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Travel in London 2023

The travel behaviour of London residents based on the London Travel Demand Survey

MAYOR OF LONDON



**TRANSPORT
FOR LONDON**
EVERY JOURNEY MATTERS

Travel in London 2023

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2022/23 update

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Summary of key findings

This report looks at aspects of the travel behaviour of London residents as tracked through our London Travel Demand Survey (LTDS). Each year, we survey around 8,000 households across London, capturing a wide range of socio-demographic data as well as a complete record of each household member's travel on the designated travel day. All household members aged five years and over are interviewed. The survey has been running continuously since 2005/06. It should be noted that the LTDS considers London residents only.

The 2022/23 LTDS gives the first consistent view of post-pandemic travel patterns and is directly comparable with the most recent pre-pandemic survey (2019/20) and the longer-term historical series. While not completely unaffected by residual pandemic effects, the 2022/23 survey does give a good view of what might now be regarded as established post-pandemic trends and is of particular interest for that reason.

The coronavirus pandemic placed restrictions on the normal conduct of the LTDS during survey years 2020/21 and 2021/22, and a scaled-down version of the survey was conducted by telephone. Key findings from this version of the survey were discussed in [Travel in London report 14](#) and [Travel in London report 15](#). However, data for these intermediate years is generally omitted from the comparisons below to aid clarity and interpretation (note the series break on the figures).

- During 2022/23, the travel behaviour of London residents substantially returned to the pre-pandemic levels and patterns, following two years of unprecedented disruption. However, there remained distinct shortfalls in some areas, and there is evidence that some adaptations, intensified by the pandemic, continued to persist. These have implications for policy and TfL's wider business.
- During the pandemic, trip rates reached unprecedented lows. Although trip rates have since recovered, the recovery in 2022/23 was incomplete. Average trip rates during 2022/23 were 6.2 per cent lower than in 2019/20, and 22 per cent lower than in 2006/07. This latter comparison reflects an element of incomplete pandemic recovery but also a background trend of falling demand for travel overall going back around two decades.
- In relative terms, commuting and shopping trip rates have both declined since the pandemic, although these are partly offset by an increase in leisure trip rates. These reflect the persistence of recognised pandemic adaptations and a leisure-led recovery observed more widely.
- The key changes 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 in the context of lower overall trip rates.
- Although public transport mode shares have declined, this was compensated by an increase in the active travel mode share. The net outcome in 2022/23 was a slight increase in London residents' active, efficient and sustainable mode share, up to 66.7 per cent compared with 66.6 per cent in 2019/20. Note that this is for London residents only and is not the same as the Mayor's aim for 80 per cent of all trips in London to be made by active, efficient and sustainable modes by 2041.
- Inner London residents now make 11 per cent more trips per day than outer London residents. Before the pandemic, the difference was only 3 per cent, and up to 2009/10

outer London residents' trip rates were higher than inner London residents. This may perhaps reflect hybrid working by outer London residents.

- While the post-pandemic increase in ability to work from home remains a significant influence on travel patterns in London, particularly on weekdays and for trips to and from central London, it should be seen in the context that only 47 per cent of all employed London residents have the option to work from home.
- While 2022/23 was itself notable for a range of non-pandemic disruptions affecting travel (such as widespread industrial action), the data broadly confirms other sources in suggesting a substantial return to normality, with a pandemic-related acceleration in some trends, particularly hybrid working and e-shopping, that were already happening in the background before the pandemic.

Trip rates

Overall trip rate

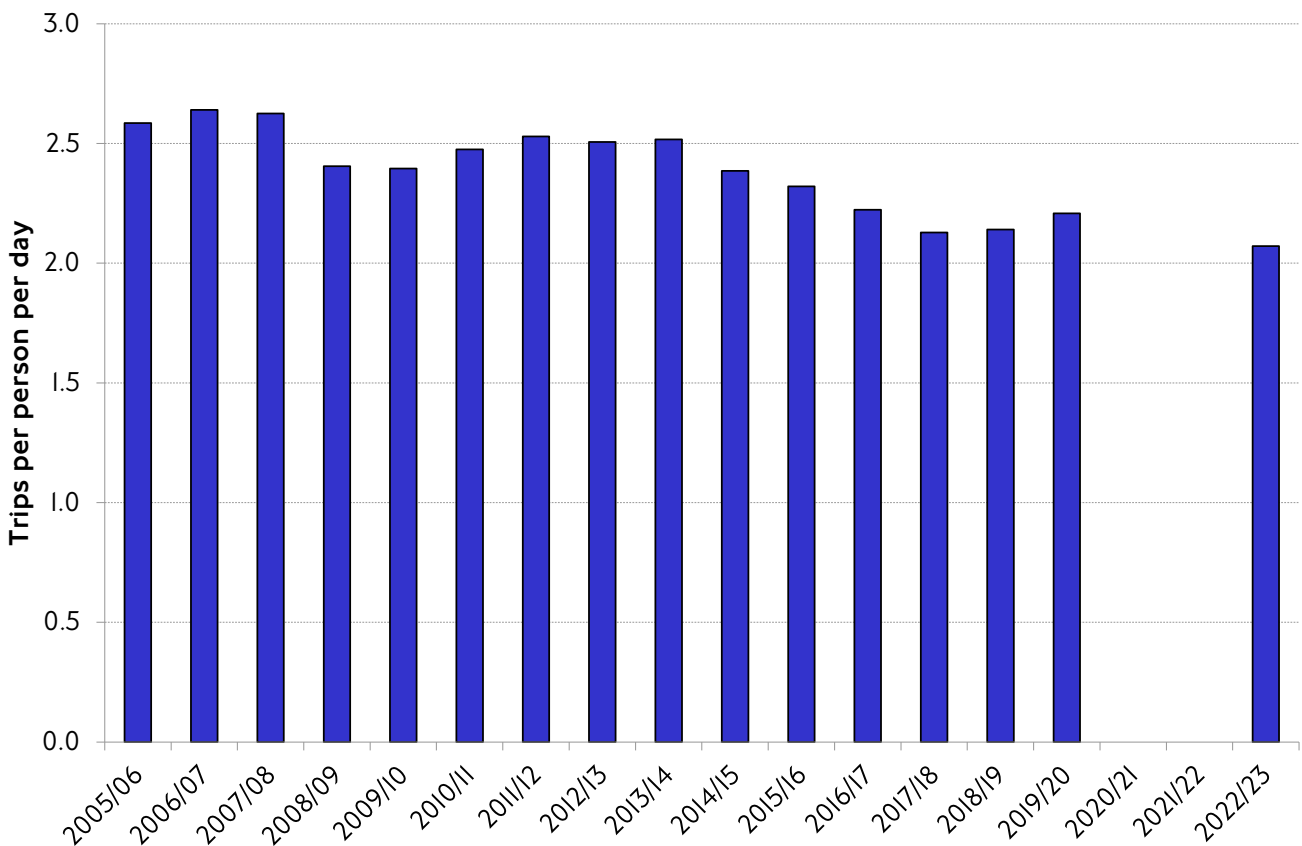
Trip rates (the average number of trips made per person per day) are a basic indicator of travel demand. The LTDS has tracked a pattern of generally falling trip rates over its lifetime (figure I). This trend accelerated between 2013/14 and 2017/18 and has parallels at the national scale in the Department for Transport’s National Travel Survey (NTS).

However, in the two years prior to the pandemic the number of trips per day made by the average London resident increased slightly, to 2.21 trips per day in 2019/20, which was thought to be due to improving economic conditions.

Data from 2022/23 shows that trip rates have not yet fully recovered to pre-pandemic levels, averaging at 2.07 trips per person per day. This is 6.2 per cent less than in 2019/20 and is the lowest trip rate since the survey began in 2005/06. Trip rates are now also 22 per cent lower than at the high point of 2.64 in 2006/07.

Rather than a reduction in the historic context, the value for 2022/23 should be seen as an incomplete recovery from the pandemic, when trip rates fell to unprecedented lows. While a relative six per cent reduction in overall travel demand is relatively small given the scale of the pandemic impact, it should be seen in the context of the longer-term trend of slowly declining trip rates.

Figure I Trip rate among London residents, LTDS, 2005/06-2022/23.



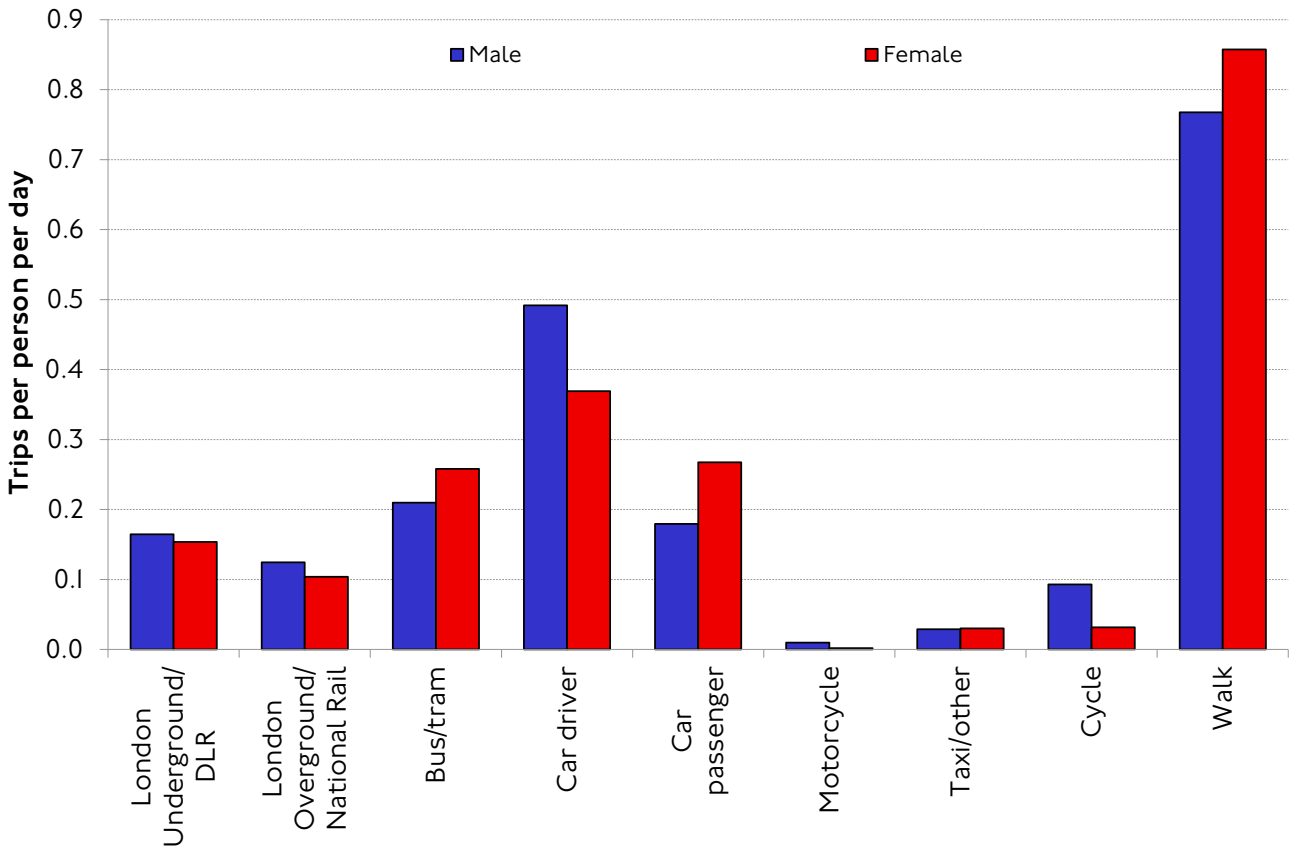
Source: TfL Strategic Analysis, Transport Strategy & Policy.

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.

Trip rates by gender

Looking at trips by gender, trip rates for men and women were the same in both 2019/20 and 2022/23, meaning that the post-pandemic decline in travel has been the same regardless of gender. However, there are still differences in the modes used (figure 2), with men showing higher trip rates for rail-based modes and car as driver. On average, women use the bus and walk more and are also more likely to make car passenger trips.

Figure 2 Trip rates by mode and gender, LTDS, 2022/23.

