

Zarin Mahmud, Josh Cottell and Claire Harding

Moving with the Times: Supporting sustainable travel in outer London



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Published by Centre for London, June 2023

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Acknowledgements

We are grateful to everyone who shared their time and expertise with us throughout this project. In particular, we thank the members of our Advisory Group: Silviya Barrett (Director of Policy and Research, Campaign for Better Transport); Joanne Beaney (Communications and Engagement Specialist, Transport for London); Andy Bland (Head of Sales, Southeast England, Enterprise Holdings); Tanya Braun (Head of Policy and Communications, Living Streets); Lucy Foreman (Transport Planning Manager, Be First Regeneration); Georgia Heathman (Senior Public Policy Manager, TIER Mobility); Matthew Hill (Assistant Director, Highways, Transport and Regulatory Services, The Royal Borough of Kingston Upon Thames); Jonathan Holdcroft (previously Head of Corporate Affairs, Worldline); Laura Holloway (Head of Government and Public Affairs, UK & Ireland, Enterprise Holdings); Amandeep Kellay (Portfolio Manager, Impact on Urban Health); Rachel Lee (Policy and Research Manager, Living Streets); Paul Ravenhill (Transport Market Director, Worldline); Annie Reddaway (Public Policy Manager, TIER); Ashok Sinha (Chief Executive, London Cycling Campaign); Tim Thomas (Head of Transport, Infrastructure and Policy Planning, Be First Regeneration); James Turgoose (Director, Turgoose Advisors); and Shashi Verma (Director of Strategy and Chief Technology Officer, Transport for London).

In addition, we would like to thank all those who generously gave their time to take part in an interview: Iqbal Ahmed (Senior Public Policy Manager, Dott); Rachel Aldred (Professor of Transport, University of Westminster); Ian Baker (Sustainable Transport and Commissioning Team Manager, The Royal Borough of Kingston Upon Thames); Rafe Bertram (Sustainability Lead, London Borough of Enfield); Nicolas Bosetti (Senior Consultant, Momentum Transport Consultancy); Catherine Bowen (Senior Policy Adviser, BVRLA); Andrew Casson (Borough Cycling Programme Manager, London Borough of Redbridge); Patricia Cazes-Potgieter (Planning Manager for TTLP, Transport for London); Matthew Clark (Associate Director, Steer); Georgia Corr (Public Policy Manager, Lime); Edward Dawes (Principal Analyst, Transport for London); Agathe de Canson (Principal Project and Policy Officer, London Councils); Richard Dilks (Chief Executive, CoMoUK); Richard Diment (Cabinet Member for Education, London Borough of Bexley); Daniel Douglas (Transport Planning Team Leader, London Borough of Havering); Richard Eason (Healthy Streets Programme Director, London Borough of Enfield); Emma Elston (Sustainability Associate, Be First Regeneration); Jonathan Hampson (Head of UK Partnerships, Via); Robin Hickman (Professor of Transport and City Planning, University College London); Geoff Hobbs (Director of Public Transport Service Planning, Transport for London); Alexander Jan (Chief Economic Adviser, London Property Alliance); Cameron McKenzie (Sustainability Officer, Peabody); Ollie More (Senior Policy Officer for London, Sustrans); Betty Owoo (Architectural Designer, Be First Regeneration); Spencer Palmer (Strategic Director of Environment, Housing and Neighbourhoods, London Borough of Sutton); Ian Plowright (Head of Strategic Transport, London Borough of Croydon); Jane Sherry (Sustainable Transport Project Manager, London Borough of Waltham Forest); Alex Smith (Head of Campaigns, London TravelWatch); Nnenna Urue-Eke (Head of Development, London Borough of Enfield); and David Wilson (Climate Response Strategy Manager for Transport and Public Realm, London Borough of Lambeth).

Thanks also go to our Centre for London colleagues Nick Bowes (for support with policy recommendations), Jon Tabbush (for support with data analysis), and Klara Blazek (for designing the report).

Finally, this project would not have been possible without the support of our principal sponsor Enterprise Holdings, and our supporting sponsors Worldline and Be First.

Nonetheless, the views expressed in this report are solely those of the authors, and all errors and omissions remain our own.

Foreword

The way we travel and move around is changing. This is the first in a series of reports that Enterprise are supporting and it is very welcome that it focuses on outer London – too often overlooked in transport and policy debates.

Outer London is, by definition, different to inner London. How residents across outer London move around is very different too. A lot of journeys are local and don't head into or terminate in central London. Indeed, a lot of journeys in outer London are made by people heading out of London entirely. 69 per cent of households have a car in outer London compared with 42 per cent in inner London. In that sense outer London is much more in line with the national average. This is not surprising given the demographics that exist across outer London – for example more families with young children and more elderly people.

So although there are vital debates about how to upgrade public transport provision across outer London, it will always be the case that many more people will require access to a vehicle in outer London compared with inner London.

A key challenge is therefore how to ensure that people across outer London have access to the right vehicle at the right time. The evidence is clear – if there are convenient, reliable and affordable alternative options to the private car then people will make a modal shift. This is where the role of car rental and car clubs comes in.

At Enterprise we therefore see ourselves as a key part of the solution – we want to work with Transport for London (TfL) and every London borough to provide convenient, economical and sustainable ways to travel for all Londoners. Our role is to provide people with access to a vehicle on those journeys where a car or a van will always be required.

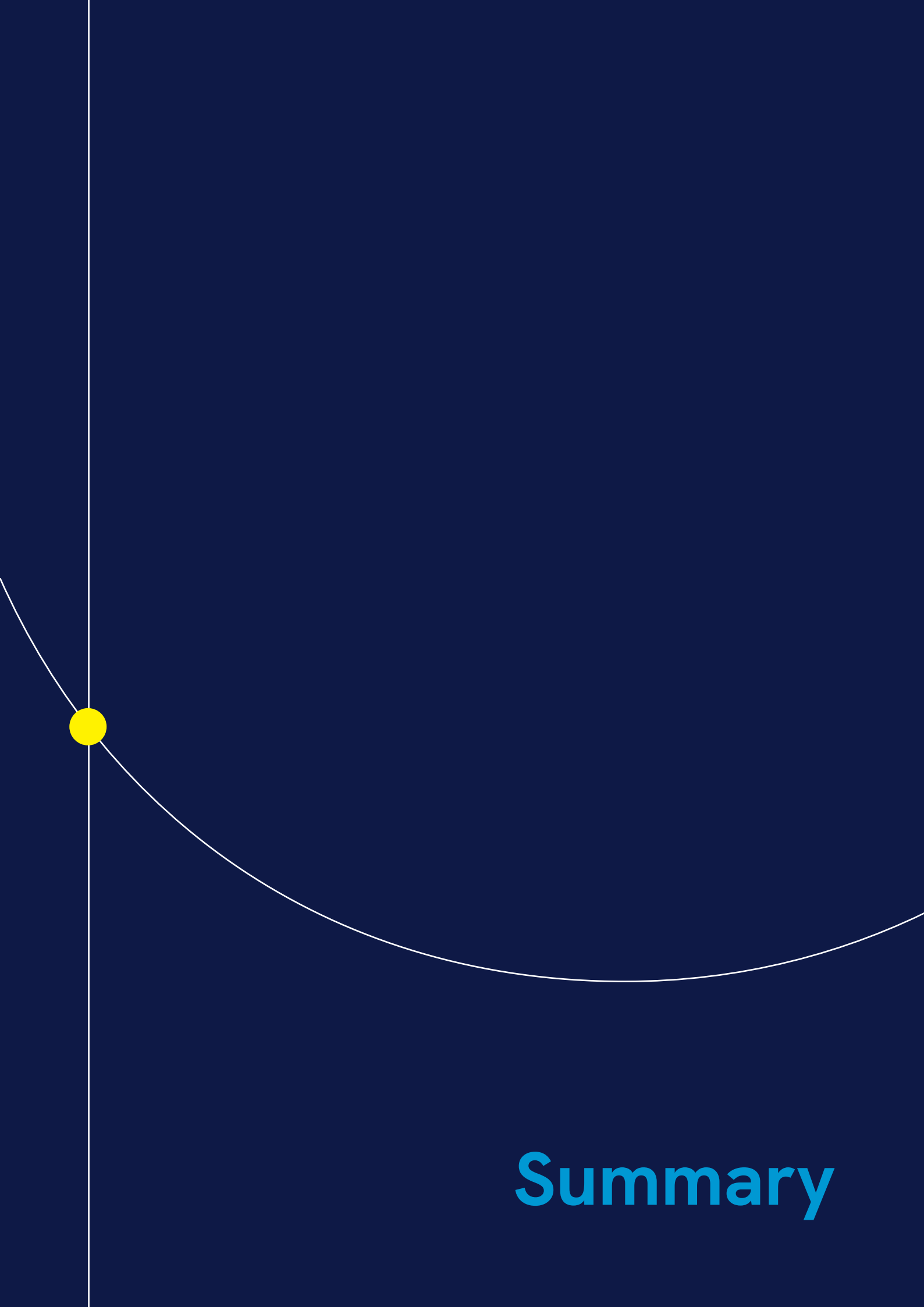
We welcome the focus in this report about the need to treat outer London differently. An outer London transport strategy – developed by the Mayor – would help ensure that all types of journeys are systematically considered. The report suggests a number of improvements and ways to support the greater use of car club across outer London. Boroughs play a crucial role here and car club providers should work more closely with the boroughs and London Councils to ensure that more residents are given the opportunity to access car clubs in convenient locations. The report rightly highlights that car clubs could also have a much greater presence at some transport hubs, especially train stations.

Although not the focus of this report it is also important that TfL makes it easier for people to plan their journeys and provide proper financial incentives to give up their private car. This will be elaborated on in future studies.

This report is therefore an important contribution to the debate. TfL and individual boroughs have an obligation to provide Londoners with the access they need to the full range of sustainable modes of travel. Working hand in glove with the private sector will help to ensure we deliver the greener and cleaner London that we all wish to see.

**Sak Gill, Vice-President and General Manager South East England,
Enterprise Holdings**

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Summary

This report is part of *Moving with the Times* – an ambitious programme of research and events from Centre for London that aims to address London’s major transport challenges and shape how people move around our city. Here, we look at how to support more sustainable travel in outer London, while our next report – to be released later in the summer – will investigate how the costs associated with travelling across London influence travel behaviour.

The difficulties of sustainable travel that are faced by people living in outer London have come to the fore this year, with proposals for ULEZ expansion and ongoing issues with the suburban rail network. Compared to inner London, outer London suffers from a lack of reliable and convenient alternatives to driving (such as public transport links) – with the result that many people find it difficult to give up their cars. This report illustrates why the way people travel matters, shows why some outer Londoners feel they have no option but to drive a privately owned car, and proposes policy changes that would support more people to travel sustainably.

Why transport in outer London matters

- For some people in outer London, accessing jobs and amenities, visiting family, and travelling to new places would be very difficult without a private car; others choose to drive but could in principle make their journeys using different modes of travel.
- 69 per cent of households in outer London have access to or own a car, compared to 42 per cent in inner London and 77 per cent across England as a whole.
- If people drove less in outer London, this would reduce greenhouse gas emissions, air pollution and congestion – and providing improved alternative transport options to achieve this could widen access to economic and social connections.

How people travel in outer London today

- In outer London, the most-used forms of transport are walking (38 per cent of journeys), driving or being a passenger in a private car (38 per cent of journeys), and using public transport (20 per cent of journeys).
- In outer London, driving is used for travel twice as much as within inner London (38 per cent of journeys compared to 19 per cent).
- In outer London, the travel environment is focused more on private car use, with less public transport and lower densities of cycle lanes, cycle parking and shared car and bike schemes.

What’s holding us back?

