). The highest number of affordable homes were delivered in Wembley (1,405 homes), accounting for 30 per cent of all homes delivered in the Opportunity Area. Overall, 23 per cent of the homes delivered in Opportunity Areas between April 2019 and March 2022 were affordable, totalling 11,209 homes.

The legacy of the London 2012 Olympic and Paralympic Games: travel to the Olympic Legacy Opportunity Area.

Travel to and from the Olympic Park and the wider surrounding area

A key element of the London 2012 Olympic and Paralympic Games was the transport and wider development legacy. Travel in London report 6 set out baselines for assessing achievement against some key transport legacy outcomes. Travel in London report 15 examined the provision of new homes and jobs in the Olympic Legacy Opportunity Area.

A key transport legacy indicator is provided by a set of counting cordons surrounding the Opportunity Area, which had previously been counted in 2013 and 2015. This cordon was again counted in spring 2023. These cordon counts allow the development of the area to be tracked through indicators such as the number of trips and the mode share of those trips, and in turn to assess the extent to which substantial development in this area was compatible with the principles of Good Growth.

Figure 48 summarises the results from the spring 2023 count against previous counts at the same set of cordons.

At the inner cordon, which tightly surrounds the Olympic Park itself, there was a steady increase in the number of trips, with a growth of 82 per cent between 2013 and 2023, although with just 9.7 per cent growth between 2015 and 2023, to 117,700 trips in 2023. The proportion of these trips made by active, efficient and sustainable modes was 78 per cent in 2023, the same as in 2015, both slightly under the 82 per cent recorded in 2013.

At the outer cordon, which encloses a much larger area broadly corresponding to the Olympic Legacy Supplementary Planning Guidance boundary and includes key highway corridors carrying 'through' trips not otherwise interacting with this area, the trend in total travel is less clear, with fluctuations across the three counted years.

Total inbound trips (this cordon excludes walking trips) in 2023 were 362,700, compared to 393,800 in 2015 and 384,300 in 2013. At this cordon private car accounts for over half of all trips: 52.7 per cent of all inbound trips in 2023 compared to 55.4 per cent in 2015 and 57.3 per cent in 2013. The absolute number of car trips also decreased by some 29,000 between 2013 and 2023, a reduction of 13.2 per cent. A feature of the 2023 data is a reduction in bus trips from 20.1 per cent in 2015 to 16.2 per cent in 2023, but this is in line with a wider decline in bus trips across London between 2013 and 2023. However, the growth in cycle trips is noteworthy, from 8,890 inbound trips (2.3 per cent) in 2013 to 17,709 trips (4.9 per cent) in 2023.
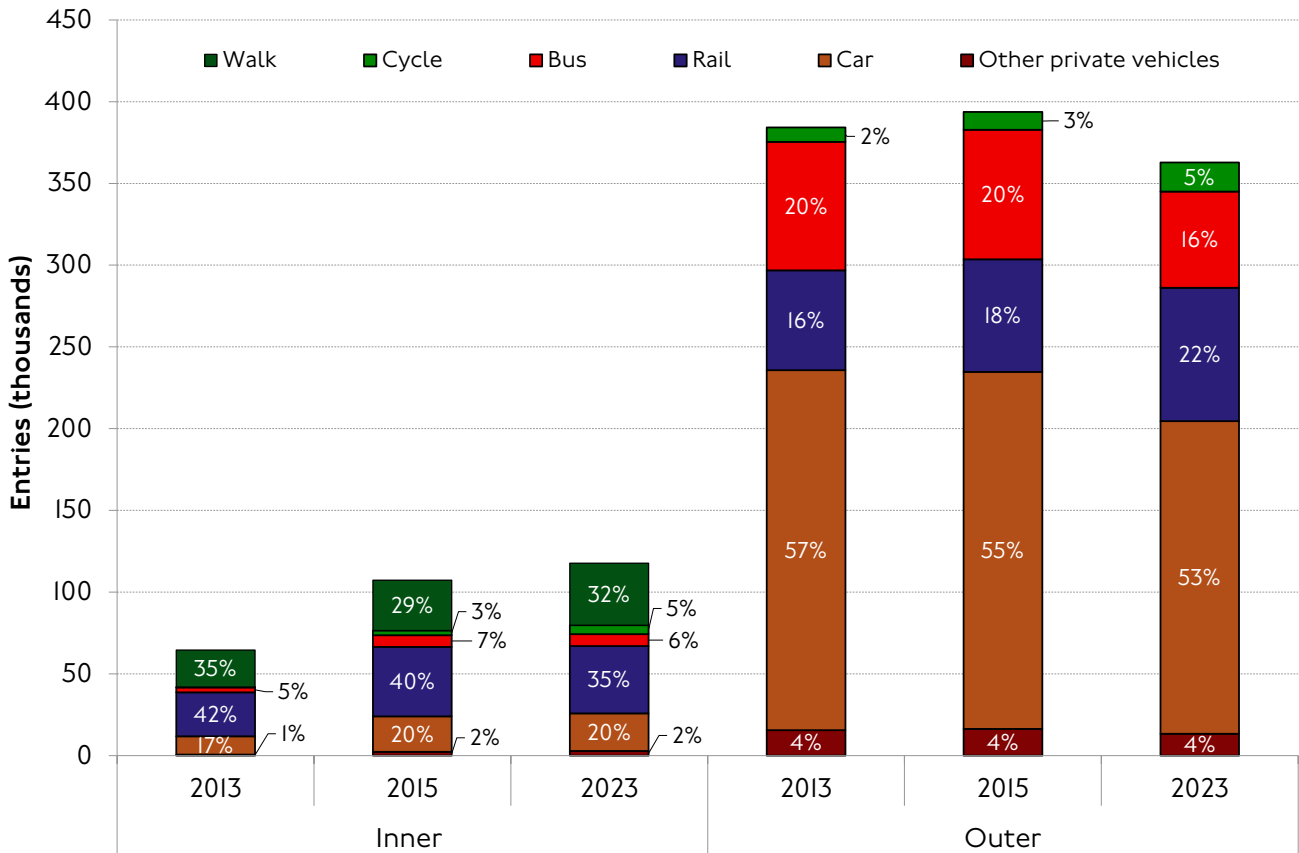
Source: TfL Strategic Analysis, Transport Strategy & Policy.
Note: The inner cordon tightly encloses the Queen Elizabeth Olympic Park itself, including the Stratford City complex, Stratford station and Westfield Stratford City shopping centre. The outer cordon roughly traces the Olympic Legacy Supplementary Planning Guidance boundary and allows enumeration of all people movements in and out by road vehicle. Both were counted 06:00-20:00 on a typical weekday.