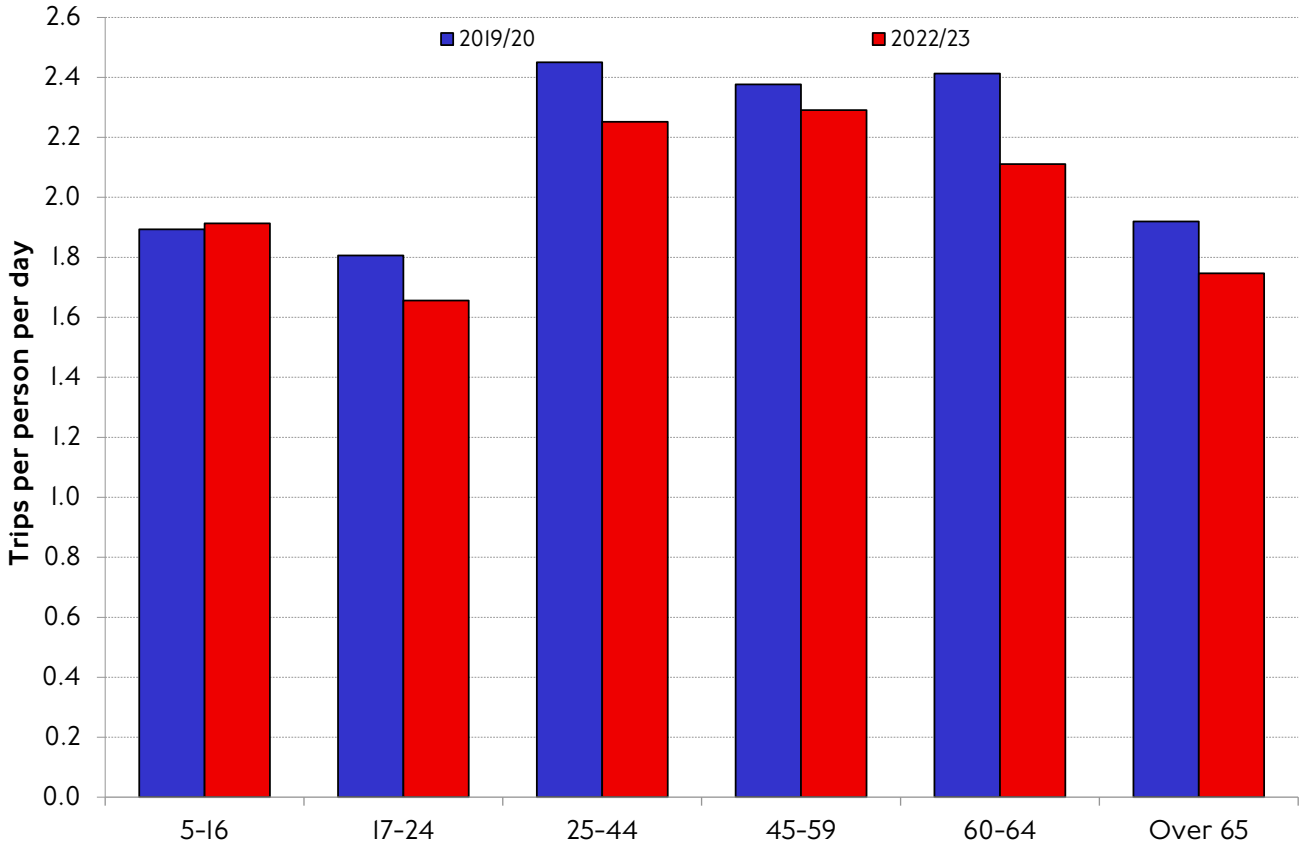


Source: TfL Strategic Analysis, Transport Strategy & Policy.

Trip rates by age group

Trip rates have fallen among almost all age groups (figure 3), except 5-16-year-olds, for whom trip rates have increased slightly since the pandemic. The largest decreases have occurred among residents aged 60 or over. Prior to the pandemic, 25-44-year-olds made the most trips per day, but in 2022/23 this had changed to 45-59-year-olds.

Figure 3 Trip rates by age group, LTDS, 2019/20 versus 2022/23.

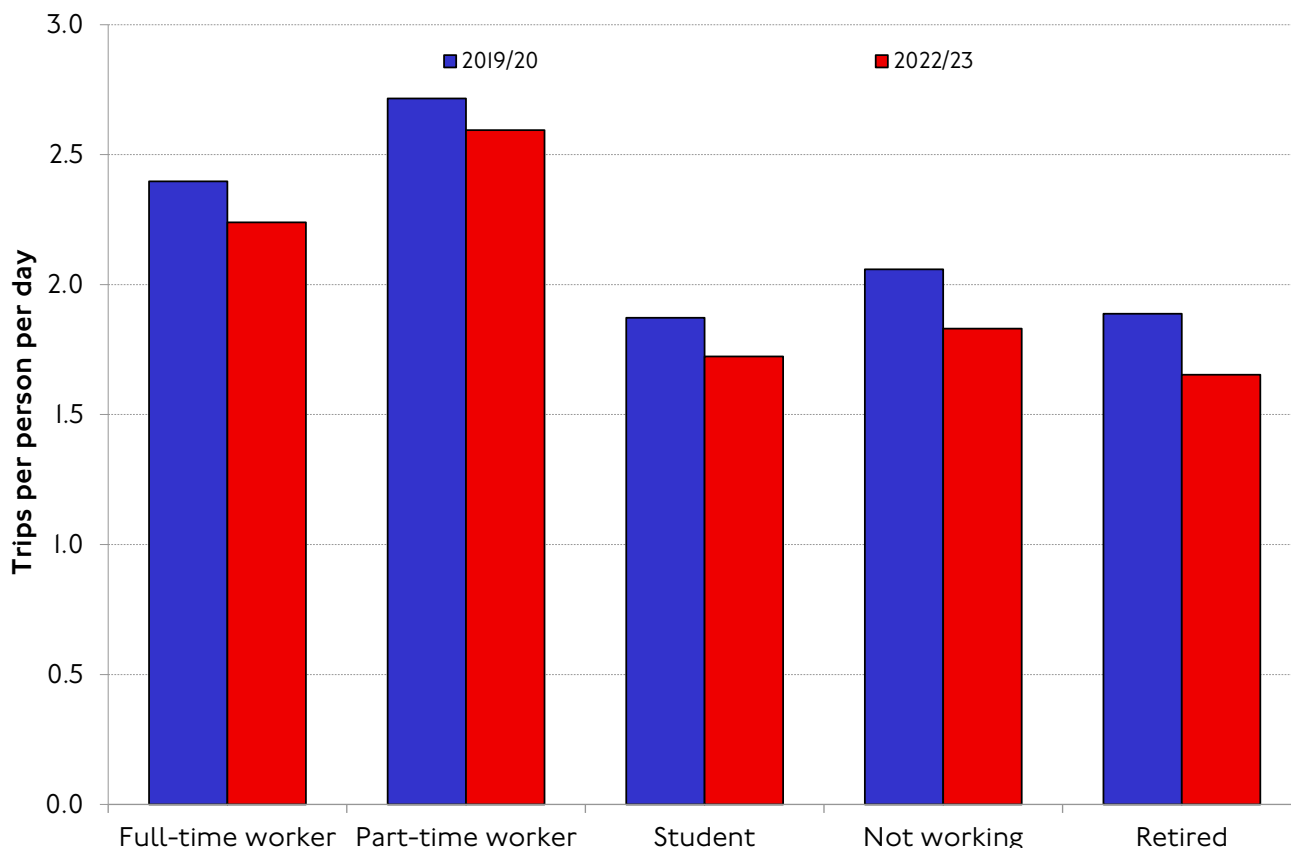


Source: TfL Strategic Analysis, Transport Strategy & Policy.

Trip rates by working status

Trip rates have declined across all working status categories since the pandemic (figure 4), suggesting that the decline in travel demand is not simply due to an increase in working from home. In fact, the largest declines in trip rates were among students, non-working and retired residents. The smallest decline was among part-time workers, who still make the largest number of trips on an average day (2.59).

Figure 4 Trip rates by working status, LTDS 2019/20 versus 2022/23.



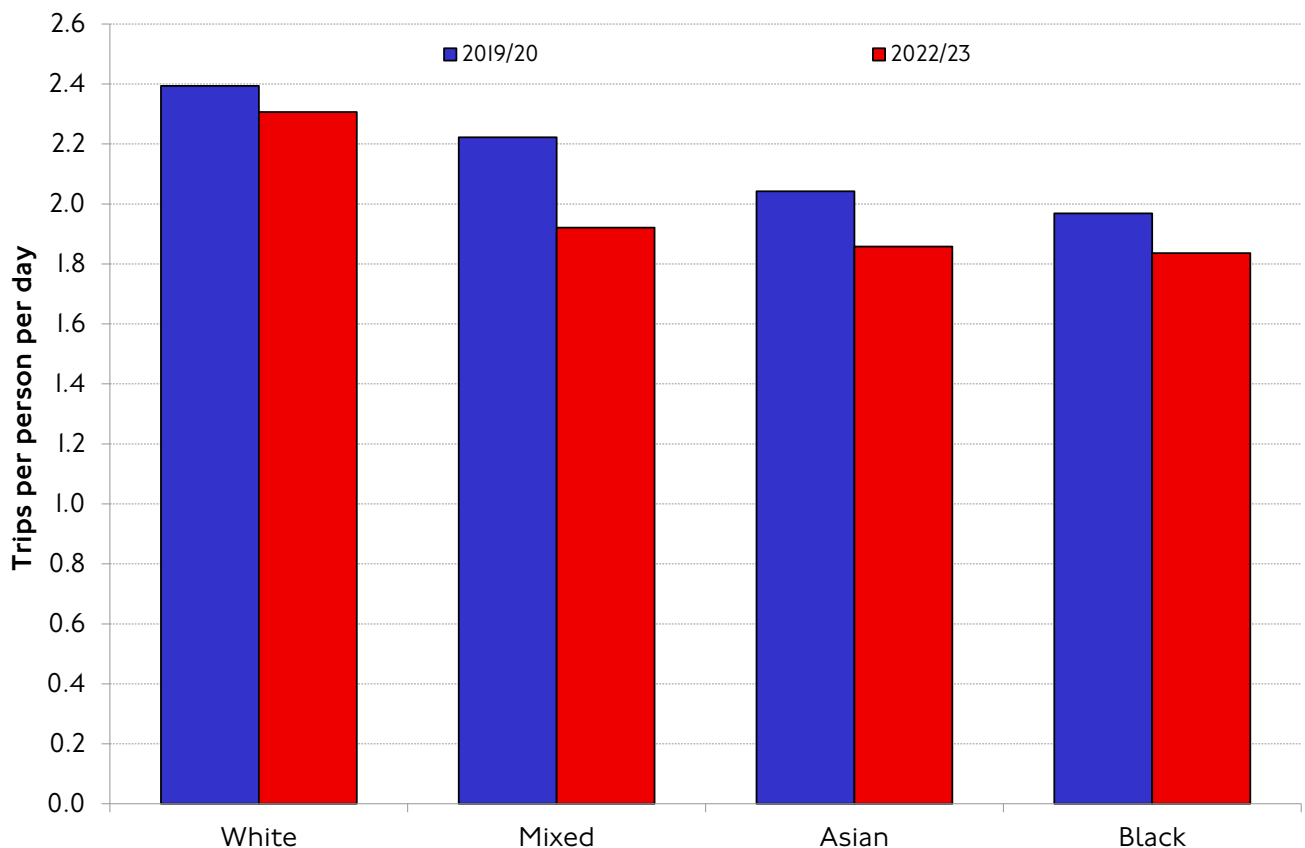
Source: TfL Strategic Analysis, Transport Strategy & Policy.

Travel by ethnicity

London residents from White ethnic groups tended to make more trips on an average day (figure 5), and this is still the case after the pandemic.

Trip rates among White residents fell by four per cent from 2.39 in 2019/20 to 2.31 in 2022/23. Residents from Mixed ethnic groups made the next highest number of trips, although this had fallen the most, down by 14 per cent compared with 2019/20. Asian and Black residents made around 1.85 trips per person per day in 2022/23, while the trip rate for all ethnic groups apart from White combined was 1.86 trips per person per day.

Figure 5 Trip rates by ethnicity, LTDS, 2019/20 versus 2022/23.



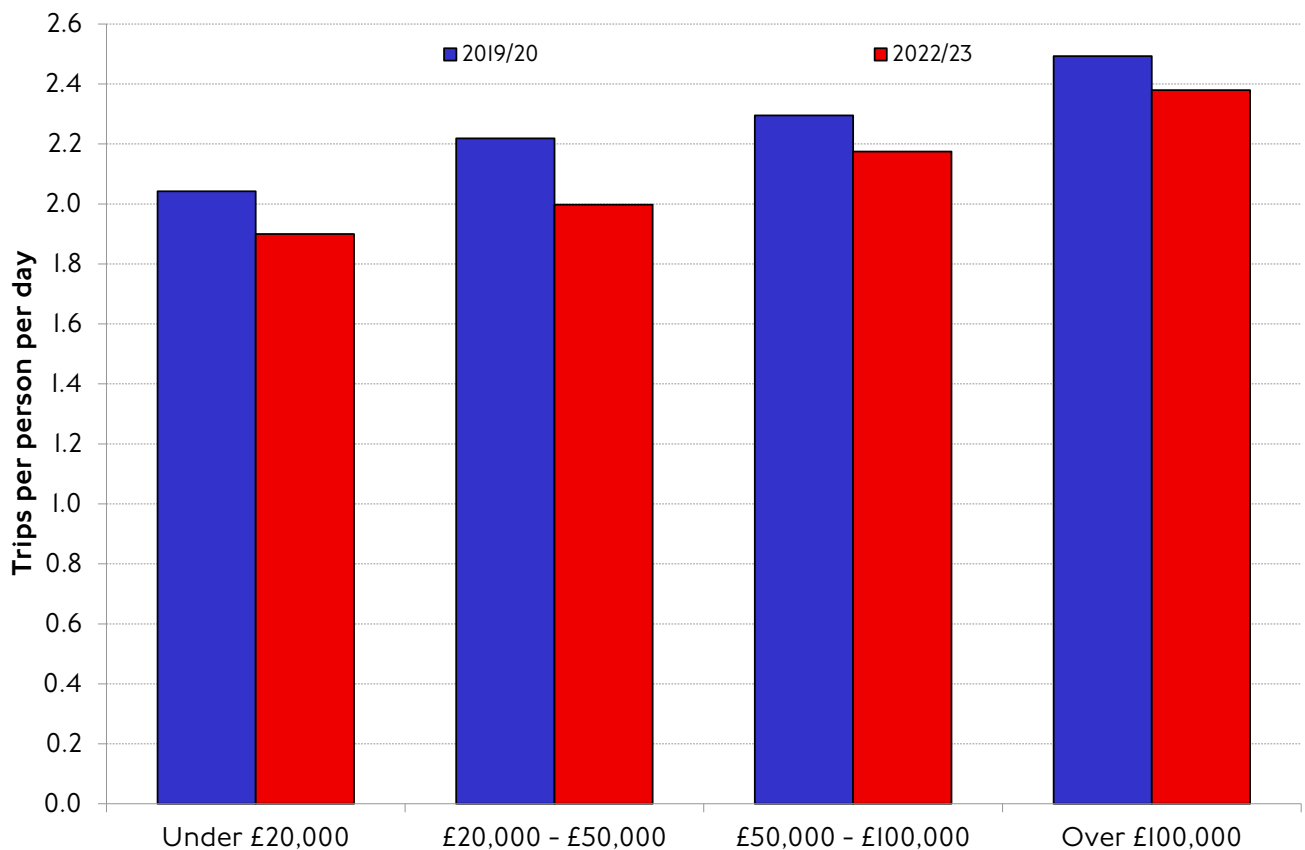
Source: TfL Strategic Analysis, Transport Strategy & Policy.