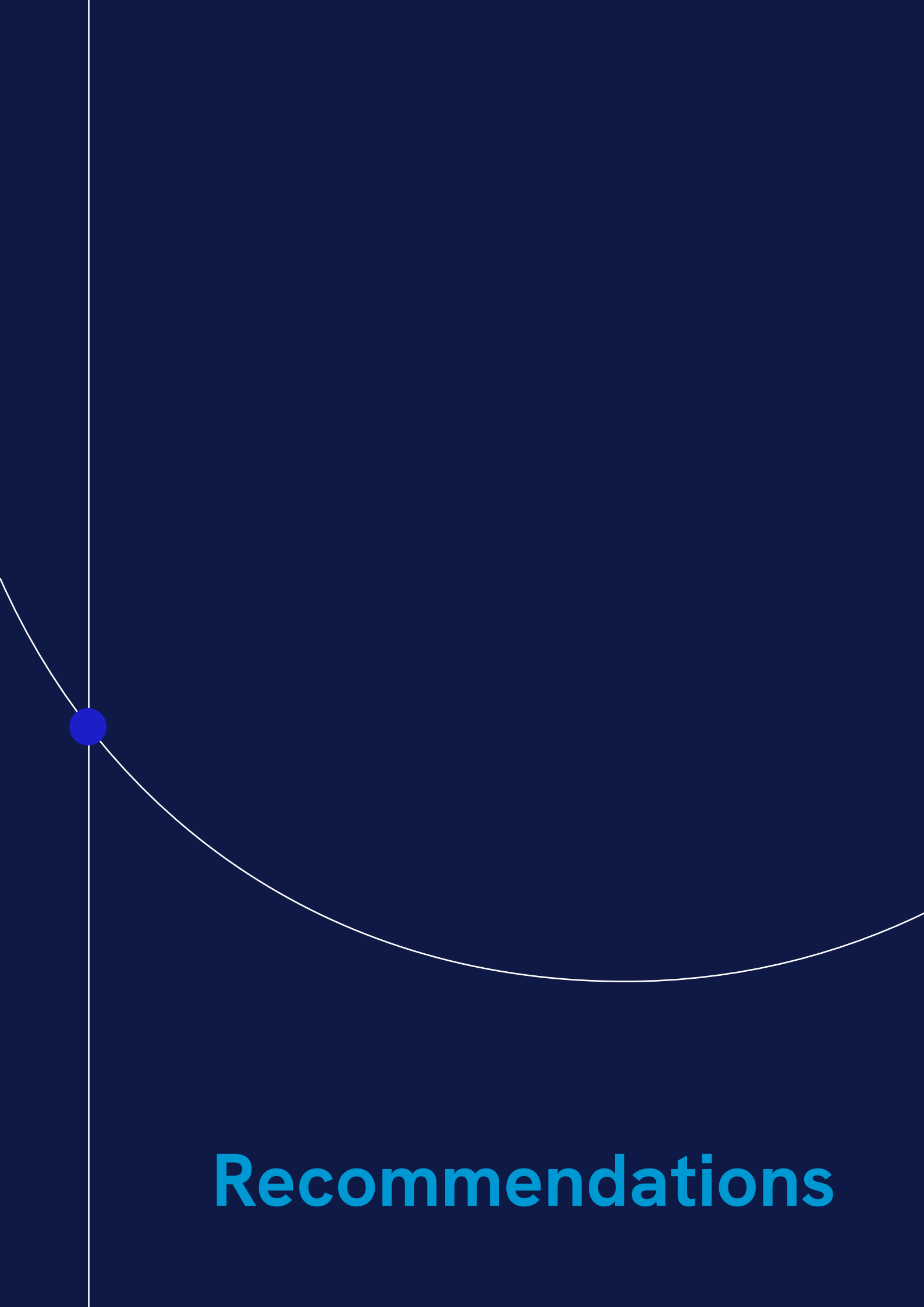
- The high cost of new infrastructure, particularly for major rail projects, is a barrier to delivering better alternatives to car use in outer London – especially since Transport for London’s revenue fell substantially following the COVID-19 pandemic. It seems possible that London will not be a national priority for capital investment in the coming years.
- Improvements that make it easier to walk or cycle vary in cost. Funding them largely falls to local authorities: however, the application process for some funds is time-consuming and inefficient, posing a barrier for local authorities with limited time resources and squeezed budgets.
- Local authorities face financial and political barriers to reallocating road space for more sustainable uses.

What needs to change?

In the next section of this report, we set out 10 priorities for change that would help meaningfully improve access to sustainable modes of transport for most people in outer London. Here are three of these key recommendations:

- **Increase the coverage of the cycle network in outer London:** Transport for London and local authorities should prioritise safe, segregated cycle lanes suitable for a range of micromobility vehicles. New routes should support local journeys for leisure and family purposes as much as journeys into central London.
- **Commit to new public transport routes for new developments:** Transport for London should commit to introducing new bus routes for new developments before those developments are completed, so that they can offer better public transport links and less car parking. This could be paid for partly through the early release of developer funding (or borrowing against such funding), but additional funding may also be required.
- **Deliver shared transport more consistently:** London Councils or the GLA should work with local authorities to design a procurement framework for shared transport modes such as car clubs and shared bike schemes. Local authorities may choose to jointly procure shared services, or temporarily reduce fees for operators to increase coverage in areas with lower population density.

Taking up these recommendations would bring long-term benefits for people in outer London. However, many will require additional funding for local authorities and Transport for London to deliver them. We recommend that additional funds are either allocated from central government or generated by granting the Mayor greater powers to raise money in the capital.



Recommendations

Recent announcements such as the “Superloop” bus service (which will provide orbital journeys around London) and the reintroduction of Local Implementation Plan funding (local authorities’ main source of funding for transport infrastructure projects), albeit at a substantially reduced rate, are welcome. However, on their own they are unlikely to do enough to meaningfully improve access to sustainable modes of transport for most people in outer London. The following recommendations aim to highlight priorities for change that would help to close that gap.

Plan for and fund sustainable transport

1. **Provide sufficient funding:** To implement the following recommendations, local authorities and Transport for London need both additional funding and the ability to plan spending with certainty. Additional funds could come from central government or be generated by granting greater powers to raise money in the capital. We discuss these options further in Chapter 3.
2. **Improve planning and funding decisions:** The Mayor of London should develop an Outer London Transport Strategy to systematically consider people’s travel needs – with more weight given to local journeys that don’t commence or terminate in central London. This will support the shorter trips that are disproportionately made by women, as opposed to longer trips for commuting. Decision makers should always consider the equality impacts of transport planning decisions.

Improve the transport environment

3. **Improve the rail network:** The Department for Transport should work with Transport for London to improve the reliability, speed and frequency of services in outer London. Although capital investment will be needed, improvements will deliver a range of long-term benefits – including making it easier to travel into and around London.
4. **Increase the coverage of the cycle network in outer London:** Transport for London and local authorities should prioritise safe, segregated cycle lanes suitable for a range of micromobility vehicles. New routes should support local journeys for leisure and family purposes as much as journeys into central London.
5. **Improve the quality of the active travel environment:** Local authorities should use evidence-based interventions to make walking and cycling more pleasant. These could include better lighting, segregated cycle lanes, and more parking for small vehicles like bikes and e-scooters – especially around key transport hubs such as bus stops and train stations. At some stations, providing access to car club vehicles alongside active travel can expand sustainable travel options.
6. **Commit to new public transport routes for new developments:** Transport for London should commit to introducing new bus routes for new developments before those developments are completed, so that they can offer better public transport links and less car parking. This could be paid for partly through the early release of developer funding (or borrowing against such funding), but additional funding may also be required.
7. **Prioritise space for sustainable modes:** Local authorities should commit to finding on-street space for cycle hangars, shared micromobility schemes, and car club vehicles – even if this means reallocating space allocated to private cars.

8. **Deliver shared transport more consistently:** London Councils or the GLA should work with local authorities to design a procurement framework for shared transport modes such as car clubs and shared bike schemes, making it easier to share best practice. Local authorities may choose to jointly procure shared services, temporarily reduce fees for operators to increase coverage in areas with lower population density, or to require new developments to provide space for shared vehicles by default.

Bring people with you as you create change

9. **Listen to people's concerns and opinions:** Local authorities should engage with the public to discuss major changes, including with those less likely to use sustainable modes of transport. Early and comprehensive public engagement will improve both public trust and the quality of schemes. For example, in Suwon in South Korea, the city invited residents to be directly involved in the design of its urban transport strategy through participation in roundtables – this then led to local policy change.
10. **Encourage the shift away from private cars:** Local authorities should engage with people who don't currently walk, cycle, ride public transport, or use car clubs much – with the aim of helping them find out how they can use these modes and what support is available to them. Work with local third sector and community groups to inform people about local changes.

Many of these recommendations are not new. There is good evidence to support changes that encourage people to make more sustainable journeys, and a lot of good practice within outer London. However, leaders sometimes find it hard to create change, especially when this involves restricting driving or car ownership. We discuss these issues further in Chapter 5.

Chapter 1

Why the way we travel matters



It is hard for many people in outer London to travel without a car – and many more outer London households own a car than those in inner London. But if we could support more people to make sustainable journeys, there would be considerable environmental benefits, and possibly social and economic benefits too.

Measuring car dependency

Of all regions across England and Wales, London has the highest proportion of households with no cars or vans. This suggests that many people in the capital are already able to travel via a range of other more sustainable modes – made possible by high population density and significant investment in both public transport and active travel.¹

However, travelling via sustainable modes is generally easier for those living closer to the centre than for those living in outer London. Better access to public transport and shared transport schemes – and better active travel infrastructure – all contribute to lower levels of car ownership and use within inner London. Indeed, a large proportion of people in inner London are already living “car free”: 2021 census data show that the proportion of households with no cars or vans in inner London is nearly double that of outer London (58 per cent compared to 31 per cent – see Figure 1).²

If we could support more people to make sustainable journeys, there would be considerable environmental benefits, and possibly social and economic benefits too.



The role of electric cars

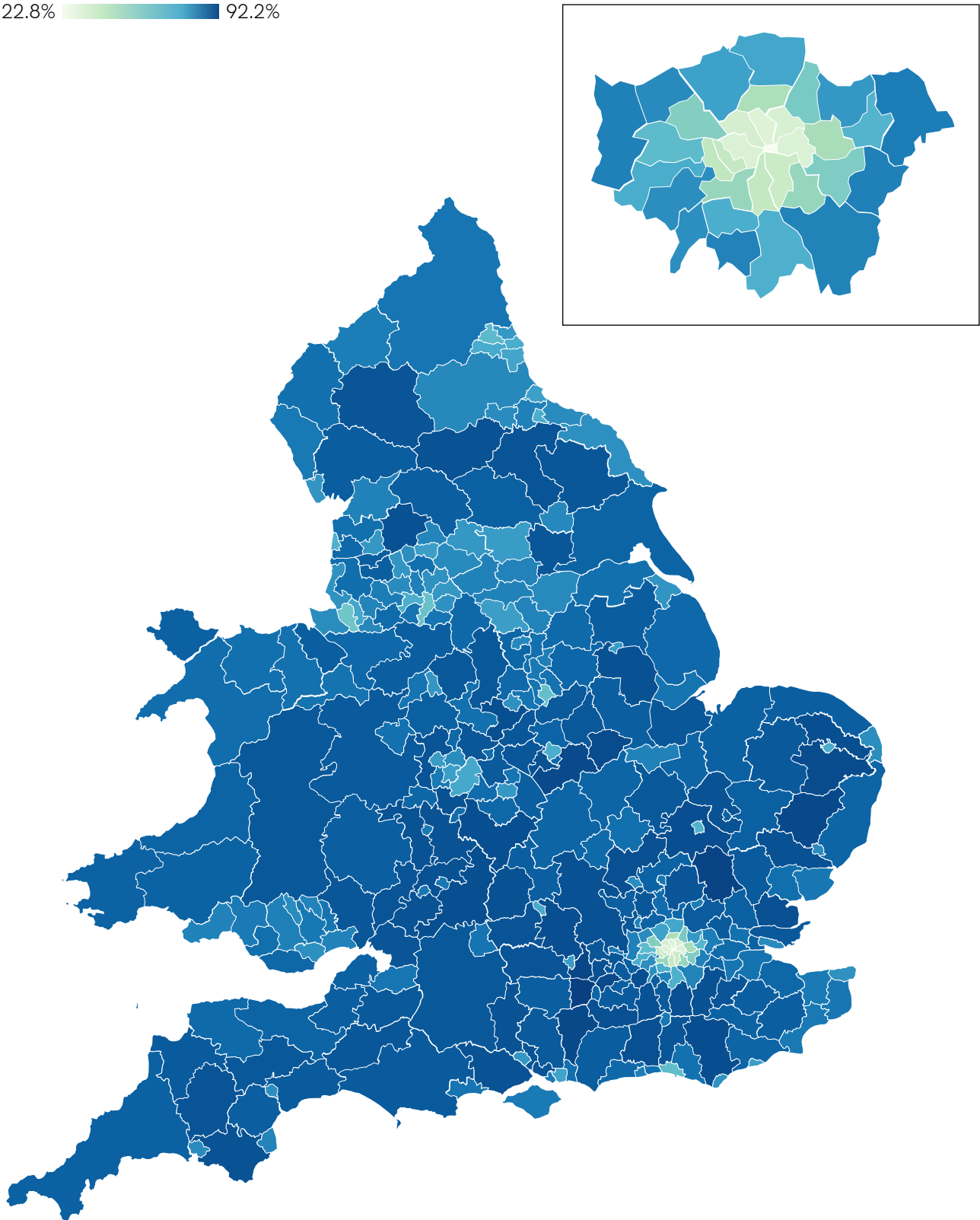
In this report, we focus on switching travel from private cars to more sustainable modes such as walking, cycling, public transport, car clubs and car rental.

