





What do people need from London's transport in the future?

## INTRODUCTION

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LONDON TRAVELWATCH

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#### Who we are

We are the independent watchdog set up by Parliament to provide a voice for London's travelling public.

We are funded by and accountable to the London Assembly. Our aim is to press for a better travel experience for all those living, working or visiting London, and its surrounding region. Our sister organisation, Transport Focus, covers the rest of Great Britain.

We work with Transport for London (TfL), train companies and others who provide transport services in the capital.

#### Message from Emma Gibson, Director, London TravelWatch

It is safe to say that the pandemic has thrown into question many of the assumptions and predictions about how people will travel in London in the future.

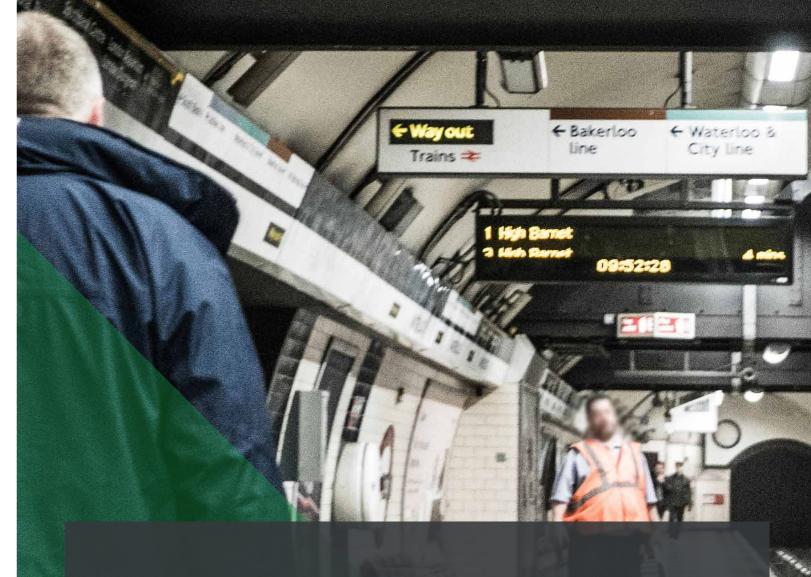
Many have been speculating about which changes will be permanent and what we can do to make sure transport is greener, safer and better for people after the pandemic.

As London's transport watchdog, we wanted to put these questions to the people who use transport in London and those who represent them. That way, we can make sure London's decision-makers know what needs to be prioritised to help those the transport network is there to serve.

Whether we are thinking about the journey of a young person living in outer London who is travelling to college every day; the long-distance commuter who has moved outside London because they can now work from home three days a week and can save money; or the family trying to help their children cycle to school but are worried that it's not safe - we need to make sure their voices are heard.

We also need to recognise the great inequalities that have become apparent in the last year and prioritise making transport accessible and affordable for all.

This is our call to action to London's decision-makers and policy-makers. Transport is an integral part of life in London, and the voice of the travelling public needs to be included in any future vision of London.



#### **Summary**

To help us understand what people need when it comes to transport in London, we asked people via an online survey what problems they had encountered when travelling, and what would help improve their journeys the most.

We also spoke to over 30 of London's representative organisations, user groups, business organisations and London politicians including London Assembly Members as well as the transport industry to get their view on how the future might look, and what people need most from transport. For some, we held semi-structured interviews to capture their views, and others sent us written responses to our questions.

This report is the culmination of these conversations, and has provided an interesting snapshot of the priorities of London's transport users. We have identified six priority areas we think decision-makers should focus on in the coming years. We have been representing people travelling in London for decades, and it was

no surprise that the core issues of service reliability, safety and accessibility came up as top priorities. We also found that many people shared an urgent desire to focus efforts on sustainable, green transport and infrastructure. This includes reducing the harmful impacts of air pollution, which affects Londoners unequally, and ensuring that walking and cycling is encouraged in a safe and equitable way.

The pandemic is the inescapable reality we have all found ourselves living in. For many, staying safe whilst travelling is more important than ever. It was also clear that the inequalities that exist across London continue to play out in transport, with some widening during the pandemic. Now, more than ever, it is essential that we prioritise the needs of London's most under-represented transport users including those who have continued to travel for key work and essential journeys throughout the pandemic.