Travel by household income

Typically, higher-income households make more trips on an average day (figure 6). Before the pandemic, people living in households with incomes below £20,000 per year made 2.0 trips per person per day, while for people living in households with an income higher than £100,000 this was 22 per cent higher, at 2.49 trips per person per day.

Trip rates fell across all income groups in 2022/23, falling the most among people in households earning between £20,000 and £50,000 (down by 10 per cent). Trip rates fell by five per cent among London residents in households earning more than £50,000.

Figure 6 Trip rates by household income, LTDS, 2019/20 versus 2022/23.



Source: TfL Strategic Analysis, Transport Strategy & Policy.

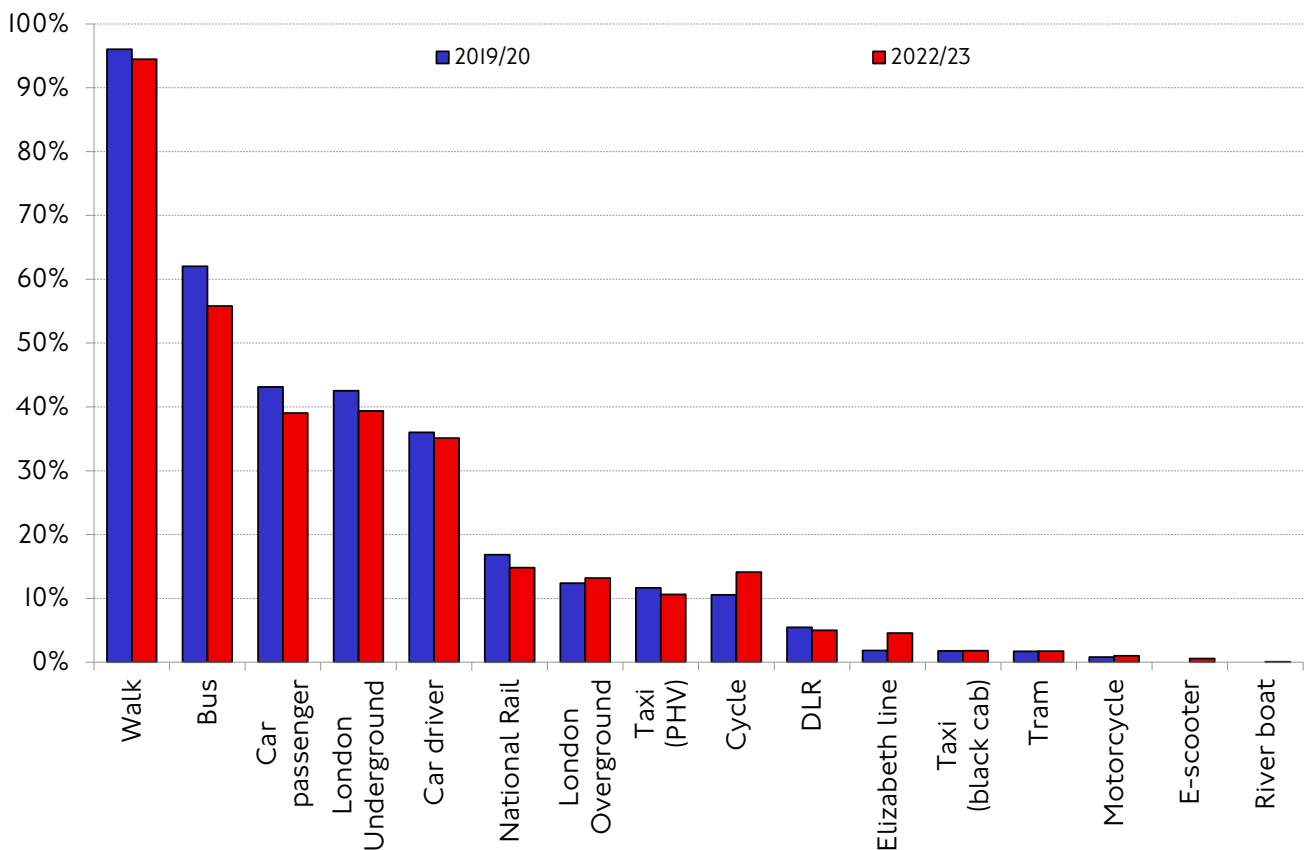
Travel by mode

Frequency of travel by mode

Figure 7 shows how frequently London residents use each mode, and how that has changed since the pandemic. The most frequently used mode is walking, with almost all London residents walking once a week or more. After this, the most frequently used mode is the bus, with more than half of all London residents using the bus at least once a week. The next most frequently used modes are car (as driver or passenger) and London Underground, with around 35-40 per cent of London residents using these modes weekly.

In common with the decline in trip rates since the pandemic, London residents are using most modes slightly less frequently than they were before the pandemic. Notable exceptions include the London Overground (an increase from 12 to 13 per cent), cycling (from 11 to 14 per cent) and the Elizabeth line (previously TfL Rail, from two to five per cent).

Figure 7 Proportion of London residents that use a mode at least once a week, LTDS, 2019/20 versus 2022/23.

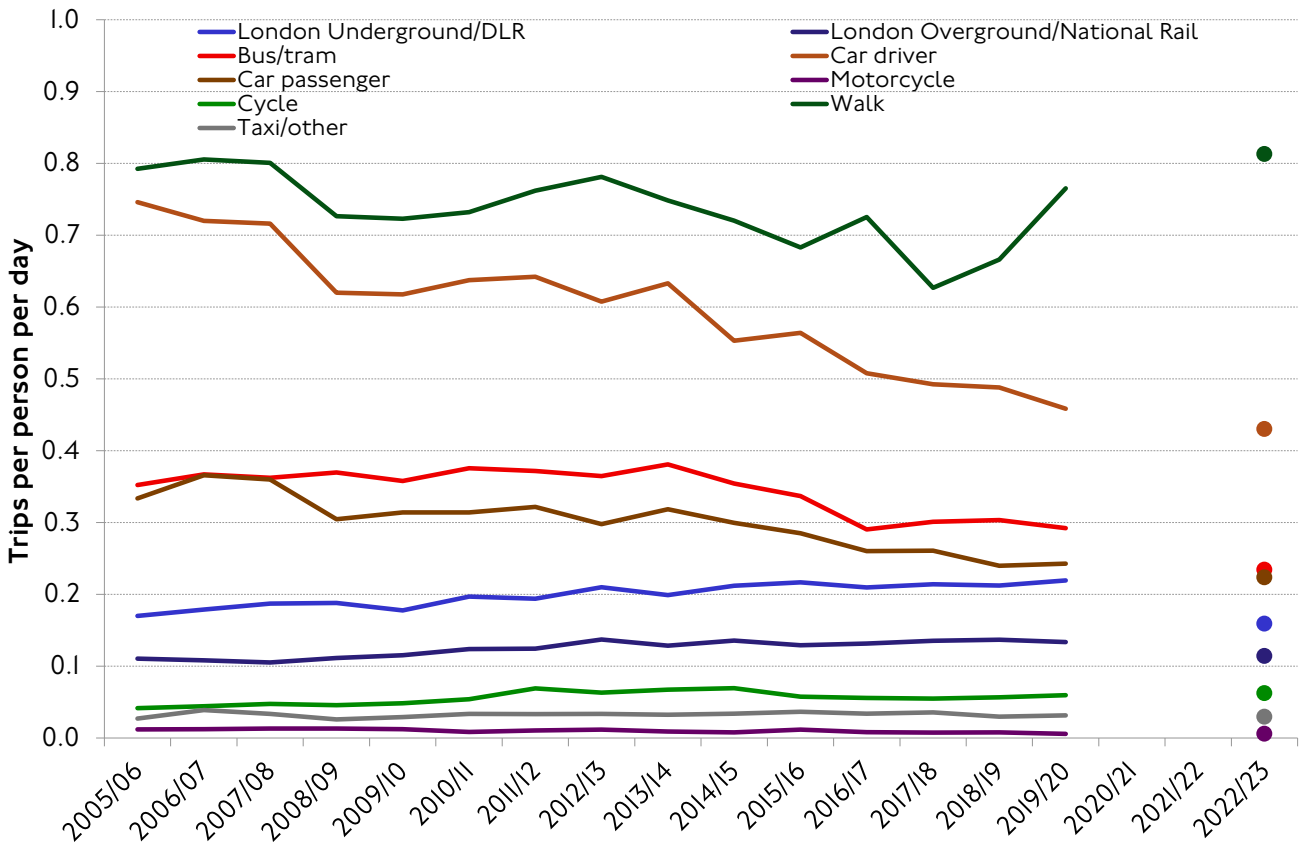


Source: TfL Strategic Analysis, Transport Strategy & Policy.

Trip rates by mode

Figure 8 shows the long-term trend in trip rates by mode over the history of the LTDS. The continuous decline in car driver trips is notable, down from 0.75 trips per person per day on average in 2005/06 to 0.46 in 2019/20. The value of 0.43 trips per person per day for 2022/23 probably reflects an incomplete recovery from the pandemic, but also continues the long-term trend of decrease.

Figure 8 Trip rates by mode, LTDS, 2005/06-2022/23.



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.

Mode shares

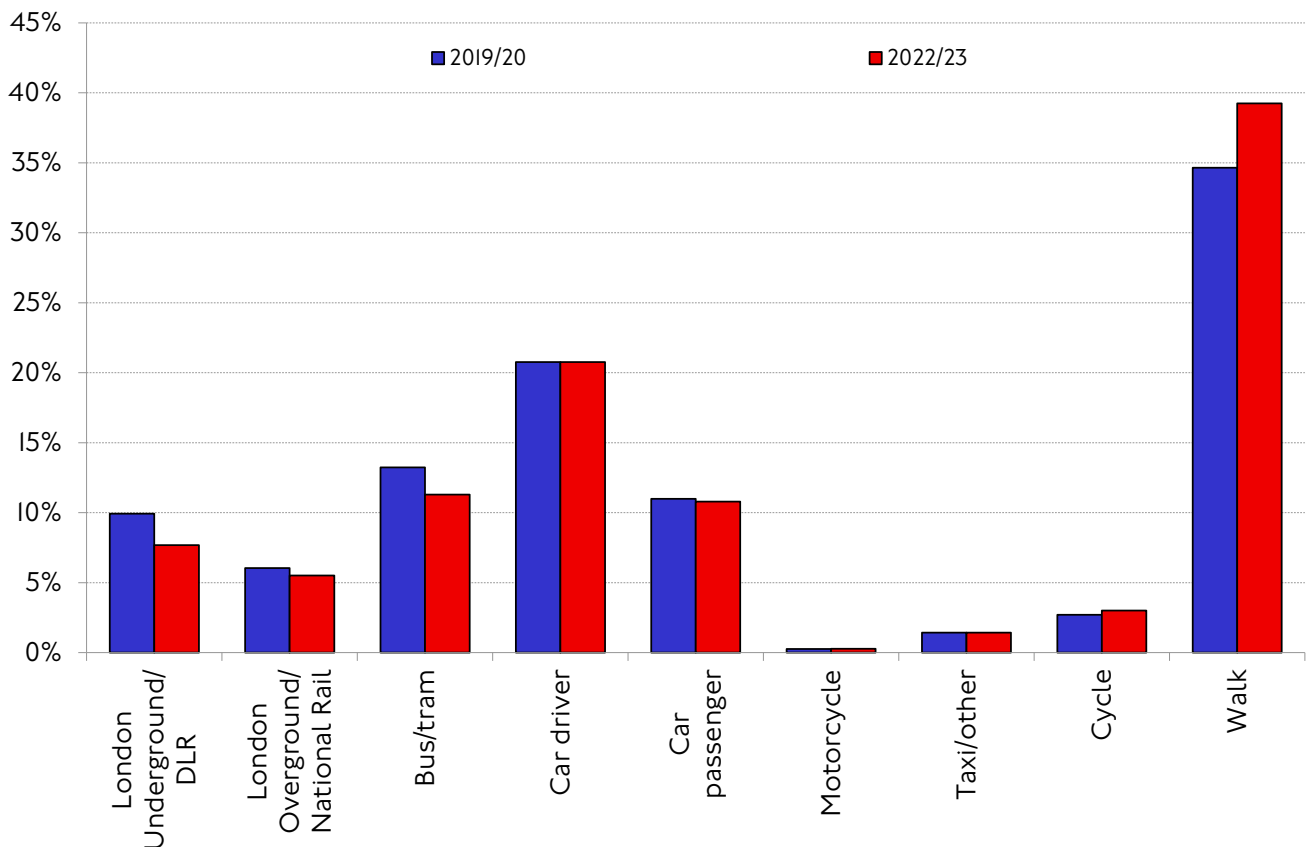
Figure 9 shows the trip-based mode shares by London residents aged five years and over before and after the pandemic.