Electric cars offer significant promise in reducing carbon emissions and localised air pollution. We believe that electric cars shouldn't be viewed as a panacea for decarbonising transport, but rather as one part of a larger story. Significant work is already going on that will enable electric cars to play a bigger role in future, such as increasing the provision of charging points: consequently, they are not the main focus of this report.

Local authorities in outer London have lower rates of car ownership than the rest of England and Wales, but higher rates than inner London

Figure 1: Proportion of households who own or have access to at least one car, by region

22.8%  92.2%



Source: Office for National Statistics (Boundaries), Simple maps (Points), Census 2021

Reducing greenhouse gas emissions

Transport is the one of the largest greenhouse emitters in London, accounting for around one-quarter of the city's total emissions.³ With road transport accounting for over 75 per cent of these transport emissions,⁴ reducing the number of journeys made by private cars is necessary to mitigate the worst effects of the climate crisis.

Reducing air pollution

Road vehicles are the biggest cause of air pollution in London.⁵ The effects of air pollution range from worsening respiratory symptoms to premature death from cardiovascular diseases.⁶ More than 50,000 Londoners live with asthma and are more vulnerable to the impact of toxic air – with over half of these people living in outer London boroughs.⁷ Levels of air pollution have been falling across London, but this has happened much more slowly in outer than inner London.⁸

Reducing congestion

Having fewer drivers on the road could be beneficial not only for cyclists and pedestrians, but also for car users. In January 2023, London was ranked by INRIX, a travel data provider, as the most congested city in the world, with drivers spending an average of 156 hours in traffic in 2022.⁹ In addition, by exposing drivers to more air pollution, high levels of traffic exacerbate the health impacts of driving on drivers themselves.¹⁰ Enabling more Londoners to use sustainable travel options can help reduce the number of vehicles on the city's roads, decreasing traffic and speeding up journey times.

Where cycle lanes have been introduced in London, one study found that traffic flow fell – though they found only marginal improvements in the speed of traffic.¹¹ If more people switched from driving to either cycling, riding an e-bike/e-scooter or using public transport, the city's roads would be less congested, as these modes take up less road space per person.



Freight and deliveries

Transport for freight and deliveries is important for the economy but also contributes to emissions, pollution, and congestion. Centre for London's report *Worth the Weight: Making London's deliveries greener and smarter* explores these issues in more detail.

Boosting the economy through better connectivity

Enabling people in outer London to travel via more sustainable modes can also boost the economy by providing improved connectivity. The lack of transport connectivity in some outer London boroughs can make it harder for people to access jobs, education and services – especially those who cannot afford a car. Improving the transport network can reduce journey times and help more Londoners access a wider range of jobs and services, thereby increasing economic output.

Addressing inequality and deprivation

Providing outer Londoners with more alternative transport options can also help to address deprivation.

For low-income Londoners who cannot afford a car, the high costs of travel and lack of connectivity to a wider transport network in some parts of London can prevent them from accessing jobs, education, healthcare and essential services – as well as contributing to social isolation.

Increasing connectivity through a greater number of affordable and accessible transport options in outer London could help more low-income Londoners to have better access opportunities and services. Meanwhile, running a car is costly: research from the AA puts the cost at £310 per month, and polling by Opinium for website Nerdwallet suggests that costs are higher in London than elsewhere.^{12 13}

What we mean by “outer London”

The term “outer London” is used to describe different things by different people. In this report, we define it as the geographical area covered by 19 of the 33 local authorities in London. This is in line with the Office for National Statistics’ definition and the Mayor’s Transport Strategy.

Approximately 5.4 million people live in outer London, or 61 per cent of London’s total population.¹⁴ Its population density is lower than inner London but higher than the rest of England, with 4,307 residents per square kilometre in outer London compared to 10,664 in inner London and 434 in England as a whole.

Outer London is home to more children, more older people, and fewer people aged in their early twenties to early forties than inner London. People living in outer London have a lower median income than those in inner London (£33,000 vs £37,000), but a higher median income than that of England as a whole (£28,000). We elucidate what this means for travel in outer London in the following chapter.

Chapter 2

How people travel in outer London today



People's travel choices are affected by the options available to them, as well as their personal beliefs and attitudes. Driving is much more common in outer London than inner London because sustainable options are less available. This could be changed by making it easier for people to use public transport, walk, or cycle – and by making it harder for people to own and drive high-polluting private vehicles.

The factors influencing people's travel choices

The travel environment

The way our cities and towns are designed can greatly influence how people choose to travel. The provision of segregated cycle lanes, cycle parking and safe crossing points were highlighted by many people we interviewed as key to encouraging people to travel via active and sustainable modes.

In contrast, areas that have been designed to make space for cars may see a greater dependence on this mode. The availability of driveways and on-street parking spaces can encourage people to make journeys by private car, especially if there are few attractive alternatives. In 2017, a TfL analysis found that the availability of off-street parking increases the probability that a household owns a car by 23 per cent.¹⁵

Poor access to the public transport network can contribute to greater use of private cars. In London there is a correlation between the boroughs in which a higher proportion of households own a car, and those scoring worst on TfL's Public Transport Accessibility Level metric (which assesses connectivity to the transport network by combining walking time to stations or stops with the level of service provided – see Figure 2).¹⁶ 69 per cent of households in outer London have access to or own a car, compared with 42 per cent in inner London and 77 per cent across England as a whole. Compared to the rest of England, a greater proportion of households in outer London with access to a car have only one, rather than two or more cars.

Even when people are well connected to public transport, other factors can make these services unattractive – including long journey times, overcrowding on trains and buses, and infrequent or indirect routes. For others, even decent public transport options struggle to compete with the convenience of using a car, and the social norm this represents.



Areas with better access to public transport (top) tend to have lower rates of car ownership (bottom)

Figure 2a: Public Transport Accessibility Levels by borough

■ 1b ■ 2 ■ 3 ■ 4 ■ 5 ■ 6a ■ 6b

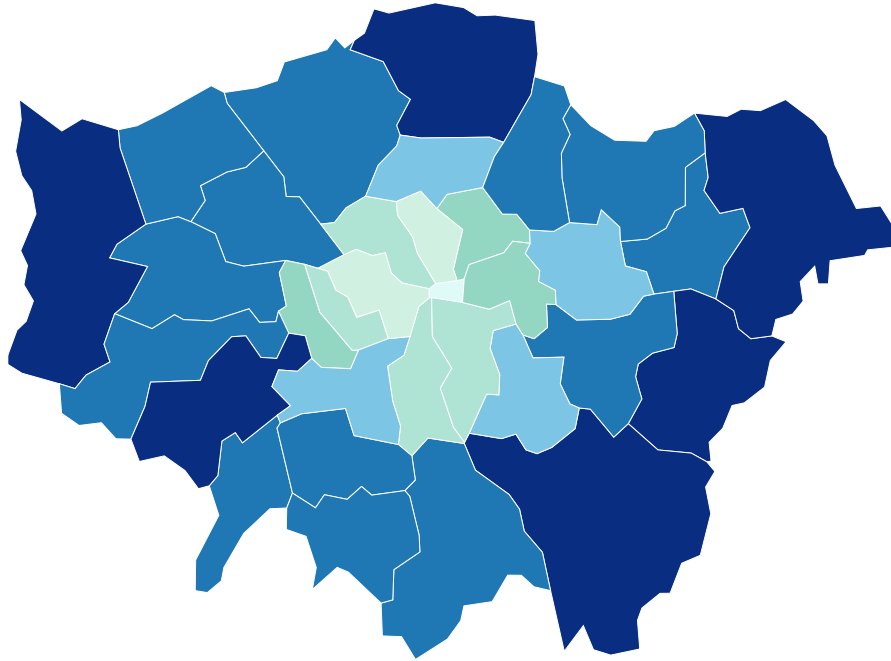
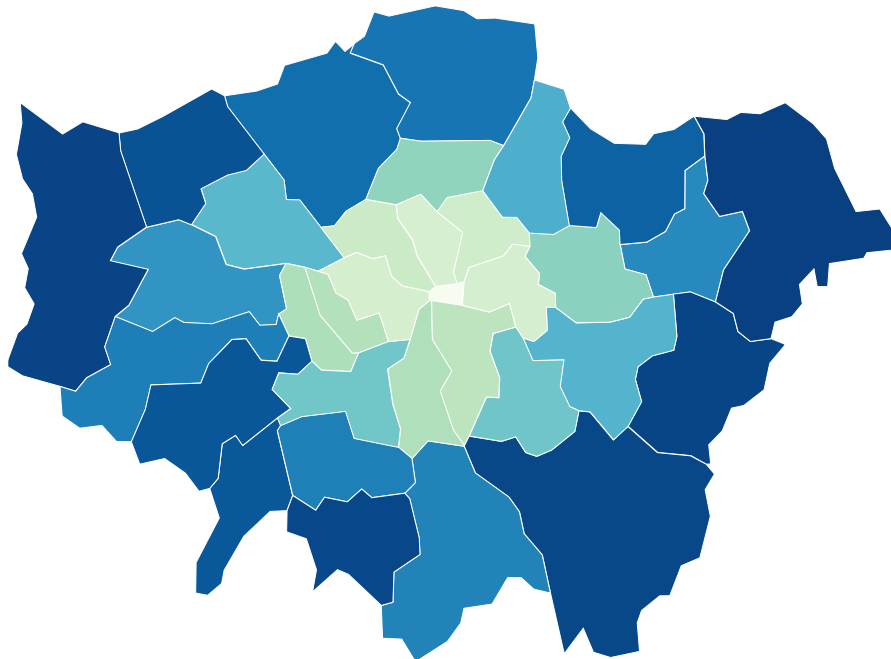


Figure 2b: Proportion of households with at least one car, by borough

22.8%  78.47%



Source: Office for National Statistics (Boundaries), Simple maps (Points), Transport for London Public Transport Accessibility Levels 2015
Source: Office for National Statistics (Boundaries), Simple maps (Points), Census 2021

There exists a link between low-density development and higher levels of car dependence:¹⁷ in areas with higher population density, fewer households own a car or van (see Figure 3). Higher proportions of car ownership in areas with low population density can be due to residents needing to travel a greater distance to access everyday services and amenities. Residents may also need to travel further to access the public transport network.

Households in more densely populated areas are less likely to own a car or van

Figure 3: Proportion of households that do not own a car or van by population density (people per km²), for all Lower Layer Super Output Areas in London

● Inner London ● Outer London



Source: Census 2021

Today, approximately 22 per cent of Londoners live within 400 metres of a London Cycleway. The cycle network is focused on offering radial routes to and from central and inner London, meaning that while good coverage exists towards the centre of the city, many areas in outer London have very little or none (see Figure 4). Radial routes are useful for commuting, but less so in the case of local journeys for family and leisure purposes. Indeed, differences in cycling uptake persist among Londoners, with men, people aged under 35, and people in medium-to-high income groups more likely to cycle than others.¹⁸

In regard to cycle safety, SafeCycleLDN has produced a more comprehensive map of places in London that are safe to cycle. While these areas cover much more of the capital, there remain many cold spots in outer London (see Figure 5).