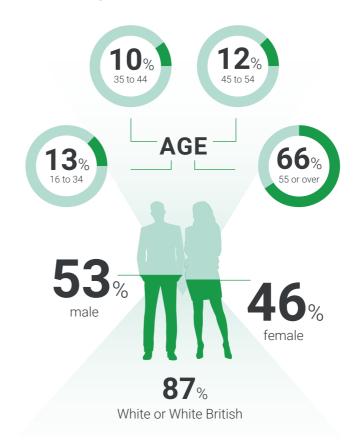
# TRANSPORT SURVEY

#### LONDON TRAVELWATCH

Travelling in London: what people told us

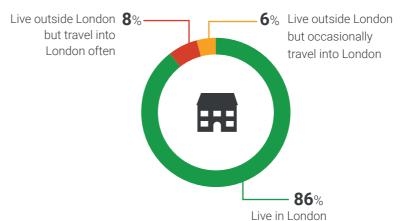
A key part of our future transport research has been to hear views about London's transport from people travelling in London.

Our online survey, which was available to fill out from October to December, invited people to tell us about any problems they have experienced when travelling in London and what they thought would help them most when travelling in the future.



#### Where do respondents live?

We received replies from all London boroughs, as well as the City of London. The majority of responses came from London residents, with **14%** coming from those who live outside London.



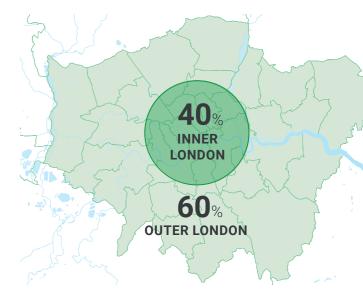


#### Who responded?

Many of the responses came from people in our digital community of transport users, a group of people who travel in London and are happy to share their experiences and opinions on transport issues. We launched the community last year and it is open to anyone. To join, people can sign up to our mailing list to participate in surveys and polls to help with our research.

This was a self-selecting survey, and the age and ethnicity spread of the respondents is not representative of London's demographic make-up. We did, however, try to speak to organisations representing the interests of Black, Asian and Minority Ethnic (BAME) Londoners and young people to help make the research more balanced. In future we are exploring ways we can make our community more diverse and representative.

It is important to note that whilst the term BAME is often used, this is just one collective term which describes a wide range of groups from different ethnic backgrounds, whose experiences are not homogenous. We have chosen to use this term as it is consistent with terminology used by official statistics, Transport for London (TfL) and the Greater London Authority (GLA) to describe Black, Asian and Ethnic Minority groups.





## Can you tell us about any problems you've experienced when travelling in London?

Many of the problems people mentioned in the survey are those that Londoners have experienced for years. However, the impact of Covid-19 has added another dimension, with new issues arising since the pandemic began and some existing issues being made worse. These are some of the key themes that came up in survey responses.

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Pre lockdown – Tube delays, traffic, the usual!
But during lockdown
– people not wearing masks, having enough space.

Female transport user, 25-34

When driving, lots of congestion.
When cycling, narrow and
dangerous roads, lack of protected
lanes. When walking, traffic fumes
and noise. On public transport,
before Covid Tubes were dirty and
packed, buses often stuck in traffic.

Female transport user, 55+



not respected.

Female transport user, 45-54

The behaviour of others

- → Concern about Covid-19 rules not being applied on the transport network. This included face coverings not being worn or worn incorrectly, a lack of social distancing and bus drivers not enforcing the maximum passenger number limit on their bus
- Concerns about other antisocial or illegal behaviour on the transport network.

People not wearing masks, or wearing them to enter, but not once on public transport, has made me avoid using Tube and bus.

Female transport user, 55+



I am concerned about the lack of compliance and enforcement of mask wearing on public transport – especially buses.

Female transport user, 55+

## Unreliable and overcrowded services

→ Delays and cancellations

→ Overcrowding on the bus, Tube, train and Overground, on platforms and in stations

→ School children using regular scheduled buses instead of additional school-only services

→ Increased awareness when there's crowding on the bus because fewer passengers are allowed to board, in order to maintain social distancing

→ Infrastructure works on the street causing bus delays and congestion

→ Traffic jams caused by cycle lanes, low traffic neighbourhoods, roadworks and closures of bridges across the Thames.

11

Although buses are frequent, they are regularly delayed by traffic conditions.