Prior to the pandemic, most trips made by London residents were walking trips or car driver trips (35 and 21 per cent shares, respectively). The combined public transport mode share in 2019/20 was 29 per cent and the cycling mode share was three per cent.

In 2022/23, the key features were a decrease in public transport mode share, no change in the share of trips made by private modes, and an increase in trips made by active modes, particularly walking. These should be seen as net outcomes given the variability seen during the pandemic, and in the context of a six per cent reduction in the overall trip rate, but they are again indicative of persisting elements of pandemic travel adaptations.

Public transport travel is particularly associated with commuting and thus vulnerable to changes affecting workplace attendance and other activities such as shopping. Active modes could, however, benefit from positive pandemic legacies.

Figure 9 Trip-based mode shares, LTDS, 2019/20 versus 2022/23.



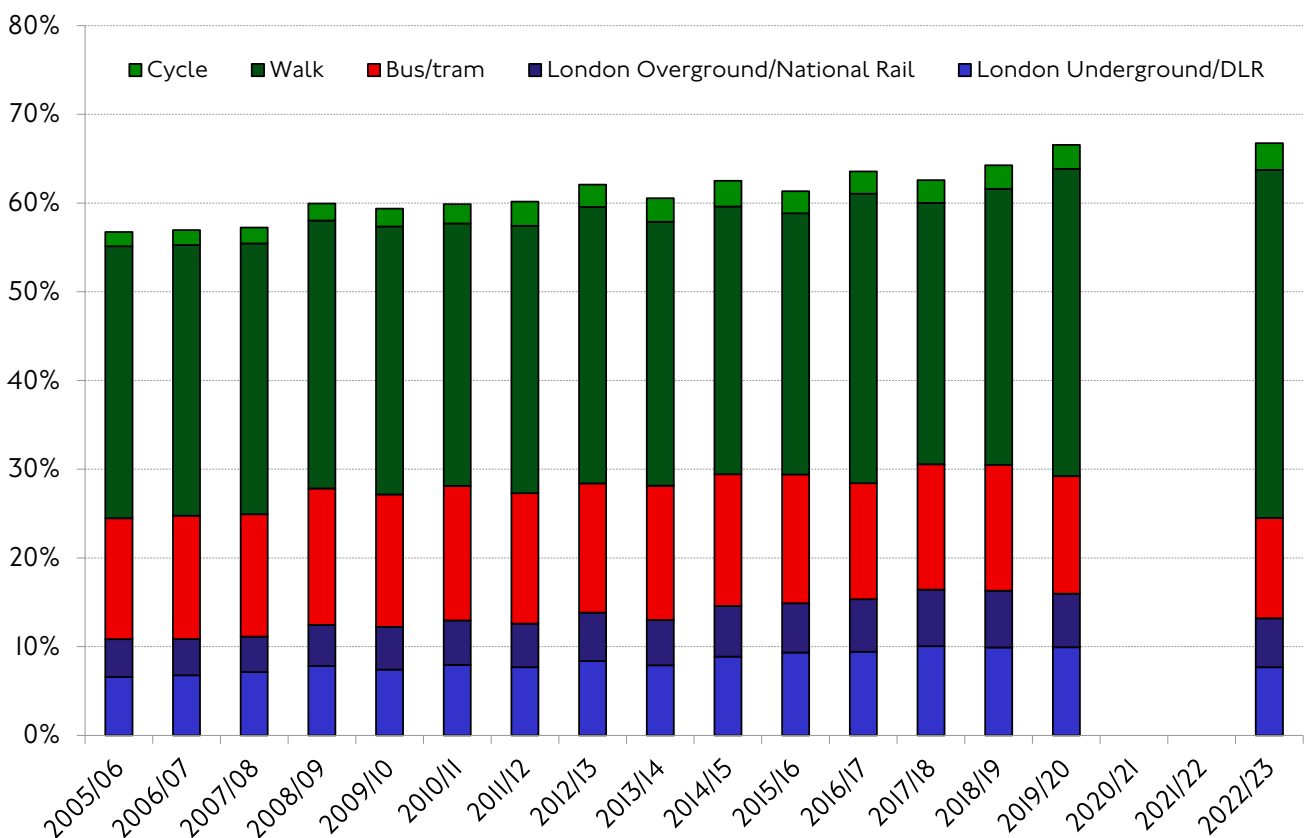
Source: TfL Strategic Analysis, Transport Strategy & Policy.

Active, efficient and sustainable mode share

The proportion of London residents' trips made by active, efficient and sustainable modes (public transport, walking or cycling) has increased gradually over time, by 10 percentage points from 57 per cent in 2005/06 to 67 per cent in 2019/20 (figure 10). This was mostly driven by consistent growth in public transport use (primarily rail) over the period, in addition to a gradual increase in cycling. Bus and walk mode shares were relatively more stable over the period.

Although public transport mode shares declined during the pandemic, this was compensated by an increase in the residents' active travel mode share, meaning that the net impact on the active, efficient and sustainable mode share was relatively small. The net outcome in 2022/23 was a slight increase, up to 66.7 per cent compared with 66.6 per cent in 2019/20. However, it is clear from the figure that parts of this have changed, with a greater proportion of walk trips and a lower proportion of public transport trips, all in the context of six per cent fewer trips overall. This is indicative of persisting effects from the pandemic and, although the net outcome is very similar to before the pandemic, it remains to be seen whether this balance will persist over the longer-term as, for example, the incentive to walk to avoid infection recedes and/or trip rates continue their recovery.

Figure 10 Trip-based active, efficient and sustainable mode share, LTDS, 2005/06-2022/23.

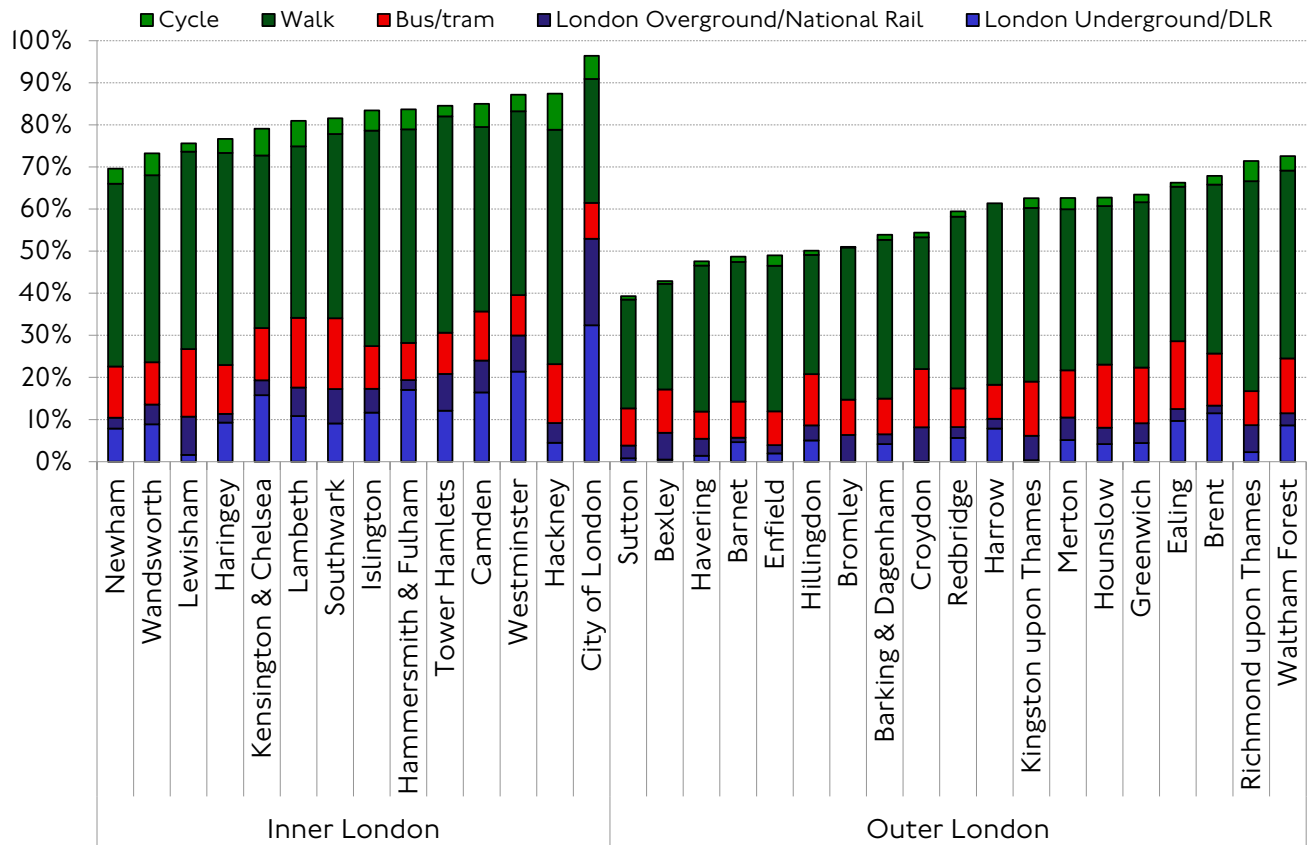


Source: TfL Strategic Analysis, Transport Strategy & Policy.

Figure 11 shows this at the borough level (for trips by London residents only that start in each borough) and this shows the scope that exists to improve this measure. The proportion of residents' trips made by active modes starting in inner London boroughs

ranges from 70 to 96 per cent, compared to outer London boroughs, where the range is from 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.

Figure II 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.

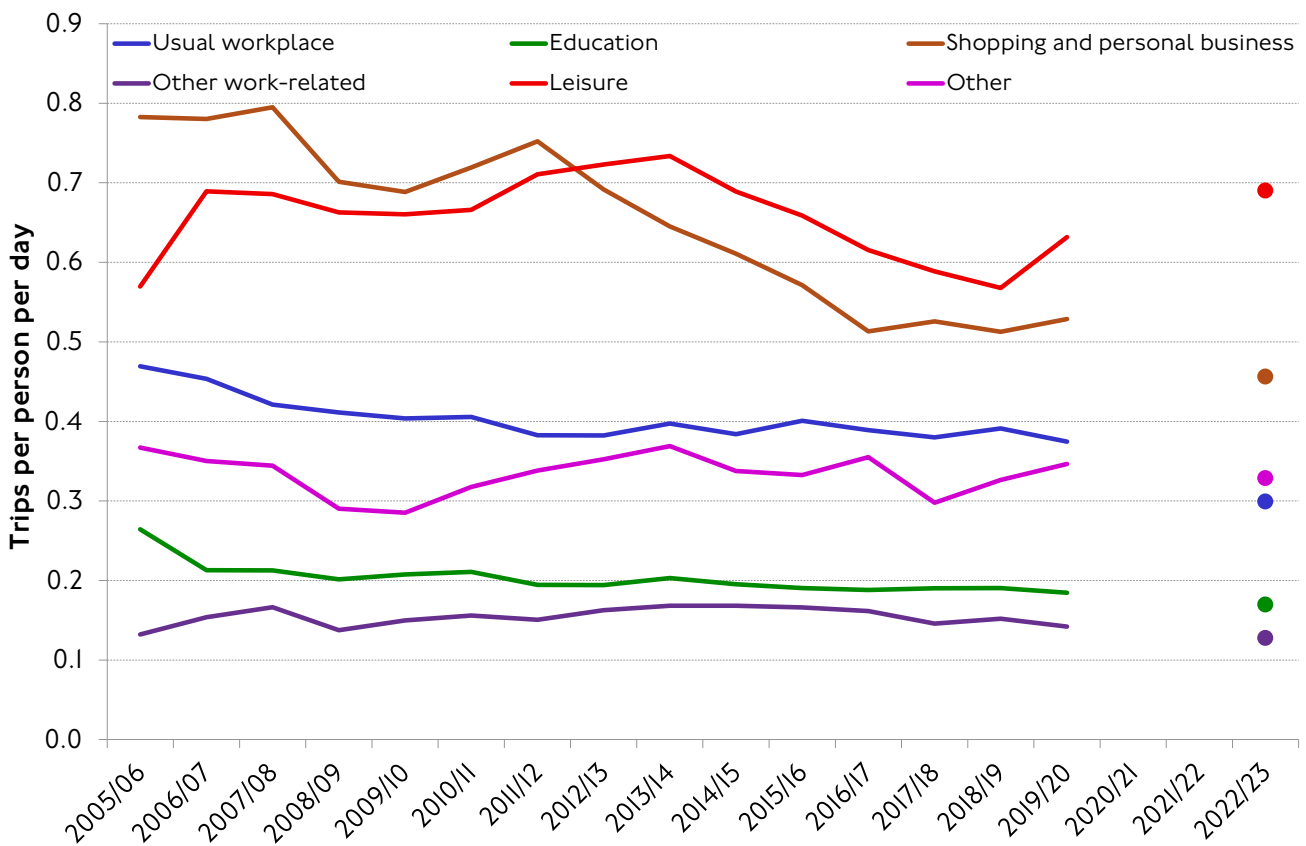
Travel by journey purpose

Trip rates by journey purpose

Prior to the pandemic, the long-term trends in trip rates by purpose showed a decline in both shopping/personal business and leisure trips, both of which had been decreasing since the early part of the previous decade (figure I2). Trip rates for most other purposes had remained relatively stable, meaning that the overall decline in trip rates was being driven at first by the decline in shopping/personal business trips which started in 2012/13, and from 2014/15 accompanied by a decline in leisure trips, the latter thought primarily to reflect cost-of-living pressures.