Transport for London's cycle network is concentrated on routes into and out of inner London

Figure 4: Transport for London cycle network

- Cycle routes
- 400-metres catchment

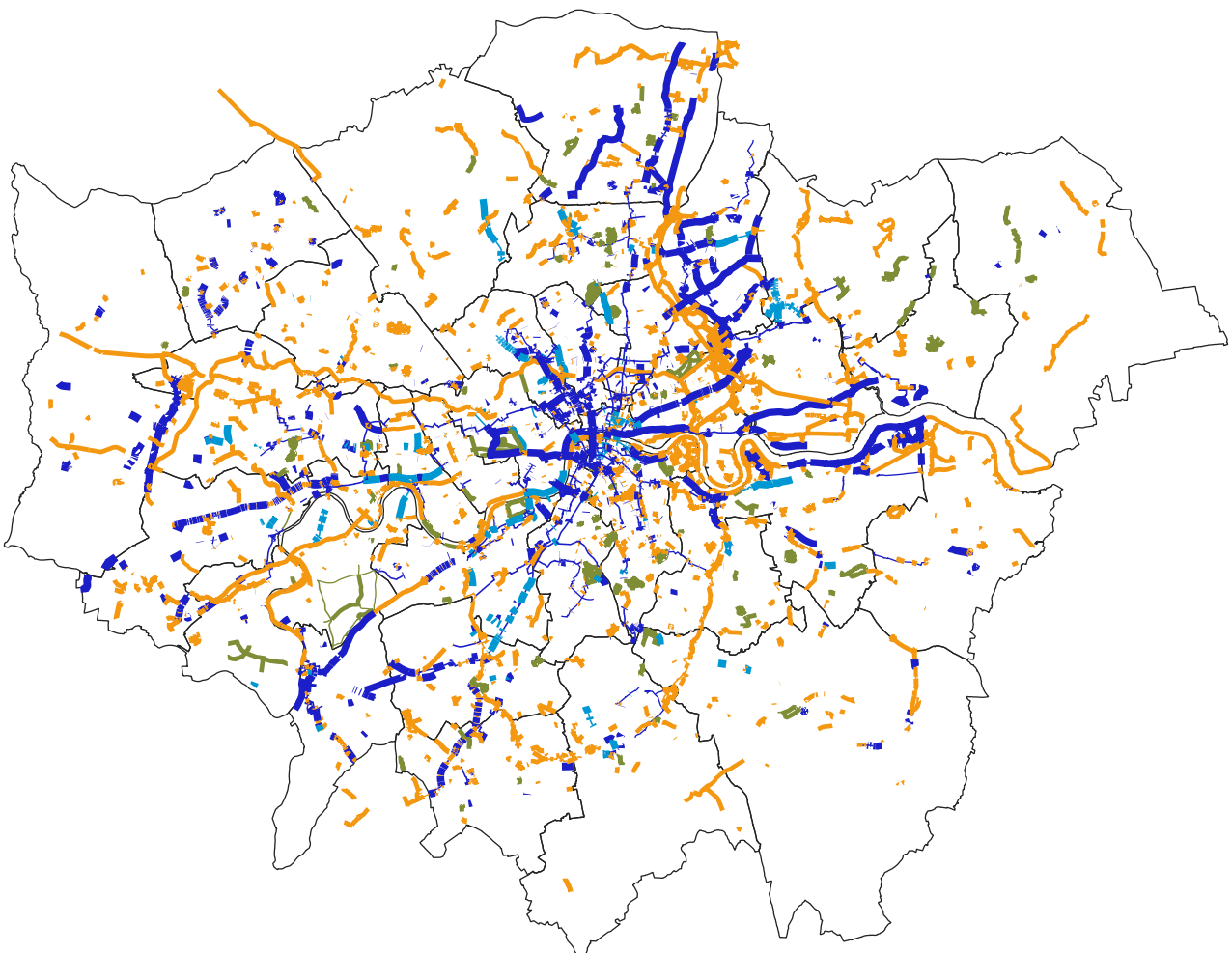


Source: Transport for London (2023), *Travel in London Report 15*.¹⁹

Cycle lanes protected from car traffic cover much of London, but leave many cold spots

Figure 5: Transport for London's cycle network plus other safe cycling routes, excluding Low Traffic Neighbourhoods

- Protected permanent cycle lanes
- Pop-up cycle lanes (temporary sections of protected cycle lane)
- Shared space with pedestrians - Speed is often limited and there are sections where cyclists must dismount
- Shared space routes through parks that are closed at night
- Protected cycle lanes (segregated from road traffic)
- Unprotected cycle lanes (connecting protected sections of cycle track)



Source: SafeCycleLDN (2023), *Safe Cycling in London map*.²⁰

Where segregated cycle lanes have been introduced in London (concentrated in inner London), cycling flows on those roads increase by 25 per cent in the first year following introduction, and by 20 per cent per year thereafter for up to three years.²¹ But access to cycle routes is not the only issue. According to the Metropolitan Police, more than 21,000 bikes were stolen in London during

2021 – a fact that is likely to dissuade many potential cyclists from buying a bike without access to secure storage.²² A Freedom of Information request in 2022 found that more than 60,000 people in London had applied for access to cycle parking near their home, and were on the waiting list for this.²³ Providing sufficient cycle storage is essential if the many people who find it difficult to store a bike in their home are to take up cycling.

Car clubs operate in every London borough, with approximately 3,500 car club vehicles across the capital. We use the term “car clubs” to refer to cars that can be rented by the hour or by the day or week (sometimes referred to as “car rental”). They have historically been most successful in areas where they represent one of a suite of travel options, particularly areas with good public transport links. This has meant they tend to be concentrated in inner London, where fewer people own a car, rather than in outer London.²⁴ There are approximately 600,000 car club members in London, of whom about half (300,000, equivalent to 3.4 per cent of London’s population) have used their membership in the past year.²⁵ A survey of car club members by advocacy organisation CoMoUK found that 23 per cent said they would have bought a car had they not joined a car club, and 16 per cent said they owned at least one less car than when they first joined.²⁶

Shared active travel schemes – where people can rent a bike, e-bike, or e-scooter for short periods – don’t operate in many parts of outer London. Lower population density and less reliable cycling infrastructure (such as cycle lanes) can reduce demand; hills in some areas are also a factor.

The costs associated with driving in London have changed in the past two decades, beginning with the 2003 introduction of the Congestion Charge in central London. It is expected that later this year, the Ultra Low Emission Zone will expand to cover Greater London. This means that driving through the city centre in any car comes with a cost, and (from later this year) so will driving anywhere in London in a car that doesn’t meet emissions standards. There is evidence that these changes have reduced the use of polluting cars in the existing inner London ULEZ zone.²⁷ Research in the Netherlands finds that approximately 40 per cent of people who own or intend to buy a car express a willingness to use car sharing to replace some of the trips they take by private car, while 20 per cent would be likely to give up a planned car purchase or a car they already own when a car-sharing scheme becomes available.²⁸

Still, the North and South Circular roads, the M25, and the rest of London’s extensive road network offer an ease of travel that is unrivalled for many routes. At the same time, off-street parking is more available in outer London than in inner London, making parking relatively easier.²⁹

Capabilities and needs

Personal travel needs can also significantly influence people’s choice of transport mode. Those who need to travel long distances for work or school may not be able to walk or cycle, relying instead on public transport or cars for these trips. Similarly, travelling with children or other dependants can also reduce the transport options that people feel are available to them.

The gendered nature of domestic and caring responsibilities means that women generally make more frequent, short trips throughout the day, often with multiple stops.³⁰ In contrast, men tend to make fewer trips, typically long-distance radial journeys during peak hours.³¹ Across the UK, men are twice as likely as women to make commutes lasting an hour, whereas women make the majority (55 per cent) of trips lasting less than 15 minutes.³² However, urban planning in London has often focused on transport corridors that carry people from suburban local centres into central London, reflecting a male bias.³³

The COVID-19 pandemic has reduced the number of radial journeys Londoners are making, with fewer people commuting into central London due to flexible home-working options available for some. Even prior to the pandemic, 41 per cent of outer London residents’ trips took place wholly within outer London. In contrast, only 26 per cent of trips by residents of inner

London took place wholly within inner London.³⁴

The ability to access the Internet can also influence travel behaviour. Londoners who cannot go online may find themselves digitally excluded from buying some types of ticket or from accessing up-to-date timetable information. Digitally excluded people are more likely to be older, disabled, and on a lower income.³⁵ These elements often interact, meaning that these Londoners may face multiple barriers to travelling in the city.³⁶ For example, many Londoners have limited public transport options due to a lack of step-free access, difficulties getting a seat, and few staff at stations to provide assistance. With only 25 per cent of rail stations and 91 out of 270 Underground stations offering step-free access, buses are often the most accessible mode of travel for disabled Londoners.³⁷

Older Londoners represent a higher share of the population in outer London than in the rest of the capital.³⁸ Journey purposes for this group shift away from the focus on work, towards more leisure and personal trips.³⁹ On buses, particular concerns for older Londoners may include ensuring disabled people get priority in the wheelchair space, making sure drivers don't pull away before passengers are seated, and guaranteeing that audio-visual announcements are in place on every bus.⁴⁰

Many people in outer London travel with children. A greater proportion of people in outer London are responsible for a child than in the rest of the capital: there are around 34 children for every 100 working-age adults in outer London, compared to 26 in inner London and 31 in the rest of England.⁴¹ Certain modes of travel are less attractive, less accessible and less safe for people travelling with children.

Though all restrictions on travel have been lifted in London following the COVID-19 pandemic, Londoners who are at a higher risk of severe illness from contracting COVID-19 may continue to avoid public transport. A recent survey conducted by wellbeing specialist Puresential found that one in three Londoners avoid public transport due to hygiene reasons.⁴²

Attitudes

Personal values and attitudes also play a large role in determining travel behaviour. The decision to travel via private car is not simply an economic choice: it also flows from emotional responses to driving and car ownership. When associated with feelings of protection, security and safety, cars can provide many people with feelings of empowerment that other modes of transport may not offer. Cultural attitudes can also shape travel choices, with some communities viewing car ownership and travel as a sign of status and success. In contrast, cycling may carry associations of poverty, disadvantage, and lack of freedom.⁴³

Safety is also a key consideration for many people, particularly women and people from minority ethnic groups. In a survey conducted by Centre for London in 2019, 24 per cent of women cited worries about personal safety as a barrier to using the Tube more frequently, compared with only 13 per cent of men. 20 per cent of people from minority ethnic groups reported the same view about bus travel, compared to 11 per cent of White respondents.⁴⁴ Research on safe travel in London by transport watchdog London TravelWatch found that of all modes, the Tube, the bus, and cycling ranked highest in terms of people feeling fairly unsafe or very unsafe.⁴⁵ Over one-third (36 per cent) of those who reported feeling unsafe said they had decided to use a car, motorcycle, or other private vehicle more in the past five years.⁴⁶

People's attitudes towards the technology associated with enforcing traffic restrictions, such as automatic number plate recognition (ANPR), plays an important role too, with privacy campaigners presenting a legal challenge to their use in London in 2022.⁴⁷

Case Study: Citizen participation in urban transport strategy – Suwon, South Korea

In order to encourage behavioural change, officials in Suwon have involved residents directly in the design and implementation of its urban transport strategy.⁴⁸

The city’s plan for citizen-led urban planning was established in 2011. The following year, the city publicly recruited members to form The Citizens’ Group for Urban Policy Planning. This group of 300 participants collects important issues among citizens and holds roundtable discussions to set the direction for the basic plans of Suwon.⁴⁹ Citizens were also recruited to monitor the progress of policies and take part in participatory budgeting.