Travel to and from the Olympic Growth boroughs

It is possible to extend this analysis by looking specifically at the active, efficient and sustainable mode share by either Olympic Growth borough residents or, as in this case, by all London residents making trips that originate in the Olympic Growth boroughs.

The general trend in the active, efficient and sustainable mode share of trips originating in the Olympic Growth boroughs has been either stable or upward. In the latest available year (2022/23) the active, efficient and sustainable mode share of trips originating in Hackney, Newham, Tower Hamlets and Waltham Forest was higher than the London average, while trips originating in Barking & Dagenham and Greenwich were lower than the London average.

The active, efficient and sustainable mode share of the Olympic Growth boroughs overall increased from 68 per cent (as an average 2006/07 – 2014/15, excluding 2012) to 74 per cent in 2022/23. This is five percentage points higher than the London average and compares to 67 per cent for non-Olympic Growth boroughs, which is two percentage points lower than the London average. This suggests that there has been a long-lasting positive effect of the London 2012 Olympic and Paralympic Games on the active, efficient and sustainable mode share of trips originating in the Olympic Growth boroughs.

Places for London

Previously called TTL Properties Limited, Places for London Limited is already building thousands of homes across the Capital. It is also one of London's largest landowners, providing workspaces for 1,500 customers, of which over 90 per cent are small businesses. The company, which is wholly TfL-owned, has a programme to start 20,000 homes by 2031 and is targeting half of these homes to be affordable to help transform London in line with the MTS.

Places for London has identified dozens of sites that will deliver not only thousands of new homes but also a range of other benefits for communities across London, including new workspaces and improved transport facilities. Over 900 homes have already been completed at sites such as Blackhorse View and work is now underway on a further 3,350 homes across London with thousands more to come in the years ahead. All operating profits made from recurring revenues will continue to be returned to TfL as a dividend, creating a growing long-term revenue stream that can be reinvested into the transport network. More information can be found on the [Places for London website](#).

Other reports in the Travel in London 2023 series

Report title	Publication
Consolidated estimates of total travel and mode shares	December 2023
The travel behaviour of London residents based on the London Travel Demand Survey	December 2023
Active travel trends	December 2023
Trends in public transport demand and operational performance	December 2023
Road traffic trends	December 2023
Supporting new homes and jobs	December 2023
Focus report: Elizabeth line travel trends in the first year of operation	December 2023

About Transport for London (TfL)

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

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

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

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

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

Working with Government, we completed the Elizabeth line in time for Her Majesty the Queen's Jubilee. This transformational new railway adds 10 per cent to central London's rail capacity and supports the delivery of high-density, mixed-use developments, which are planned around active and sustainable travel to ensure London's growth is good growth. We also use our own land to provide thousands of new affordable homes and our own supply chain creates tens of thousands of jobs and apprenticeships across the country.

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

We are constantly working to improve the city for everyone. This means using intel, data and technology to make services intuitive and easy to use and doing all we can to make streets and transport services accessible to all. We reinvest every penny of our income to continually improve transport networks for the people who use them every day. None of this would be possible without the support of boroughs, communities and other partners who we work with to improve our services. By working together, we can create a better city as London's recovery from the pandemic continues.