The main changes in 2022/23 relative to 2019/20 were a decrease in commuting (usual workplace) trip rates (down by 20.1 per cent) and shopping/personal business trip rates (down by 13.7 per cent). These declines have been partially offset by an increase in leisure trip rates, which have increased by 9.2 per cent. Overall, these reflect a shift in post-pandemic travel patterns of fewer work trips being partly compensated for by increased leisure trips, although again in the context of renewed cost-of-living pressures.

Figure I2 Trip rates by journey purpose, LTDS 2005/06-2022/23.



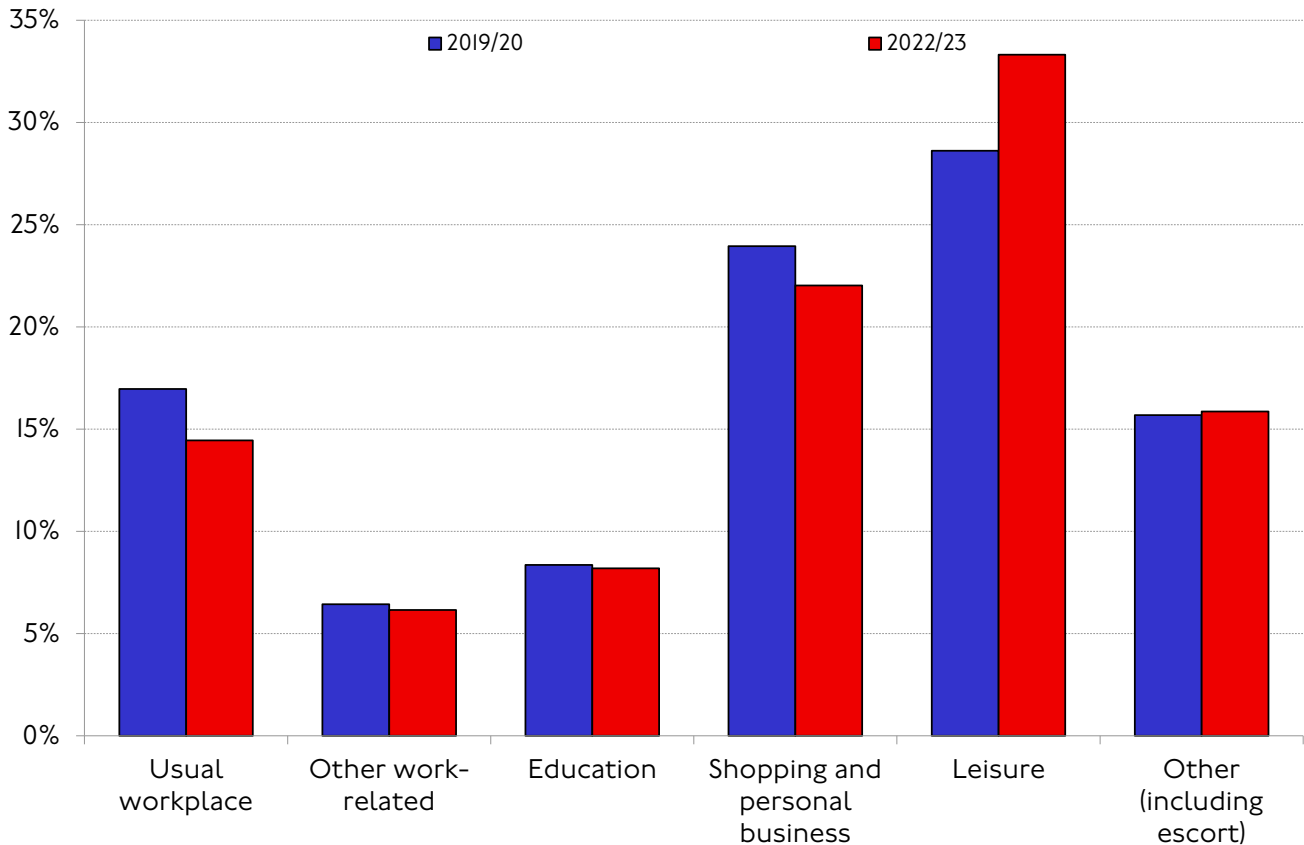
Source: TfL Strategic Analysis, Transport Strategy & Policy.

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.

Purpose shares

Figure 13 shows that, prior to the pandemic in 2019/20, around 17 per cent of trips by London residents were for commuting and a further six per cent of trips were work-related (for example travelling to a meeting). The commuting share decreased to 14.4 per cent in 2022/23, the lowest level since the LTDS began in 2005/06. The majority of trips in 2019/20 were for leisure purposes (28.6 per cent), and this share increased in 2022/23 to 33.3 per cent, the highest purpose share since the LTDS began. In 2022/23, shopping/personal business trips accounted for 22 per cent of all trips.

Figure 13 Proportion of trips by journey purpose, LTDS, 2019/20 versus 2022/23.



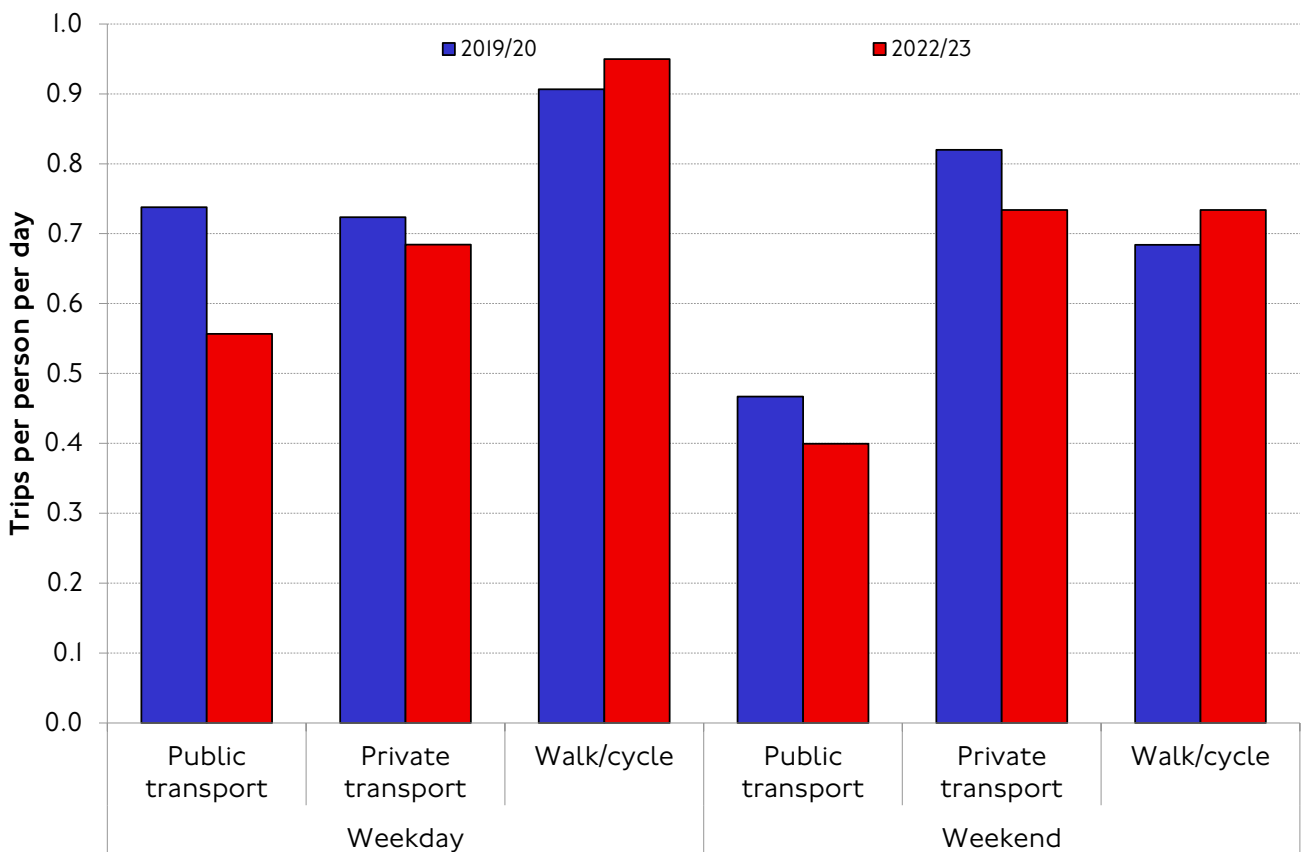
Source: TfL Strategic Analysis, Transport Strategy & Policy.

These changes by journey purpose broadly reflect what are thought to be lasting impacts of the pandemic: a reduction in work-related trips reflecting hybrid working and internet shopping (a widespread pandemic adaptation). The relative increase in leisure trips may reflect increased time availability (for example, not commuting opens up other travel possibilities during the time saved). Furthermore, 2022/23 was notable for the emergence of intensified cost-of-living pressures, but the impact of this on leisure trips in 2022/23, previously thought to be a significant driver of lower trip rates, is not clear.

Travel by day of the week

Trip rates have declined at a lower rate on weekends compared to weekdays and are down by five per cent overall compared with 2019/20 (figure I4). In comparison, weekday trip rates are down by seven per cent. On weekends, private transport usage is down by 10 per cent, compared with a five per cent decrease on weekdays. Walking and cycling trip rates are now seven per cent higher on weekends than before the pandemic. Weekend public transport usage has declined, but at a lower rate than on weekdays (14 per cent versus 25 per cent).

Figure I4 Trip rates by mode type and day type, LTDS, 2019/20 versus 2022/23.



Source: TfL Strategic Analysis, Transport Strategy & Policy.

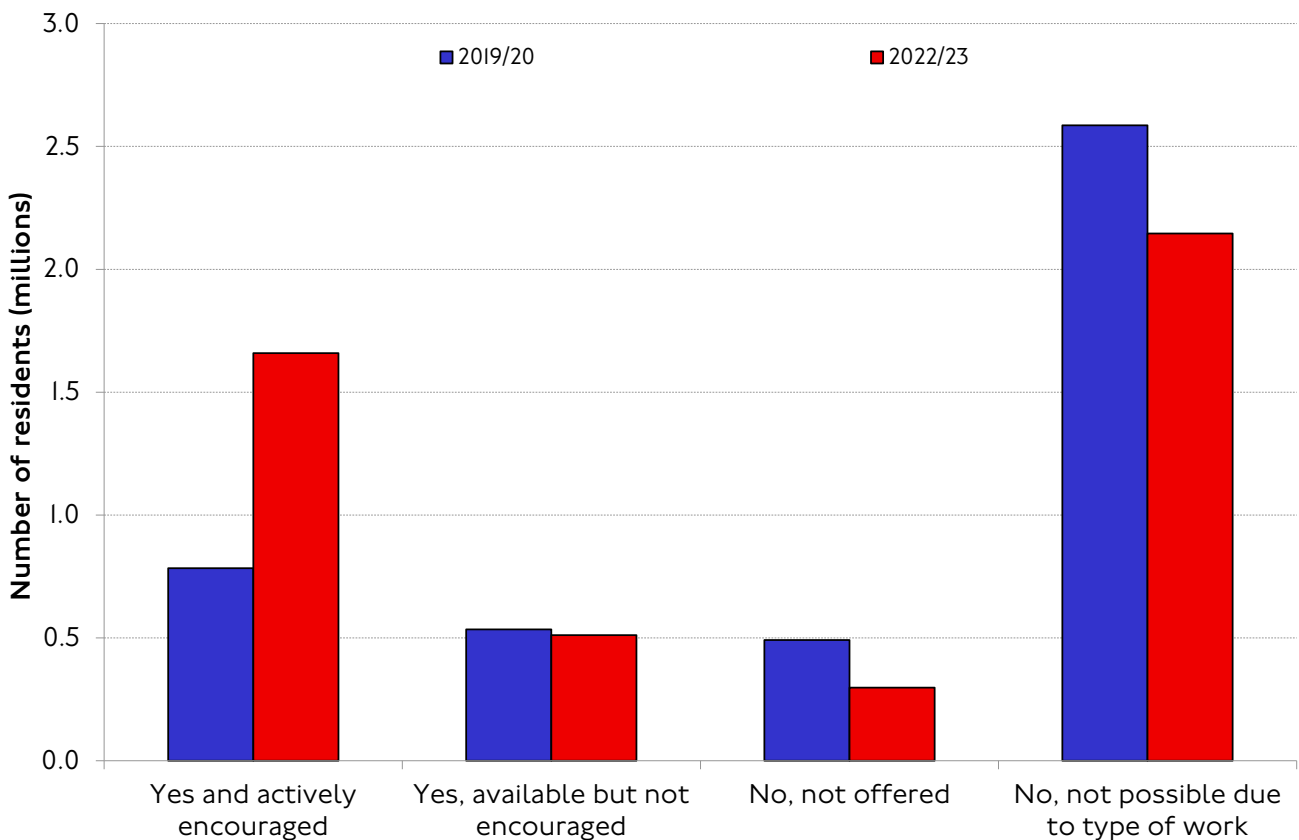
This is once more broadly reflective of legacy pandemic effects: a relative increase in leisure travel and a relative decrease in weekday work-related travel.