An example of the change enacted through this process can be seen in the aftermath of the city’s car-free experiment. In 2013, as part of the Eco-Mobility World Festival, the 4,343 residents of Suwon agreed to stop using their cars for 30 days. In order to ensure that the streets of the neighbourhood would be “car-free”, 1,500 cars were moved out of the neighbourhood to parking lots outside the city.⁵⁰ A year later, the city hosted a citizens’ roundtable, which called for speed restrictions, parking controls and one-way systems to be instituted in the neighbourhood where the experiment took place. The immediate changes that were made included:⁵¹

- Speed restricted to 30km per hour.
- Car-free weekends.
- Residents were allowed to have their free car-parking rights in parking lots renewed permanently, with free rental of bikes.



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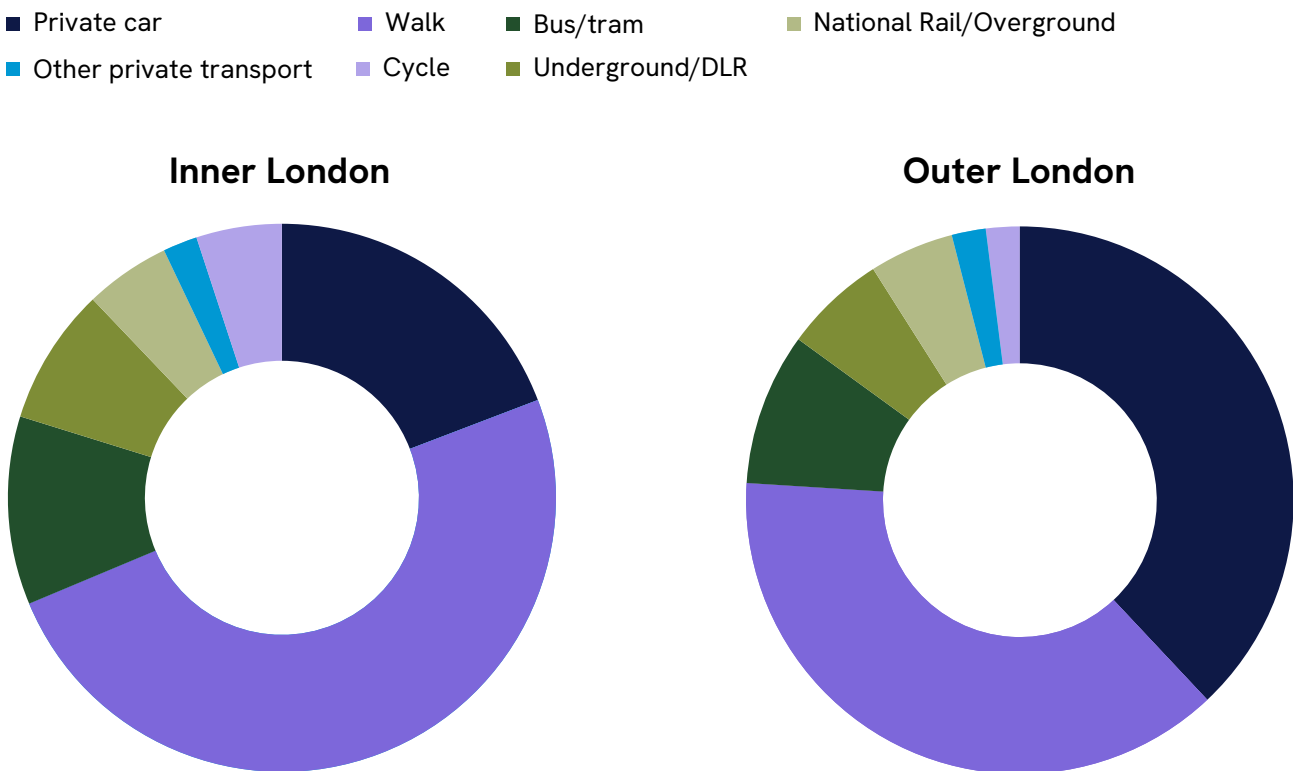
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How people travel in outer London compared to elsewhere

According to data from Transport for London, trips by active and sustainable modes of transport account for 60 per cent of trips made by outer London residents, compared to 78 per cent of trips by residents of inner London (see Figure 6).⁵²

Trips made by outer London residents are twice as likely to be by car, compared with trips made by residents of inner London

Figure 6: Trip-based mode share, by area of residence, London residents only, 2022/23 Q1-2 (provisional)



Source: "Transport for London (2023), correspondence" Provisional data. London residents only. Other private transport includes vans and lorries.

In outer London, the most-used forms of transport are walking (38 per cent of journeys), driving or being a passenger in a private car (38 per cent of journeys), and using public transport (20 per cent of journeys). In outer London, walking and public transport are used for a smaller proportion of trips compared to inner London, while driving is used for twice the proportion of trips (38 per cent in outer London vs 19 per cent in inner London).

Cycle mode share accounts for just two per cent of trips taken by residents of outer London, a figure that has remained broadly unchanged for the past two decades.⁵³ The proportion of people cycling to work in outer London

increased from 2.3 per cent to 2.5 per cent between 2011 and 2021.⁵⁴ by comparison, cycling to work in inner London increased from 7.2 per cent to 9.0 per cent.⁵⁵

Though there has been a gradual shift toward more sustainable travel modes in outer London, private transport (largely cars) has remained the most popular mode over time.⁵⁶ From 2005 to 2020, the proportion of outer London trips made using sustainable modes increased from less than 50 per cent to nearly 60 per cent – while in inner London it increased from around 70 per cent to more than 80 per cent.⁵⁷

Many people in outer London use their cars even for short local trips: more than half of all car trips made in outer London are less than two miles in length.⁵⁸ The lack of suitable infrastructure for walking and cycling accounts for some of these short car journeys. However, for many short trips, it is simply the convenience of private cars that leads people to drive rather than walk or cycle.

Further, a substantial number of trips are made between outer London and the wider South East of England. Some people in outer London have a car in part to support their journeys outside London.

What trips could be switched?

Many car trips in outer London can already be made by other, more sustainable forms of transport.

Transport for London's most recent *Travel in London* report explores the idea of "switchable trips".⁵⁹ ⁶⁰ Switchable trips are defined as those which are currently made by car but could theoretically be made by other more



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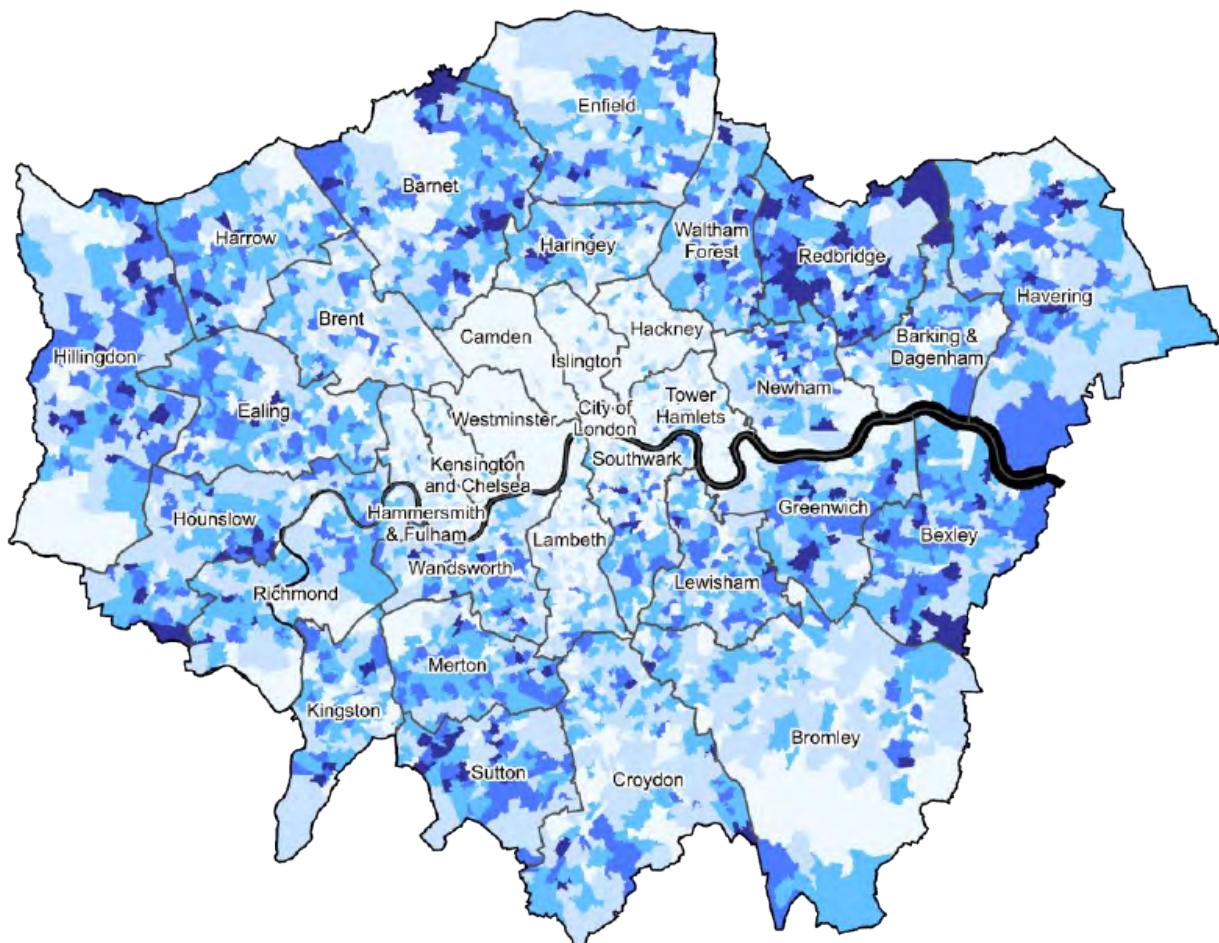
sustainable modes, depending on the availability and suitability of alternatives as well as the propensity of the person making the trip to choose them.⁶¹ TfL modelled these, and found that the trips with a high likelihood of switching include those that have the most competitive alternatives to cars, such as trips made in areas where there are frequent and reliable public transport services. Measures that could be put in place to encourage the use of these may include disincentives to drive, or greater provision of information on sustainable transport options.

The report suggests that the highest number of car trips with a high likelihood of switching are those that have both their origin and destination within outer London – nearly half a million (494,000) daily trips.⁶² Areas with higher numbers of car trips with a high likelihood of switching to sustainable modes include areas in outer east London such as Redbridge, Waltham Forest, Greenwich and Bexley (see Figure 7).⁶³

Hundreds of thousands of daily trips taken in outer London could be switched to more sustainable modes

Figure 7: Number of car trips in each area with high likelihood to switch to a sustainable mode by 2026, according to TfL modelling

■ ≤150
 ■ ≤300
 ■ ≤450
 ■ ≤650
 ■ ≤1,500



Source: Transport for London (2023), Travel in London report 15

Sponsored Case Study: Enterprise car clubs

Operating shared, sustainable mobility from our rental branch in Barnet

Enterprise opened a new rental vehicle location in Barnet in April 2021, following the conversion of a previously empty former pub. This neighbourhood branch was strategically located to provide local residents with a new form of shared, sustainable mobility, whilst linking effectively with other modes of transport in the area. The branch is located on a main road, with the nearest bus stop being almost adjacent allowing travel in less than ten minutes to High Barnet Underground Station and New Barnet mainline station, as well as quick walking and cycling access to local stations and the town centre.

The location currently operates a fleet of up to 350 fully ULEZ compliant vehicles, including both cars and LCVs and which are typically in use by a variety of different customers for over 90% of the time. Enterprise customers are a mixture between local residents, visitors to the area, business including SMEs and public sector entities. However, in Barnet, the overwhelming majority of customers are local residents renting vehicles where they do not own a private vehicle, or a large enough vehicle, or individuals accessing replacement mobility if their own vehicle is unavailable.