Male transport user, 45-54

"

Before Lockdown it

was often extremely

room to stand,

Central line.

especially on the

Female transport user, 55+

overcrowded - hardly

Daily delays and frequent cancelled trains.

Male transport user, 35-44

11

Before the lockdown trains were often late, cancelled, and overly full.

Female transport user, 45-54

#### A network difficult or impossible to use

- → A lack of communication from transport providers and limited information provided
- → The absence of live updates including when or why services are delayed or cancelled, with no accurate information online
- → An absence of a Londonwide bus map and a lack of next bus indicators at bus stops
- Poor accessibility, including a lack of step free access at Tube and train stations and gaps between platforms and trains
- → Bus drivers not pulling buses into the kerb, making it difficult and dangerous to get on and off.

11\_

Finding out the best route can be a challenge, as can reliable information on the status of each route.

Male transport user, 55+



Lack of step-free access at certain places when travelling with family/friends that need it

Female transport user, 25-34



Too many steps and far too often too big a step from train/bus to platform/kerbside.

Female transport user, 55+

Buses no longer pull up close to the kerb, which means it takes me longer to climb up and down onto and off buses. Not every driver

lowers the plate to help.

Female transport user, 55+



**2** Travelling in London: what people told us

#### What do you think would help you most when travelling around London in the future?

The second question in the survey asked people what would help them most when travelling around London in the future. Many responses offered potential solutions to specific problems experienced. The comments from people travelling in London matched what we found in the other parts of the research, particularly around the themes of feeling safe on public transport, improving air quality, better accessibility and improved information and journey planning options.

There were also calls for better services and links in outer London, which may reflect the fact that during the pandemic more people have been spending a greater amount of time in their local area. It also makes sense when most of the responses came from those in outer London. A future transport network will need to reflect both current and potential future demand for services. particularly outside Central London. If it does not, the risk of a car led future will grow. These are some of the key themes people mentioned would help them most.

#### More and better services

- → Extra and more reliable services on the bus, Tube, train, Overground and Trams
- → More Tube lines and stations, such as the proposed extension of the Bakerloo line into south east London, an expanded tram system and longer trains
- → Better local and orbital services and links, and more express bus services.

A transport system better matched to modern travel patterns. Too many services are still in and out of Central London. Better suburban orbital services are needed.

Male transport user, 55+

More frequent Tubes and buses outside Central London.

Female transport user, 55+



Have more buses travelling East to West in South London.

Female transport user, 55+

New, longer trains. More frequent trains so trains aren't so full. Better East-West transport links. Reduce the amount of cars on the road so buses are faster and more reliable.

Male transport user, 25-34

#### Travelling with reassurance

- → Visible and active staff across the transport network to give reassurance about safety and provide information
- → Greater police presence to deal with enforcement around anti-social and illegal behaviour
- → More enforcement and compliance with Covid rules including wearing face coverings by those who aren't exempt and maintaining social distancing on services
- → Better cycling infrastructure with more, improved and segregated cycle lanes, better signage and joined up cycle infrastructure between boroughs

transport user, 55+

Safe segregated cycle infrastructure in all areas, consistently provided, catering to all people including those using adapted cycles, tricycles, cargo bikes. A joined-up cycle network... Support for people to learn to cycle and hire bikes before buying.

Make police more evident on transport and challenging travellers who are involved in anti-social behaviour.

Male transport user, 55+



More enforcement of rules regarding consumption of alcohol while travelling and more visible action to deal with fare dodgers.

transport user, 55+



Enforcement of mask wearing, so people aren't afraid to take the bus or Tube.

Male transport user, 45-54

Throughout the pandemic, Transport Focus have regularly surveyed passenger journey satisfaction. The most recent results have shown steadily increasing satisfaction for journeys on London buses and the Tube. They found that the ability to keep a safe distance from other passengers is the most important factor in passengers' perceptions of safety across both bus and rail<sup>1</sup>. Continued monitoring of perceptions of safety will be important as more passengers return to the network.



**2** Travelling in London: what people told us

#### Becoming a network for everyone

- → Better accessibility with more lifts and escalators at stations
- → Bus drivers lowering their buses at stops to allow passengers to get on and off safely
- → More toilets available and maintained at stations
- → Better communication and information, including bus maps, better live travel information, next bus indicators, clear signage, access to Wi-Fi and online improvements such as to TfL's journey planner
- → Maintaining concessions such as the Freedom Pass and 60+ Oyster card.