Remote and hybrid working

Figure I5 shows how the ability to work from home has changed since the pandemic among working London residents. The number of workers that can work from home and are actively encouraged to do so has more than doubled to 1.66 million from 0.78 million in 2019/20. Around half a million workers could work from home but are not encouraged to do so. A further 47 per cent of London workers are not able to work from home because of the type of job they do.

While the post-pandemic increase in ability to work from home remains a significant influence on travel patterns in London, particularly on weekdays and for trips to and from central London, it should be seen in the context that only 47 per cent of all employed London residents have the option to work from home.

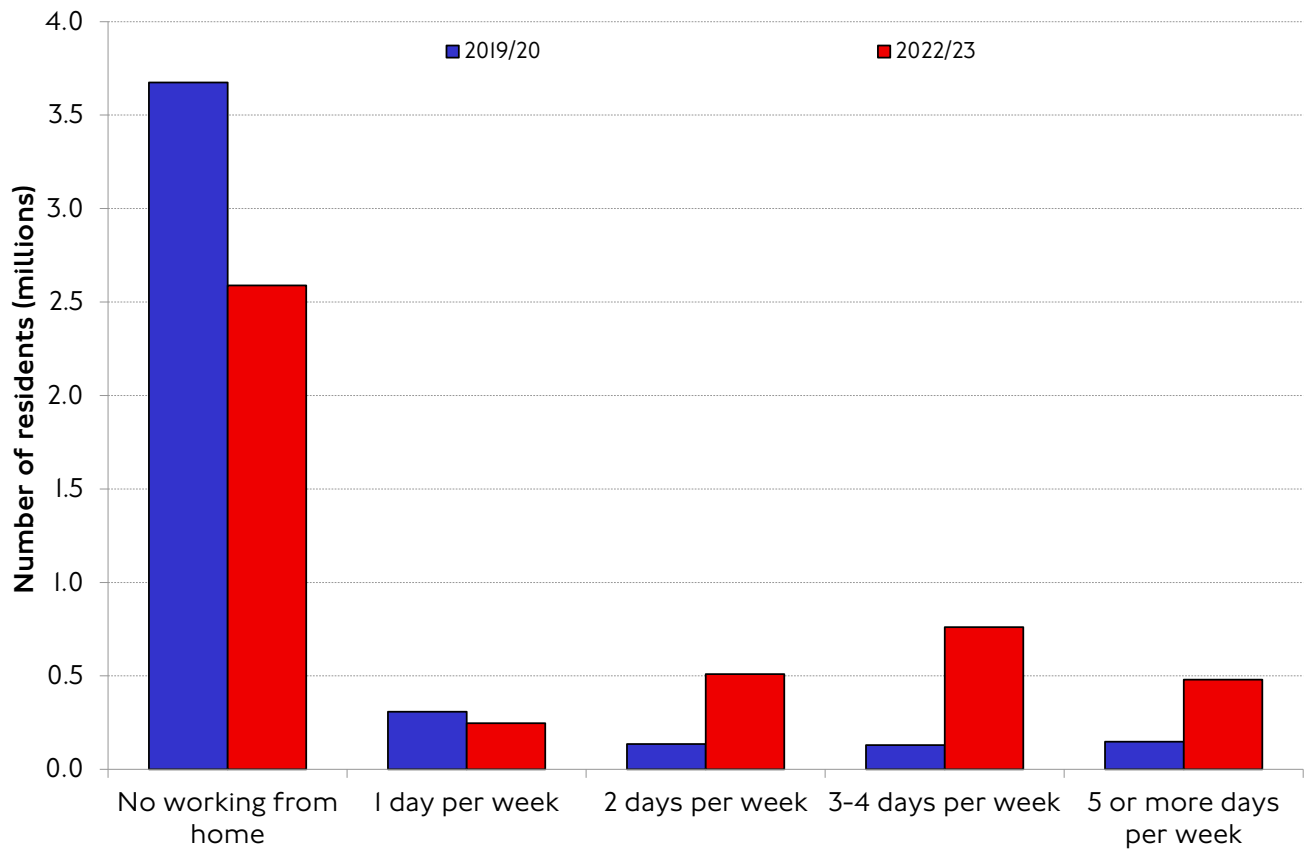
Figure I5 Ability of London resident workers to work from home, LTDS, 2019/20 versus 2022/23.



Source: TfL Strategic Analysis, Transport Strategy & Policy.

Figure I6 shows the number of days that London residents in employment can work from home in a typical week. Immediately apparent is the 30 per cent decrease in the number of people that do not work from home at all. The most common working from home frequency is now three or four days per week, with almost half a million London workers spending five or more days per week working from home. However, what is also apparent is that most London workers do not work from home at all in a typical week.

Figure 16 Days working from home in a typical week, LTDS, 2019/20 versus 2022/23.

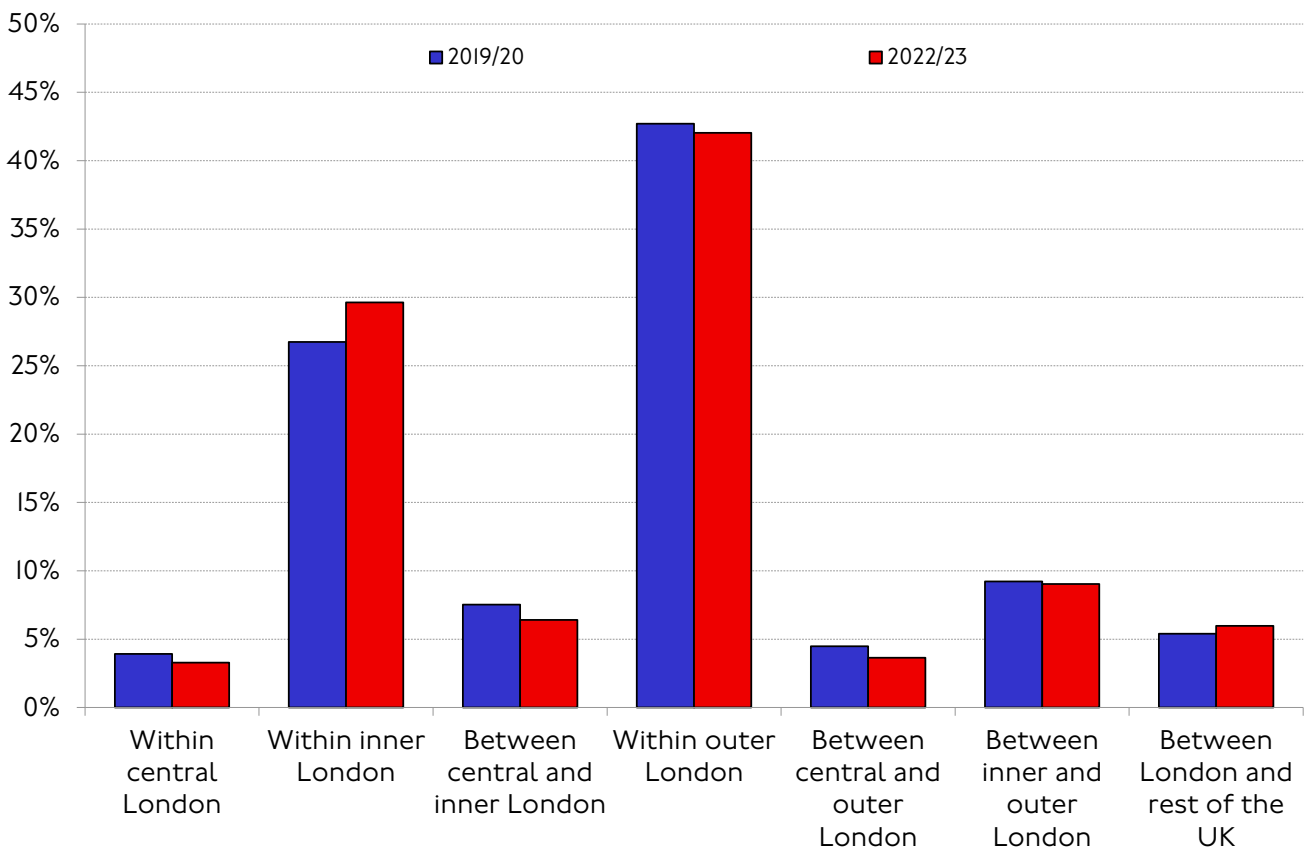


Source: TfL Strategic Analysis, Transport Strategy & Policy.

Travel by London area

Most trips by London residents that take place within London are wholly within the same area, with 30 per cent taking place wholly within inner London and a further 42 per cent wholly within outer London (see figure 17). Trips to, from and within central London by residents account for only 13 per cent of all trips. Compared with 2019/20, the proportion of trips to, from and within central London has declined, while a greater proportion of resident trips are wholly within inner London.

Figure 17 Proportion of trips by origin and destination area, LTDS, 2019/20 versus 2022/23.

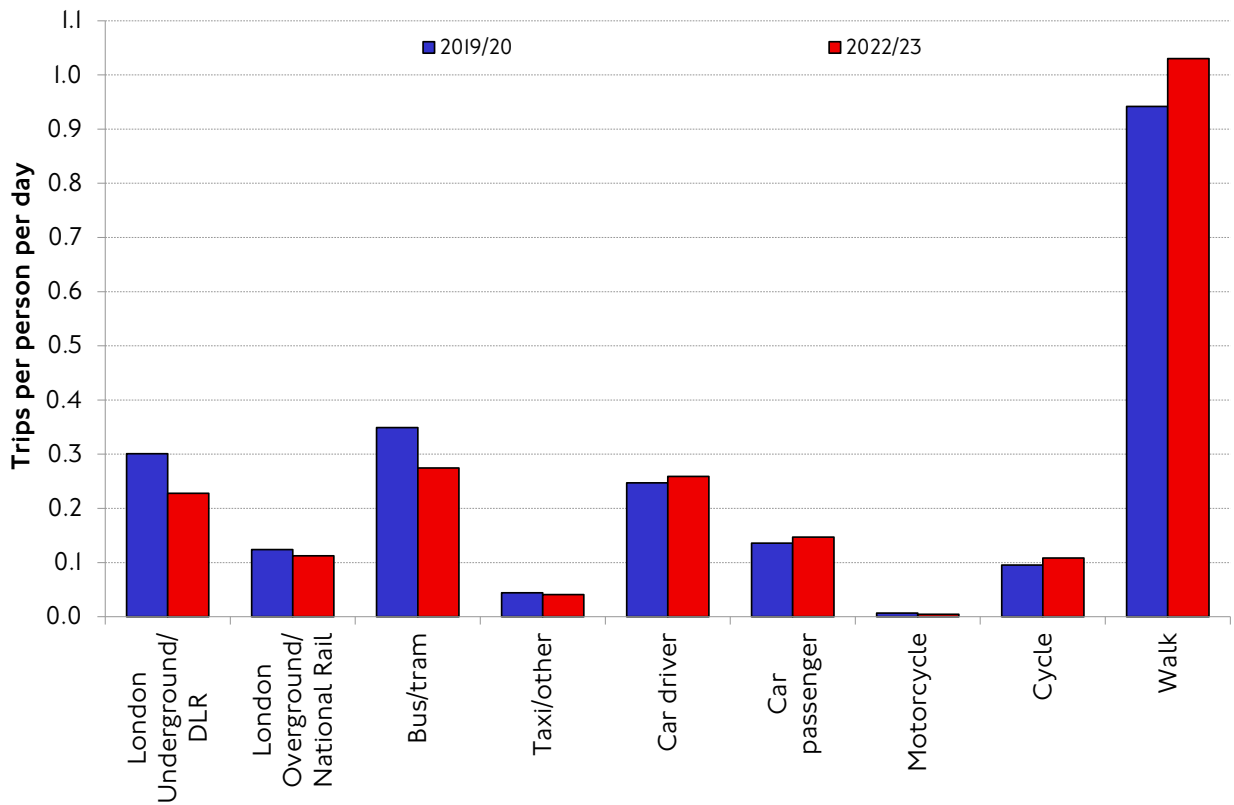


Source: TfL Strategic Analysis, Transport Strategy & Policy.

Trip rates for inner London residents (figure 18) are highest for walking and walk trip rates have increased by nine per cent since 2019/20. Inner London residents' trip rates have declined across all public transport modes, but have increased on private and active modes, with a five per cent increase in car driver trip rates and a 14 per cent increase in cycle trip rates. Inner London residents now make 11 per cent more trips per day than outer London residents. Before the pandemic the difference was three per cent, and up to 2009/10 outer London residents' trip rates were higher than inner London residents.