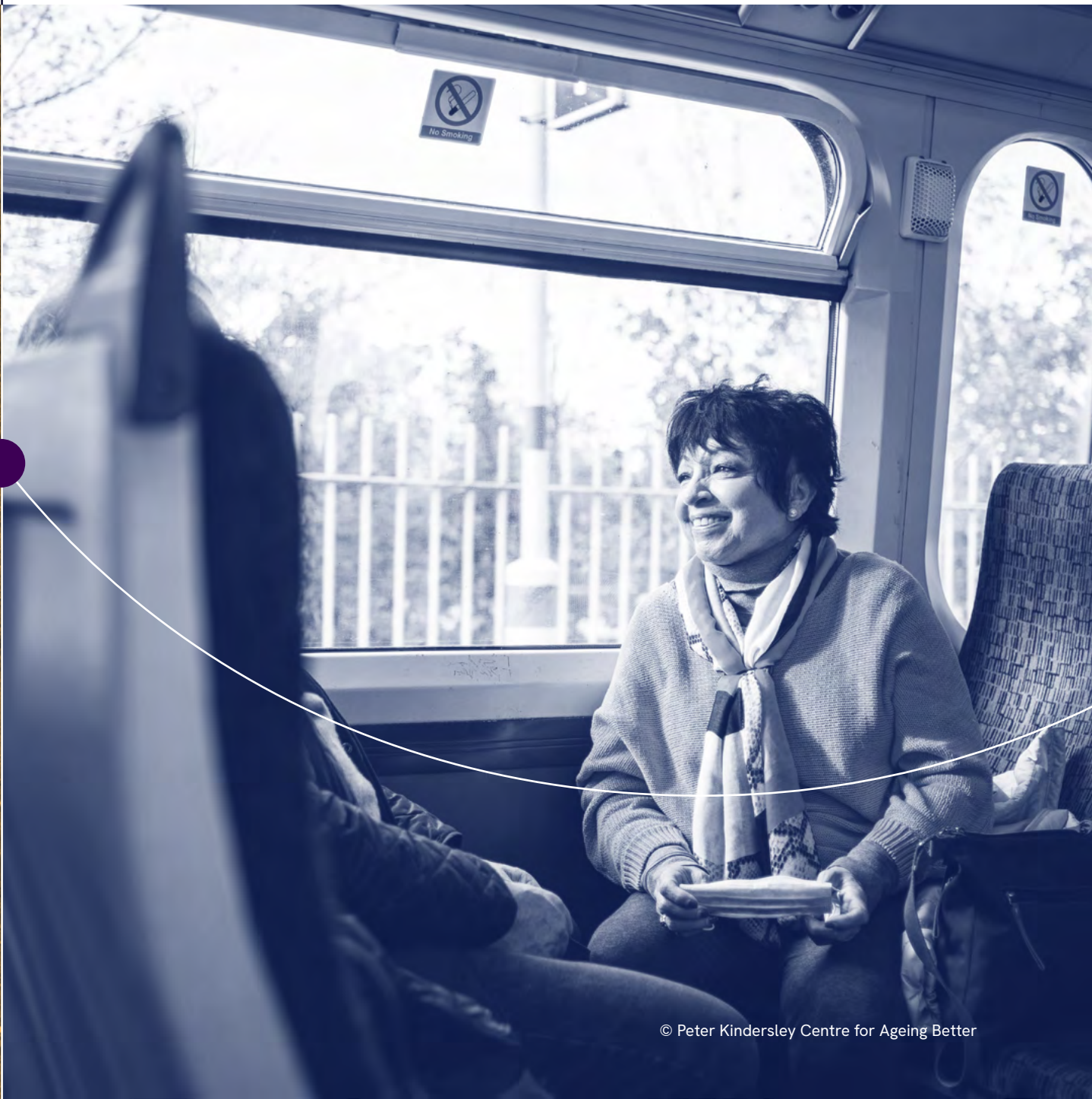
The location also includes two vehicles from the Enterprise Car Club fleet. These automated rental vehicles provide low emission shared access seven days a week, twenty-four hours a day to residents, businesses and visitors, and are also linked to the wider Enterprise Car Club network across outer and inner London.



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Chapter 3

The tools available to improve sustainable travel



Responsibility for policy and funding decisions related to transport sits at different levels of government – UK, regional and local. The UK government sets the overall direction for transport policy in the country and controls national rail services. The Mayor of London (via Transport for London) is responsible for most public transport in the capital, and for maintaining the strategic road network. London’s local authorities are responsible for the upkeep and management of their roads outside the strategic road network, and for improvements to the active travel environment.

What policy levers are available?

Local, regional and national government can influence the travel choices people make by:

- Investing in transport infrastructure through capital spending – including roads and rail lines – or revenue spending, specifically by subsidising public transport fares.
- Investing in maintaining and improving the travel environment – for instance by installing new lighting, improving the condition of the footway, or installing dropped kerbs.
- Restricting where people can use certain transport modes – explicitly (through restrictions on driving or parking) or implicitly (through not providing active or public transport options).
- Changing planning or other regulations – for example, requiring employers to restrict parking spaces or requiring developers to provide cycle storage.
- Changing the rules and legal obligations of drivers and riders – for example, through amendments to the Highway Code concerning which vehicles may be used on the road and at what speed.
- Changing public sector procurement and contracting rules – for example, requiring a certain level of service in rail franchise agreements.
- Providing information to Londoners about the sustainable travel options available to them and the support they can use to access them, including providing training (e.g. cycle training).
- Changing taxes and charges paid by individuals or households for different forms of transport, including vehicle taxation, driving charges, parking charges and public transport fares.

This project will consider most of these levers. The last, taxes and charges paid by individuals, will be considered in Centre for London’s next research deep dive as part of the transport programme, to be published in summer 2023.

The role of central government

The UK government sets the overall direction for transport policy in the UK, which is influenced in various ways. It sets climate targets – a significant metric, since transport accounts for one-quarter of the UK’s carbon emissions.⁶⁴ As part of these commitments, it will ban the sale of petrol and diesel cars by 2030.⁶⁵ It sets fuel duty and road tax for cars and makes the rules about the tax treatment of travel for work. It decides whether to go ahead with big infrastructure projects like High Speed 2. It also controls the Highway Code – particularly relevant to whether e-scooters and other emerging forms of micromobility are allowed on the road.⁶⁶

Although the Mayor of London controls most public transport in London, central government controls many of the national rail services that run through the capital through its contractual arrangements with Network Rail and the train operating companies. This includes the frequency of services, the cost of fares, the standards expected for punctuality and reliability, and

the sanctions when these are not met. Many people in outer London are reliant on these lines, and there have been frequent reports that services have become less frequent or less reliable since the COVID-19 pandemic.⁶⁷

Public funding for transport

Many interventions to increase use of sustainable modes of transport cost money – including both revenue and capital costs. Some changes will create in savings in the future, primarily through productivity or health improvements.

Options to increase funding for active and sustainable transport modes in London include:

- Increasing the costs of using non-sustainable modes. In particular, introducing pay-per-mile road user charging on a London or national basis, or higher parking charges such as a workplace parking levy.
- Increasing central government investment in transport – ideally through funding being devolved directly to regional and local government, rather than through competitive funding pots.
- Allowing the Mayor of London to raise more money in taxes and levies by changing the GLA Act to allow for some fiscal devolution.

It is also possible to raise more money through increased developer contributions and increased public transport fares. However, there are risks involved: if set too high, the former may disincentivise housing development in areas where it is much needed, and the latter is likely to discourage people from using public transport.



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The Mayor of London and GLA

The Mayor of London controls Transport for London (TfL), which runs most public transport in the capital and also controls and funds London's strategic road network.⁶⁸ TfL also runs the Santander cycle hire scheme as well as the Cycleways network of bike routes, most of which are focused on radial travel into central London.

Normally, Transport for London is financially self-sustaining, using fares and other commercial revenue to pay most of its running costs. But sharp decreases in passenger numbers during and after the COVID-19 pandemic meant that it required financial support from central government to continue to operate. After a series of short-term deals, there is now a settlement in place until the end of March 2024.⁶⁹ As part of this settlement, the Mayor has agreed to certain conditions – such as fares rising at the same rate as National Rail. The process of agreeing funding has been acrimonious at times,⁷⁰ and it is unclear how it will develop over the next two years.

Beyond their responsibility for Transport for London, the Mayor of London is able to impose driving charges such as the Congestion Charge or ULEZ. They can also influence transport through their responsibility for planning. For instance, the current London Plan has requirements to restrict the number of car parking spaces in new developments, and provide more cycle parking.⁷¹

Case Study: Public transport subsidies – Bogotá, Colombia

Research has shown that in Bogotá, low-income individuals pay more relative to their income for using the public transport system compared to more affluent individuals.⁷² In 2014, the city of Bogotá implemented a transport subsidy scheme to help people on low incomes gain access to more affordable public transport.⁷³ At that time, the benefit reached up to a 66 per cent discount during off-peak hours.⁷⁴

The public transport system in Bogotá is centred around a Bus Rapid Transit (BRT), along with a feeder system of buses.⁷⁵ The BRT is based on high-capacity buses operating in dedicated bus lanes on specific routes, known as trunk routes.⁷⁶ Feeder buses connect passengers from residential areas to the trunk routes, bringing them to BRT bus stops.⁷⁷

A 2016 World Bank evaluation of the effects of the subsidy on transit system use found that recipients had a 56 per cent increase in monthly trips when compared to normal fare card use.⁷⁸ In 2017, amendments were made to the scheme to ensure the subsidy was effectively targeting the poorest households.⁷⁹ As well as launching a new fare policy, the municipality eliminated transfer surcharges, allowed users to hold a negative balance of up to two trips in their smartcard, and expanded the network of recharging locations, especially in the poorest neighbourhoods.⁸⁰

In February 2020, the number of subsidised travel cards represented around 18 per cent of total trips in the system, with over 614,000 users.⁸¹ A 2022 evaluation of the scheme found that it had a significant positive impact on the total number of trips made by subsidiary beneficiaries, both on weekdays and weekends.⁸²



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Local government

London's local authorities are responsible for the upkeep and management of all their roads, apart from those within the strategic road network (which only covers around five per cent of London's roads). This includes setting rules and charges for all on-street parking. Local authorities control the design and implementation of cycleways on their roads, and can also decide on other changes to make walking and cycling easier or more pleasant – including new pedestrian crossings, improved street lighting, more benches, more greenery, and restrictions on driving in specified places and/or at specified times.^{83 84}

In addition, they can set up cycle parking on public land. Conversely, they can block TfL from introducing cycleways where these are not on strategic roads, though we are unaware of this having occurred in outer London.⁸⁵

Local authorities can also determine whether and under what conditions shared schemes such as car clubs, the e-scooter trial and shared bike services can operate in their borough.⁸⁶ This means that passengers can face artificial boundaries to their travel, such as e-scooters stopping on a borough border. Shared transport providers may also face very different costs in neighbouring boroughs, such as different fees for an on-street car club space.

Case Study: Sustainable Travel Towns – Darlington, Peterborough, and Worcester

In 2004, the towns of Darlington, Peterborough and Worcester won the Department of Transport’s “Sustainable Travel Towns” competition. The three towns jointly received £10 million in funding to implement a range of “soft” transport policies that would encourage more sustainable travel over a five-year period.⁸⁷ “Soft” transport policies are designed to motivate individuals to voluntarily change their travel behaviour to more sustainable modes. In contrast, “hard” policies tend to be more punitive, and can be more difficult to implement due to public opposition and political infeasibility (for example, congestion charging).

Prior to the schemes’ commencement, more than two-thirds of trips were made by car in all three towns.⁸⁸ A significant proportion of car journeys were very short, and within residents’ own towns.

All three towns put in place a range of initiatives to encourage more use of non-car options such as the bus, walking, and cycling – as well as discouraging single-occupancy car use.

Strategies used included:⁸⁹

- Public transport and active travel promotion.
- School and workplace travel planning, which builds on people’s travel needs to develop measures that make it easier to travel to school or work via sustainable modes.
- Large-scale personal travel planning, which aims to deliver targeted transport information directly to individuals via one-on-one conversations, cycling maps or bus timetables – as well as information about relevant subsidies.⁹⁰

A long-term evaluation conducted on behalf of the Department of Transport in 2016 concluded that the Sustainable Travel Towns project was successful in reducing car travel and increasing the use of other modes.⁹¹ Overall, in the three winning towns, there was a reduction in total traffic levels of around two per cent, as well as a reduction of between 7 and 10 per cent in the number of car driver trips per resident.

Although the growth of bus use in Worcester and Peterborough was part of the Sustainable Travel Towns success story, bus use subsequently declined in all three towns. In contrast, the evidence suggests that increases in cycling and walking have sustained, supported by high-quality or improved infrastructure in all three towns and further promotional work through Local Sustainable Transport Fund (LSTF) funding.



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Case Study: Controlled Parking Zones – Vienna, Austria

Vienna’s “Parkraumbewirtschaftung” parking management policy has improved the city’s parking situation, reduced car traffic, and provided positive economic and environmental benefits.

Parking restrictions apply Monday to Friday during the daytime. Revenues from the scheme are earmarked for the city’s transport system, including funds for public transport, road safety measures and municipal neighbourhood garages.⁹²

Between 1993 and 2012, the city rolled out parking restrictions across a number of areas, beginning in the centre and gradually including districts closer to the periphery.⁹³ The outer districts saw a reduction in average parking space occupancy rates from 83 per cent to 60 per cent in the morning, and from 88 per cent to 79 per cent in the evening. There was also a reduction in unauthorised parking by 72 per cent in the morning and 13 per cent in the evening, improving traffic conditions and safety for other transport users.

The city’s parking system was frequently subject to criticism due to individual districts having different parking regulations.⁹⁴ In March 2022, Vienna’s parking permit system expanded to cover the whole city, with standardised fees across all districts.⁹⁵

As well as reducing car traffic, the policy has the additional environmental benefit of reducing pollution and noise. It also supports the economy, increasing footfall by providing more high-turnover parking spaces for customers and businesses.⁹⁶



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Chapter 4

What's holding us back?



New infrastructure, such as changes to the road layout or the railway network, can be very expensive. It seems unlikely that there will be much new investment for London in the next few years. Historically, where there has been new infrastructure investment, it has tended to favour business and commuter travel, prioritising economic over social gains. Some changes to support active travel, such as introducing benches or cycle parking, are relatively less expensive – but still a significant cost for cash-strapped and time-poor local authorities. Without changes to transport infrastructure, many people will continue to rely on their car for much of their travel.

Many of the recommendations in this report are not new. However, this raises the question of why more change has not happened – and why it has occurred in some places rather than others. In this chapter, we explore why.

Barriers to different modes of travel

Public transport

Public transport use is often held back because of the high capital cost of new infrastructure. The costs are highest for major rail projects like the Elizabeth Line, which totalled £19 billion.⁹⁷ Historically, decisions about major public transport investment in Britain have been made according to HM Treasury “Green Book” costings, which place a high value on economic gains from commuter and business travel.⁹⁸ This has led to more investment for London and the South East; it has also led to radial and intercity commuter services being prioritised over local and orbital services used by people on family, caregiving or leisure trips. Some argue that the focus on the business case can stop good schemes from happening.

In the last few years, advocates for London have been concerned that central government’s priority on spending in areas outside London will reduce the capital investment available within London. It is probably too soon to tell what difference this will make to infrastructure spending in the medium term.⁹⁹ Public transport in areas immediately surrounding London tends to be less comprehensive, so improvements to the public transport offered in these areas could have a meaningful effect on people’s travel options in London and further afield.

Bus and tram travel in London is fairly cheap by comparison both to other parts of England and to Tube travel within the capital.¹⁰⁰ This is because TfL subsidises bus use from Tube fares – a broadly redistributive policy, since Tube passengers tend to be wealthier than bus passengers.¹⁰¹ However, this makes it harder for TfL to create new bus routes or increase capacity even where there is demand, since new bus services are unlikely to pay for themselves. Nonetheless, there have been calls to further reduce the cost of bus travel, or even to make it free entirely.¹⁰² In London, this would require additional funding to be made available to Transport for London, through funding or fiscal devolution.

Demand Responsive Transport schemes (DRT: small buses offering on-demand trips) have been trialled in Ealing and Sutton as an alternative to car use. However, they are costly to run, and evaluations have been mixed.¹⁰³ Although results so far are only indicative, it seems unlikely that DRT will become a major part of London’s public transport system in the short term, although it may well be used in less densely populated parts of the capital and areas where there is less congestion. Within London, physical constraints on the size of roads can be a constraint to expanding bus services because of the difficulty of prioritising bus traffic.

Case Study: Trialling Demand Responsive Transport – London Borough of Sutton

Sutton has one of the highest proportions of car ownership of all London boroughs, with 77 per cent of households owning or having access to a private car.¹⁰⁴

As one of only five London boroughs not served by the Underground, an officer working at Sutton’s council stressed that it is the inconvenience of existing public transport options that encourages the use of private cars. Infrequent rail and bus services are particular challenges. The unreliable and inefficient operation of the National Rail network in south London (which serves the area) adds pressure to bus networks and Tube services in other boroughs, since many residents use bus services as a means to bypass their local rail station and get to a more reliable Tube station.¹⁰⁵

The borough has campaigned for new, innovative public transport developments to improve connectivity, such as Demand Responsive Transport (DRT) and tram services. In 2019, TfL launched the “GoSutton” trial for DRT services, run with technology partner ViaVan and bus partner GoAhead.¹⁰⁶ However, the trial was terminated in May 2020 due to the COVID-19 pandemic.

The GoSutton services offered more direct journeys, with the Public Transport Accessibility Index increasing by 29 per cent for residents in the borough.¹⁰⁷ Journey time analysis showed that 73 per cent of GoSutton journeys were quicker than public transport, including waiting and walking times. 60 per cent of respondents to the GoSutton survey who drove said they would use their car less in favour of a demand-responsive bus service.

However, TfL’s analysis of the trial found that there was low take-up, as well as misunderstandings among residents about whom the service was for. Ridership consisted of a small proportion of local populations, with 47 per cent of journeys made using a Freedom Pass (the concessionary travel pass which offers free travel to those with a disability or over 66).¹⁰⁸ There were also concerns around safety at night.¹⁰⁹

Many people we interviewed argued that the trial in Sutton would have been more successful if the DRT services were integrated into the wider public transport network. In particular, the fact that GoSutton did not serve major rail or Tube stations was cited as a limitation of the trial – as was the lack of Oyster card or travelcard integration.

There are a number of other DRT trials happening across the UK. Some suggest that DRT can play a role in meeting demand for orbital routes, but in areas with high rates of congestion it can be difficult to make such routes financially viable for operators.¹¹⁰

Active travel

Active travel improvements usually cost less than major public transport projects, but they mostly fall to local authorities, whose budgets are under severe pressure.¹¹¹ Some of the funding that is available from central or city government is subject to competitive bidding processes, and we have heard that making these applications is time-consuming and inefficient, with local authorities citing uncertainty about future funding as a barrier to efficiency.¹¹² Building segregated cycle lanes for new routes in outer London can be extremely expensive for local authorities. As well as capital funding to install new infrastructure, it is important that funding also exists to maintain it, keeping it both safe and attractive to use. To fund this work, some call for new measures such as directing revenue from LTN-associated traffic cameras to fund sustainable travel investments.

Many organisations have a financial interest in increasing car sales or in building new public transport infrastructure. There is much less scope for profit in increased walking, and few people see “being a pedestrian” in a town or city as part of their identity. As such, it is harder for well-funded advocacy groups to assemble around pedestrian improvements: some charities work in this area but their capacity is inevitably limited. In recent years local air pollution campaign groups have become more prominent, though anecdotally they are more active in inner London than outer London. Organisations dedicated to cycling in the UK have been successful in improving bike infrastructure. However, many of these improvements have been to commuter cycle routes¹¹³ – which risks reinforcing the existing gender imbalance in cycling, as women are more likely to make family or caregiving trips.¹¹⁴

There can be a tension between providing active travel infrastructure (e.g. cycle lanes) and prioritising bus lanes. The appropriate solution is likely to vary depending on local circumstances, with different areas trying different solutions. In the meantime, London TravelWatch is calling on London boroughs to make existing bus lanes 24/7 (except at clearly defined loading times), and to enforce parking restrictions on bus routes to speed up buses.¹¹⁵

Private cars

Interventions that make it harder for people to use private cars – through blocking access, increasing costs or making it harder to park – tend to be controversial. Ideas for implementing them are sometimes blocked. Such objections are often noisy and well organised, but it is important not to exaggerate the scale or longevity of their support. Although LTN schemes were often presented by both proponents and opponents as being new and radical, London has a long history of similar driving restrictions: the first LTN-type scheme was introduced in the 1970s in De Beauvoir, Hackney.¹¹⁶ When the Congestion Charge and inner London ULEZ were introduced in 2003 and 2021 respectively, objections fell back after the schemes were introduced.¹¹⁷ Moreover, if politicians attempt to reverse existing driving-restriction schemes, they can run into serious opposition – this has happened recently in Tower Hamlets.¹¹⁸

31 per cent of households in outer London do not have access to a private car or van, and there will be even more people who do not use their household's vehicles much or at all – for example, because the car is always used by one person for work.¹¹⁹ Moreover, drivers are not necessarily opposed to restrictions or higher costs on cars: Centre for London's polling shows that there is little difference in support for road user charging between drivers and non-drivers.¹²⁰ Research by the Campaign for Better Transport found that half of people (49 per cent) supported the idea of replacing the existing vehicle taxation system with "pay as you drive" (or road user charging) – while only 18 per cent thought it was a bad idea. Support also rose following discussion about what this would mean.¹²¹

Shared schemes

Car club schemes have not attracted the same level of controversy as schemes affecting private cars, but their spread across London is inconsistent.¹²² This is partly due to local variation in demand, but also because car club regulation is a matter for local authorities, whose policies vary. Interviewees told us that the amount of money that operators are expected to pay for a car club bay, and the time taken for a new scheme or bay to be approved, varies considerably between boroughs. In theory, local authorities could offer discounts to operators of shared schemes in order to increase both supply and local awareness of the option – but stretched budgets can make it very difficult to do so. While local authorities can negotiate the fee that car clubs pay to operate in the area, the cost that consumers pay is set by car club companies.

Shared bike and scooter schemes have been more controversial, but as with some car restriction schemes, the nature of people's concerns has changed over time. At the start of the scheme, there was significant opposition to the TfL shared bike docks being installed.¹²³ Today, there seem to be more people lobbying to expand the scheme than lobbying to restrict it.¹²⁴ While serious and valid objections have been raised to undocked bike and scooter schemes – due to vehicles left blocking pavements¹²⁵ – the major barriers to expanding these schemes into outer London seem to be ones of scale and density rather than public opposition. Introducing more safe cycle lanes and providing cycle parking at regular intervals – at least one every 250 metres, according to one expert – could help to increase supply.

Outer London in the Mayor’s Transport Strategy

Sadiq Khan’s 2021 Manifesto promised to “work with TfL on a strategy for the suburbs”¹²⁶ including bus, rapid bus transit and trams. At the time of writing no such strategy has been published. However, the Mayor’s Transport Strategy does include a number of commitments specific to or especially relevant to outer London, including:

- Improving the walking and cycling environment.
- Supporting the provision of car clubs.
- Refocusing bus provision on outer London, especially in areas of high housing growth.
- Considering the introduction of express bus routes to outer London destinations.
- Introducing bus transit networks and considering demand-responsive services.
- Seeking the “metroisation” of some outer London rail services.¹²⁷

While some progress has been made on improvements to walking and cycling infrastructure, there has been less progress on bus expansion. The recently announced “Superloop” orbital bus route may improve this. The COVID-19 pandemic and the financial problems it caused for TfL have made public transport improvements much harder, but the underlying need for more sustainable options has not changed.

An Outer London Transport Strategy, or more detail on outer London in the existing Transport Strategy, could add to the existing Mayor’s commitments. It could:

- Consider proposals for more frequent services (especially during weekends and holidays) to help people use public transport for leisure purposes – as well as supporting people who work atypical hours or shifts.
- Commit to additional funding for the development of sustainable transport infrastructure in outer London, such as dedicated cycle lanes, pedestrian crossings, walkways, and major projects such as improvements to train stations.
- Commit to specific transport interventions that grow connections between different areas of outer London and address its demographics – particularly the needs of elderly residents and families with children – as well as areas outside London.