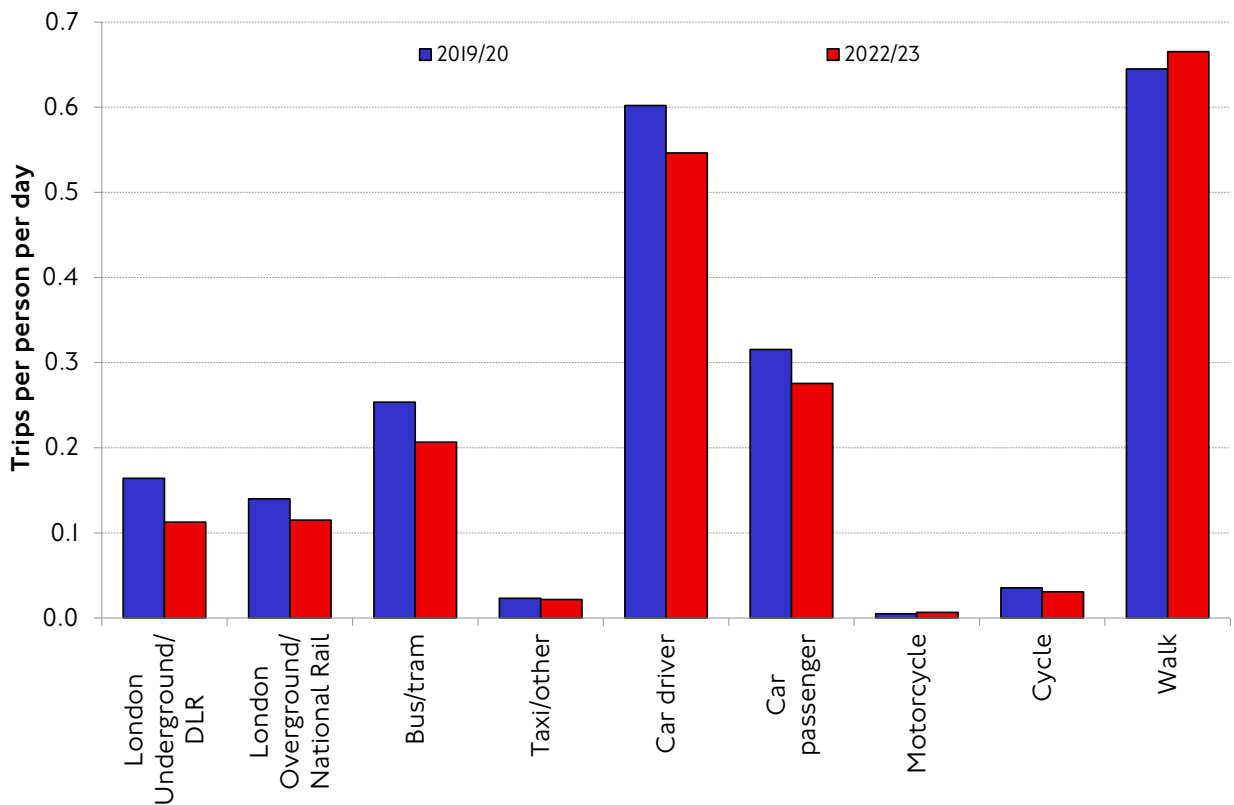
The only modes that have higher trip rates in 2022/23 among outer London residents (figure 19) are motorcycle and walking. Walk trip rates are the highest, but 35 per cent lower than walk trip rates by inner London residents. Outer London residents make more than twice as many car driver trips compared to inner London residents, and almost 30 per cent fewer public transport trips.

Figure I8 Trip rates by inner London residents, by mode, LTDS, 2019/20 versus 2022/23.



Source: TfL Strategic Analysis, Transport Strategy & Policy.

Figure I9 Trip rates by outer London residents, by mode, LTDS, 2019/20 versus 2022/23.



Source: TfL Strategic Analysis, Transport Strategy & Policy.

Trip lengths and durations

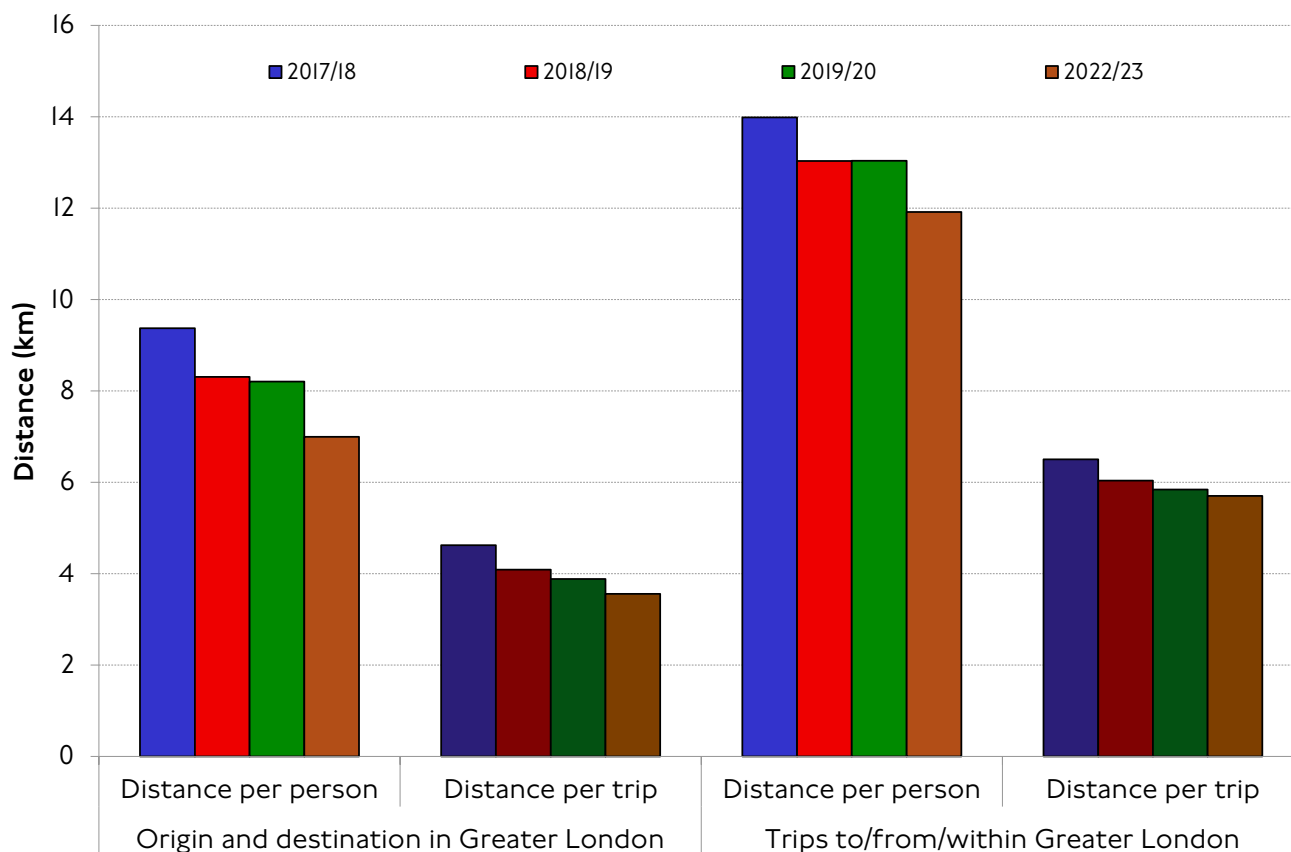
The average distance travelled per person per day in 2022/23 was 11.9km (including trips to, from and within Greater London). This was a reduction of nine per cent compared with 2019/20.

The average trip distance also decreased, although by just two per cent, showing that most of the distance reduction per person was from fewer trips.

For trips wholly within Greater London, the average distance travelled per person declined by 15 per cent to 7.0km per day, with the average distance per trip declining by eight per cent (figure 20).

While the pandemic has undoubtedly affected the distance that London residents travel, the trend even before the pandemic was of trips getting shorter, which combined with declining trip rates led to London residents travelling shorter distances overall.

Figure 20 Distance travelled per person and per trip, by trip origin and destination area, LTDS, 2017/18-2022/23.

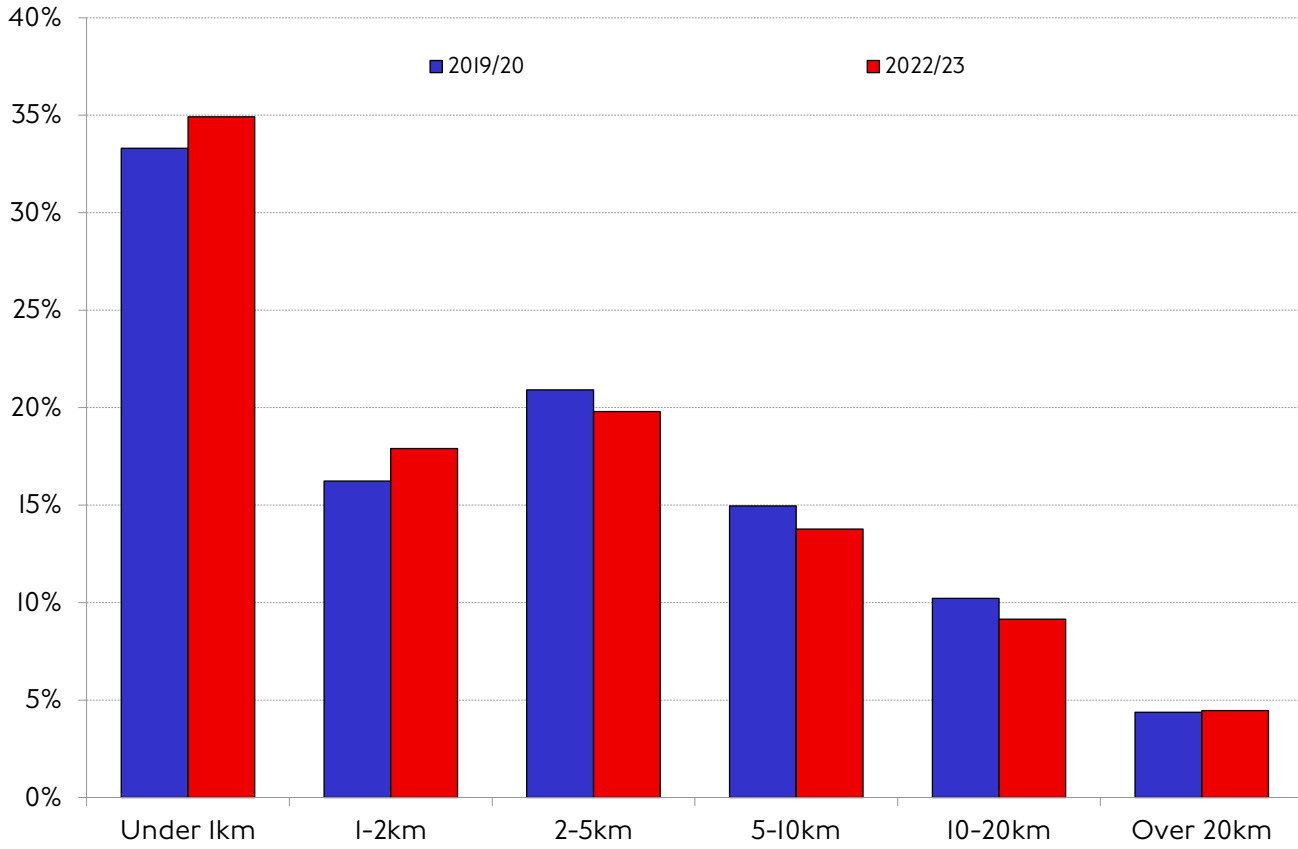


Source: TfL Strategic Analysis, Transport Strategy & Policy.

Most trips by London residents are short in length (see figure 21), with 35 per cent under one km in length and a further 18 per cent between one and two km. Only 13 per cent of all trips by London residents are longer than 10km, and almost three quarters of all trips are under five km in length. This includes trips to and from Greater London to other parts of the country.

In 2022/23, a greater proportion of trips were shorter in length, although the net changes have been relatively small: a two percentage point increase in trips under one km and between one and two km.

Figure 21 Proportion of trips to/from/within London, by trip length, LTDS, 2019/20 versus 2022/23.