In producing this strategy, the Mayor should work closely with a variety of organisations including the London boroughs, sub-regional partnerships, active travel and accessibility groups, environmental charities, national government, and private transport operators.



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Who stands to win and lose from change?

All policy changes have advantages and disadvantages. Often these advantages and disadvantages will fall more on particular groups of people – changes which are known as equality impacts. The table below gives some high-level examples of equality impacts, though the specifics will of course vary with each situation. We have not included economic gains and losses, but they are covered elsewhere in the report.

In all cases where public money is spent, there is an opportunity cost in that the money could have been spent elsewhere – perhaps to the benefit of a particular group. Since this is hard to track, we have not included its impact here. We know that climate change will affect some groups more than others, but due to the difficulty of linking local action to global climate outcomes, we have not included this consideration here.

Table 1: Who stands to win and lose from change?

Type of intervention	Groups who might gain	Groups who might lose
Making it more expensive to drive for all cars (e.g. Congestion Charge, flat parking rates)	People most affected by air pollution (children, older people, those with respiratory illnesses) ¹²⁸	People who need to drive (especially older people and those with certain disabilities)
Making it cheaper to drive lower-polluting cars than higher-polluting cars (e.g. ULEZ, graded parking rates)	People most affected by air pollution (children, older people, those with respiratory illnesses)	People who need to drive and live on low incomes (especially older people and those with certain disabilities)
LTNs /modal filters, which restrict through-driving at all times in residential areas	People most affected by air pollution People most affected by pedestrian/vehicle accidents (children and older people)	People who need to drive and whose journeys are time-sensitive (especially those who need to attend medical appointments)
School streets , which restrict driving near schools at certain times	People most affected by air pollution People most affected by pedestrian/vehicle accidents (children and older people)	People who need to drive and whose journeys are time-sensitive (especially those who need to attend medical appointments)
Building new radial transport infrastructure (e.g. trains, bike lanes to the city centre)	People who commute to the city centre (more likely to be male, higher income)	People who park or drive private cars on these routes, as they may have less access to road space
Building new orbital transport infrastructure (e.g. trains, bike lanes between suburban areas)	People who don't commute to the city centre (more likely to be female, lower income)	People who park or drive private cars on these routes, as they may have less access to road space
Building new local cycling infrastructure (e.g. segregated bike lanes and bike parking)	People who cycle (or might cycle) – especially those who are particularly safety conscious, often including women and families	People with physical disabilities (if bike lanes or bike parking spaces block pavement access). We believe this is unlikely in most parts of outer London, as busy “cycle superhighways” are unlikely to be needed.
Improving lighting for active travel and public transport (e.g. on the pavement and near bike parking and bus stops)	Women (due to concerns about safety) Older people (due to age-related decline in vision)	Unlikely to be direct impacts, unless people's homes are impacted by brighter lighting (which can generally be avoided with good design)
Making it more pleasant to walk (e.g. by improving seating, shade, and planting on high streets)	People who need to sit down while walking (particularly older people and those with certain disabilities)	Unlikely to be direct impacts –though planners need to take care not to obstruct wheelchair access on the pavement
Reducing fares on bus and tram	People who are more likely to use these modes (generally people on lower incomes)	Unlikely to be direct impacts (except through opportunity costs)
Reducing fares on Tube and rail	People who are more likely to use these modes (generally people on higher incomes)	Unlikely to be direct impacts (except through opportunity costs)

Case Study: Becontree Estate, London Borough of Barking and Dagenham

The Becontree Estate is the UK's biggest council estate, once described as the largest housing estate in the world.¹²⁹ Built in the interwar period to provide “homes for heroes”, the Becontree Estate was designed with the “garden city” in mind – a model of urban planning that aims to create small cities where the amenities of urban life can be combined with a more rural environment. This led to the creation of a low-density suburban housing development, which the council is considering how best to serve with sustainable transport alternatives to driving.

Council officers at the Borough of Barking and Dagenham told us how the initial design of the Becontree Estate has contributed to high levels of car dependency in the area. Homes in the estate were originally designed to surround local town centres within walking distance, and a tram line was planned to provide links across the area. However, with the tram system not implemented, and local centres no longer serving people well, many households are now dependent on cars to travel the distances required to access key amenities. The prevalence of multi-car households has led to issues with cars being parked either partly or completely on the pavement, creating an unpleasant pedestrian experience.

Officers stressed that a holistic approach is necessary to enable people to take fewer car journeys in the area – one that combines limiting parking spaces with the provision of strong alternative modes of transport. More frequent bus services, cycle hire schemes, and e-scooter hire schemes could enable more people in Becontree to shift away from private car use. In the middle of the estate, the boulevard where a tram line was once imagined currently offers an underused space that could provide opportunities for active travel. With two dual carriageways on either side, the area is currently inaccessible for pedestrians – but could be redesigned to offer space for walking and cycling.



Chapter 5

Best practice for local authorities



In this chapter we highlight some lessons for local authorities seeking to make the case for sustainable travel options.

Making the case for change

Many of the recommendations in this report are not new. In many cases, this is because it is hard to persuade people of the advantages that come with change – especially for interventions that make it harder for people to use their cars.

Every debate is different, but below we outline some steps that decision makers and campaigners have found helpful when making arguments for more sustainable transport. We know that these are already in use in many places.

Structuring the intervention

Replace transport options: Wherever possible, interventions that make it harder or more expensive for people to drive should also make it easier for them to use public or active transport. For example, when the London Congestion Charge was introduced in 2003, it was accompanied by a major increase in bus routes.

Review equality impacts: All interventions need a detailed, site-specific equality impact assessment. Some traffic-calming measures have inadvertently blocked access to dropped kerbs for wheelchair users needing to cross the road – this could have been avoided with a slightly different design.

Making the case for change

Focus on one reason for change: The creation of low-traffic neighbourhoods (LTNs) in London was made more difficult because councils gave multiple reasons for introducing them – pollution, road safety, climate change and congestion – which undermined their case.

Focus on the benefits to local children and families: School streets and play streets, which are explicitly aimed at making children safer and happier, have been much less controversial than LTNs.

Refer to benefits of walking: The majority of Londoners in all social groups walk for at least some journeys every week, making it our most inclusive mode of transport.

Emphasise local precedents: In many cases, LTNs were treated as a new intervention. But there are thousands of long-established modal filters (which stop certain vehicles going down certain roads) in London – many of which are popular locally for making streets quiet and safe.

Communicating the intervention

Encourage people to think about all the ways they travel: Some consultation questionnaires start by asking people about when they walk in their local area, before asking about when they drive. They also avoid categorising anyone as a “driver”, “cyclist”, etc.

Use trusted communicators: For example, some local authorities have asked local doctors or nurses to talk about the benefits of reducing air pollution. Others have asked headteachers to talk about safer streets outside schools. Working with independent charities can be effective too, especially if they have local branches. By joining up communication efforts with these and other bodies – such as Transport for London, the Met Police, and others – local authorities could amplify their messages about the work they are already doing and the changes they are considering.

Acknowledge that some people will lose out: If some people are going to face longer journeys or pay more, it is better to acknowledge this than to undermine trust by insisting that their concerns are groundless.

Improving the active travel environment

Lighting

High-quality lighting has the potential to create a more liveable, sustainable, and visually appealing urban environment for Londoners. There is evidence that a substantial proportion of Londoners, particularly women, feel unsafe in some parts of their neighbourhood at night.¹³⁰ Improving lighting at and around transport hubs – along walkways, cycle ways, and places where people park their micromobility vehicles – would encourage more people to use them.

Safety

The number of people killed or seriously injured in road traffic accidents has fallen substantially over the past two decades. But cyclists and pedestrians still make up more than half of all casualties, with cars and other vehicles being involved in the vast majority of cases.¹³¹ People are more likely to cycle or ride an e-scooter when they perceive it to be safe – safety being considered particularly important by women and those cycling with children.¹³²

Per journey, the risk of being killed or seriously injured while walking or cycling has fallen – but the total number of people killed or seriously injured while cycling was higher in 2020 than a decade earlier. This increase is likely driven by higher rates of cycling.¹³³ The Mayor has committed to reducing the number of deaths and serious injuries on London's roads to zero.

Introducing low-traffic neighbourhoods – which prevent people from driving through a given road or set of roads – can be an effective way of improving safety for pedestrians and cyclists. However, they are only one part of the solution.¹³⁴ Traffic-calming measures such as lower speed limits and speed humps can also contribute to making streets safer for people who walk or use micromobility modes of travel.

Clear passage

Relatively small steps, such as ensuring residential waste bins are kept off the footway where possible and ensuring the maintenance of street trees and privately owned trees and bushes that may take up space on the footway, can play an important role too. Centre for London's ongoing project "Reducing Street Clutter in Central London" will look at this in more detail.

Storage space

For people who cycle or use an e-scooter (or other small vehicle), the availability of easy-to-use parking at home and at their destination points is important. Parking near public transport hubs such as bus stops and train stations enables more people to access the public transport network – so long as there are good cycle lanes between these hubs and their homes.

Reallocating space from private car parking to more sustainable uses

Cars parked on London roads take up approximately 5,000 kilometres of road space, equivalent to the distance from the UK to the US.¹³⁵

To offer more sustainable travel options, local authorities will need to reallocate some space currently given to parked cars. This will be transferred to other uses such as on-street space for cycle hangars, shared micromobility schemes, and car club vehicles.

Develop a clear policy

In line with our earlier report on this topic, *Reclaiming the Kerb*, we recommend that boroughs commit to reallocating a certain portion of parking space every year – even if only one per cent.¹³⁶ This can involve introducing a cap on the number of parking permits issued, using waiting lists for new applications, or limiting eligibility for new residents. Strategies should establish a clear hierarchy of uses and commit to allocating kerbside space on that basis.

Reallocating road space could start with a small trial. Some temporary alternatives (such as parklets) can also be implemented quickly, allowing residents to see the benefits before more permanent measures are installed.

Join up work across teams

Parking has been treated in some local authorities as an amenity for residents, and its enforcement has been considered separately from wider policy decisions about transport (such as reducing car dependency). Many local authorities are moving away from this model, integrating parking enforcement with strategic transport planning.

Evaluate the costs

In 2019-20, about one-quarter of the £3.7 billion that local authorities spent on transport projects was raised from parking revenue.¹³⁷

An alternative or additional source of funding can come from shared vehicle schemes such as shared bikes, e-bikes, and shared cars. Shared operators often pay more than the typical cost of a parking permit for access to these spaces – just £50 per year for a diesel car.¹³⁸ However, any charge ought to be proportionate to the demand for spaces from operators of shared schemes – and local authorities should be aware of the risk that higher charges are passed on to consumers.

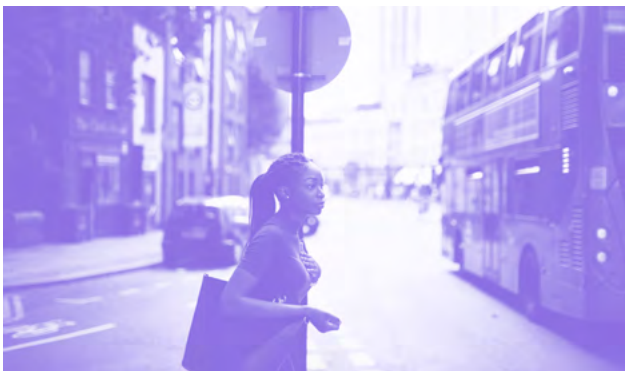
There is also a case for increasing the charges on remaining residential parking permits, as existing permits often do not cover the costs associated with administering them.¹³⁹

What comes next for *Moving with the Times*?

This report is part of *Moving with the Times* – an ambitious programme of research and events from Centre for London that aims to address London’s major transport challenges and shape how people move around our city.

Later in the summer, we will publish the results of an investigation into how the costs of different travel modes within London incentivise Londoners to travel sustainably (or not). The report will also examine the impact of different policies to influence these costs, such as road user charging.

In autumn 2023 we will host an event bringing together experts from across the sector to discuss a new vision for a financially and environmentally sustainable transport system.



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Published by:

Centre for London 2023

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