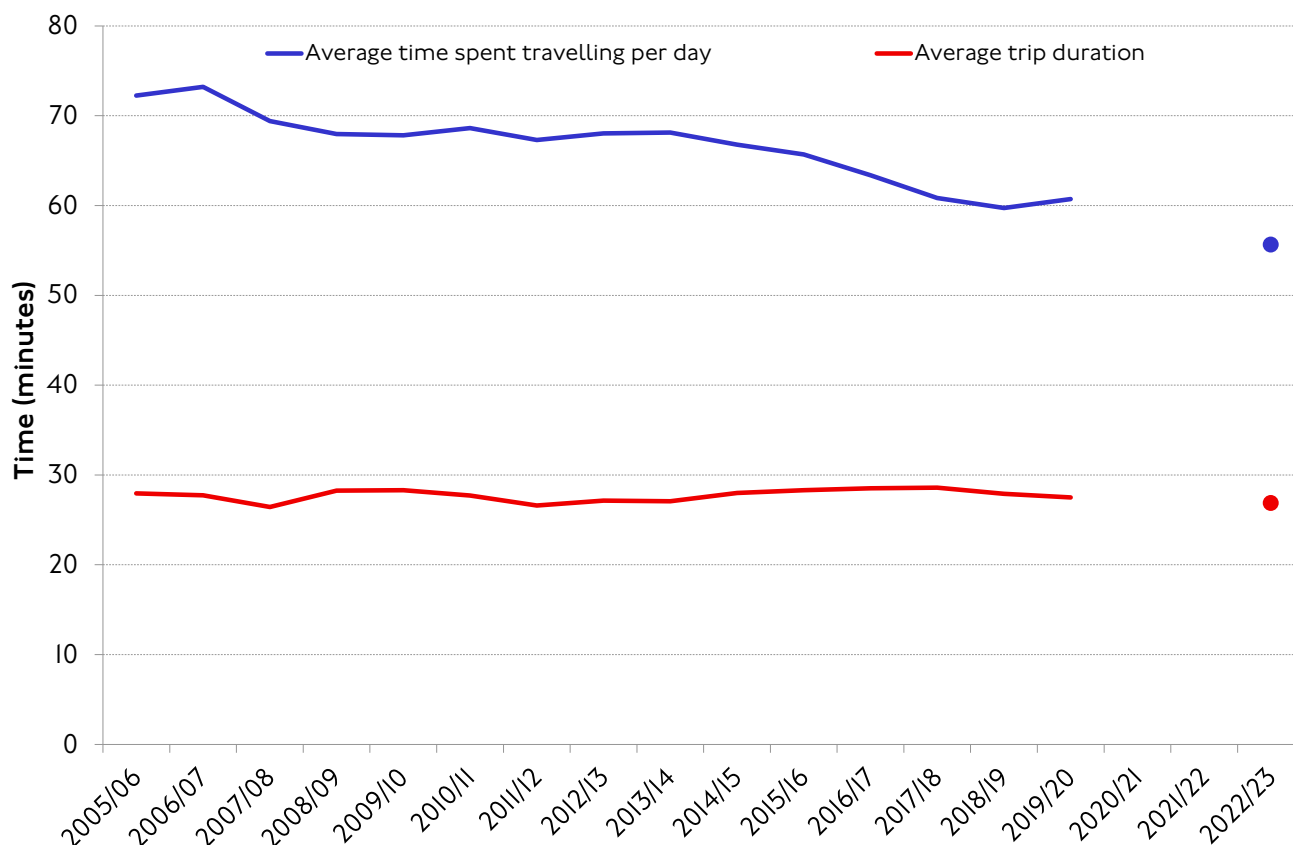


Source: TfL Strategic Analysis, Transport Strategy & Policy.

Figure 22 shows how the amount of time London residents spend travelling has changed over time. Interestingly, there has been a gradual decline in the total amount of time spent travelling on an average day, which decreased from 73 minutes per person per day in 2006/07 to 61 minutes in 2019/20. In 2022/23, this declined further to 56 minutes, the first time that the average time spent travelling in a day fell under one hour.

However, the average duration of a trip changed very little over the same time period, suggesting that London residents have reduced the need to travel overall but are still travelling for the same length of time when they do make a trip. In 2022/23 the average duration of a trip was 26.9 minutes.

Figure 22 Average daily time spent travelling and average trip duration, LTDS, 2005/06-2022/23.



Source: TfL Strategic Analysis, Transport Strategy & Policy.

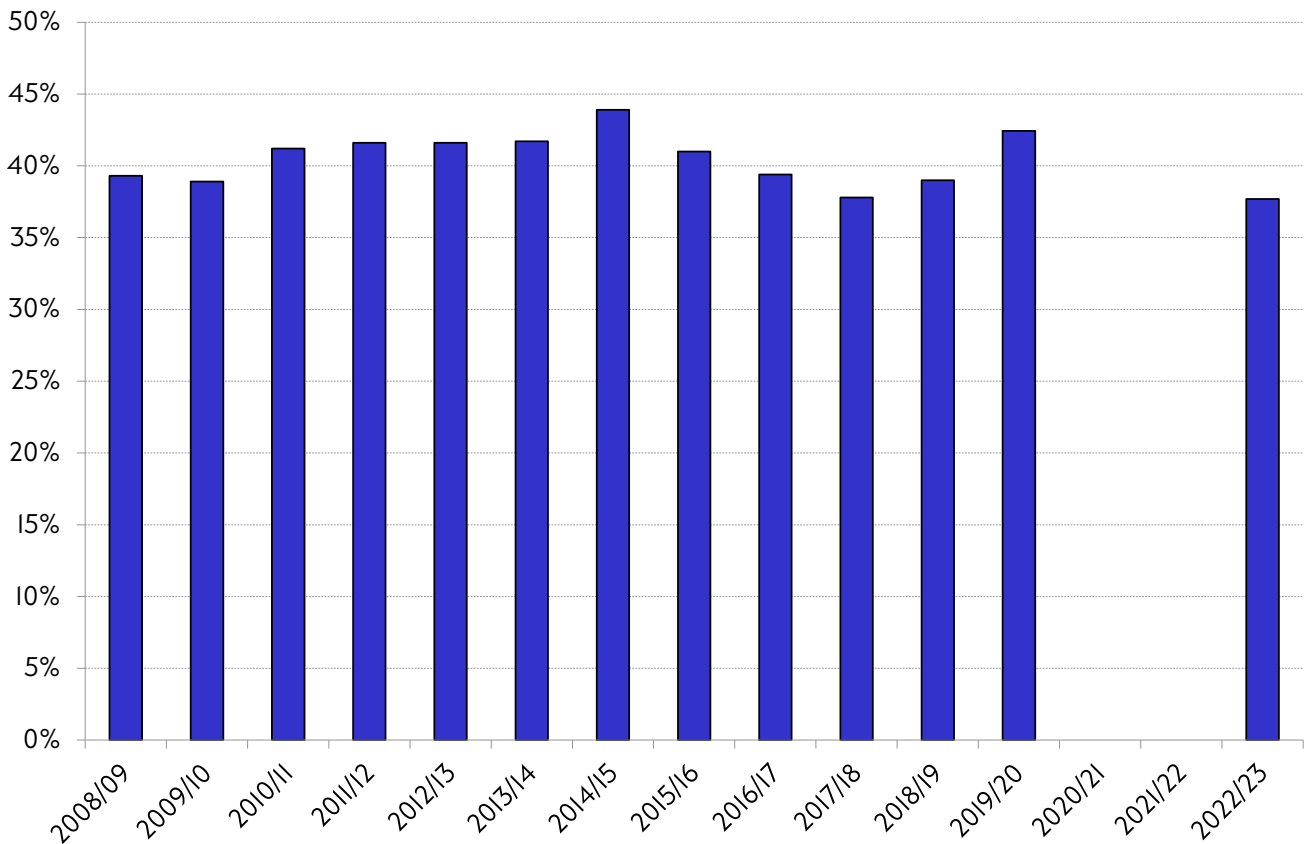
Note: Comparable data is missing for 2020/21 and 2021/22 due to the disruptions that the coronavirus pandemic caused on the LTDS on those two years.

Travel and physical activity

The Mayor's active travel target is for all London residents to achieve at least 20 minutes of active travel (defined as either walking or cycling) per day by 2041. The LTDS offers the best available data source on active travel in London, giving a daily snapshot of travel behaviour by London residents.

The historic trend prior to the pandemic was relatively stable, with the proportion of London residents aged 20 or older achieving at least 20 minutes of active travel per day fluctuating at around 40 per cent up to 2019/20 (figure 23).

Figure 23 Proportion of London residents aged 20+ who achieve at least 20 minutes of active travel per day, LTDS, 2008/09-2022/23.



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.

Between 2014/15 and 2017/18 there was a gradual downward trend in this metric, associated with an overall decline in trip rates. Just before the pandemic, the measure increased for two years, with 42 per cent of London residents aged 20 or over achieving at least 20 minutes of active travel per day in 2019/20.

Data for 2022/23 shows that the measure has fallen again, or, more likely, failed to fully recover from the pandemic, and currently stands at 38 per cent, which is the same level as in 2017/18. Although the use of active modes was higher in 2022/23 than before the pandemic, active travel is often used to access public transport, as a journey stage (trip component), and the decline in public transport usage since the pandemic has probably contributed to the net fall in this measure.

Household car ownership

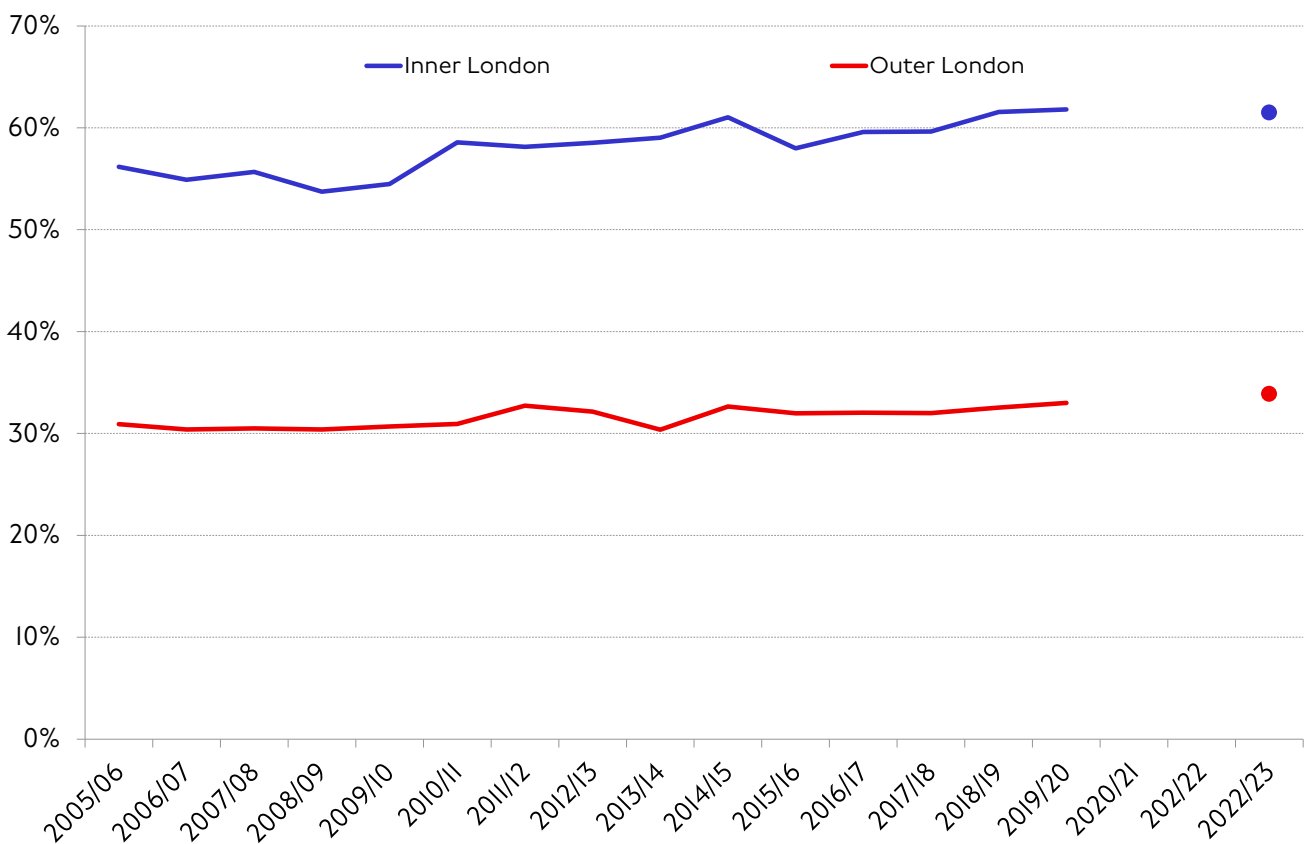
The long-term trend in car ownership in London has been one of decline, with the proportion of households not owning a car increasing from 41 per cent in 2005/06 to 46 per cent in 2022/23, the lowest level of car ownership since the LTDS began (figure 24).

More than 60 per cent of households in inner London do not own a car, an increase of five percentage points since 2005/06. Car ownership rates are higher in outer London, but the long-term trend has been a three percentage point decrease in car-owning households since 2005/06. The proportion of households owning multiple cars has also declined in all areas of London.

Since the pandemic, there has been an increase in the proportion of households in outer London that do not have a car available, from 33 per cent in 2019/20 to 34 per cent in 2022/23. In inner London, there was relatively little change overall. In London as a whole, the biggest change was in the number of households owning more than one car, which decreased from 14 per cent to 13 per cent.

Using a much greater sample, data from the 2021 Census suggests slightly higher levels of car ownership in London, with 42 per cent of households in inner London having access to a car or van, and 69 per cent in outer London (compared with 39 and 66 per cent in the LTDS from 2022/23, respectively).

Figure 24 Proportion of London households that do not own a car, by London area, LTDS, 2005/06-2022/23.



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.

Full summary data

The above has summarised key indicators of travel for London residents and how they have changed since the pandemic. A full summary of the data on which this is based is available on the [London Travel Demand Survey page](#) on TfL's website.