More accessibility &/or escalators; this benefits people with young children, as well as those with a range of mobility difficulties.

transport user 55+

11

A better real time communication system for informing passengers what is actually going on. The current notification system is at best slow and often inaccurate.

Male transport user, 55+

11

Traditional bus map, so I can relate routes to geography.... Spider maps absolutely hopeless and Journey Planner too narrow.

Male transport user, 55+

Having paper maps of bus network. This helps people not online or who can't afford mobile internet connecting.

transport user, 35-44

Male transport user, 55+

transport user 55+

I have just obtained a

Freedom Pass and not on a

high income so this means a

great deal to me being able

to see friends and get out

and about without the high

Retaining the Freedom

Pass, it's often portrayed

as an expensive perk, but

car in the London area.

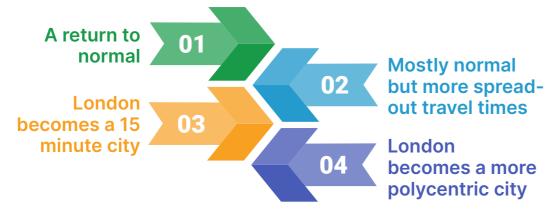
because of it I rarely use my

costs of travel.

#### LONDON TRAVELWATCH

### What might the future look like?





As part of our research, we created four possible 'scenarios' which describe what transport in London might look like in the future, to test out in our interviews. Whatever the 'new normal' is for transport, we wanted to understand which scenario would help people most in the future, to get a sense of the priorities of people using London's public transport, roads and streets. These scenarios were not meant to be black and white predictions of the future. Instead, we wanted to see which aspects of each people thought were more likely or useful to the way people will travel in the future.

The pandemic has had a huge impact on the economy, including the finances of TfL and the rail companies. There is a big question mark over how transport in London will be funded in the future. In two months things may look and feel quite different.

As London's transport watchdog, we want to make sure that this doesn't impact people in a negative way. London will need a clear vision for its transport network and what people need to get around in the future to make sure the lives of people living and travelling in London are not made more difficult.

Overall, we found most people and organisations we spoke to are expecting things to largely return to some sort of normal, with changes to lifestyles and travel habits varying for different types of people and in different parts of London. Many people have benefited from the ability to work from home, while some industries and jobs have seen very little change as they cannot work from home. Lots of people also agreed that many people in London have been travelling around their local area more, a trend that is likely to continue in the future. This makes it even more important that 'active travel' (walking, cycling and public transport) is accessible to all people.



#### **SCENARIO 1**

#### A return to normal

TfL's initial prediction was that, by the end of 2021, things will mostly have returned to normal.

In this scenario, due to the effects of the pandemic and more people working from home, London transport has returned to around 80% of its normal use. This means rail services, the Tube and London's buses are running with about 80% of the normal number of people travelling before the pandemic. There are still busy peak times and less busy off-peak times.

This scenario largely reflects how things used to be, with congestion on London's roads still a problem and many of the past problems remaining such as poor air quality and crowding on peak services.



'The thing about the construction industry is that they go wherever the construction is: your place of work changes from one week to the next. They have to be quite flexible in the way they get to places.'

#### Jaime Powell, Berkeley Group

'The people who are likely to be affected most by the pandemic are low paid people who would be in retail, catering, cleaning, care workers and for those people that need to travel to do their jobs. A number of us can work from home, and a number of those people, particularly of the low paid, will not be able to work from home. They have to be in a place where the work needs to be carried out.'

**Bharat Mehta, Trust for London** 

02

#### **SCENARIO 2**

#### Mostly normal but more spread-out travel times

This scenario is the same as scenario 1, but instead of the normal busy peak times we are used to seeing in London (morning and evening rush hours) people make journeys at times which are spread throughout the day and week. This is because workplaces and employers are more flexible about when their employees come into the office, with many choosing to continue to work from home.

More workers are only travelling in a few days a week or coming in to work at different times of the day, and services are less busy than they used to be.



'With a five-day week commute currently consigned to history, and the very real possibility of part-time season tickets, we must prepare for change, most likely via flattened peak time demand that remains in place for much of the day (similar volume, in time, but spread in a way it currently is not, with quieter peaks and work from home Fridays).'

Go-Ahead London, written response

#### **SCENARIO 3**

#### London becomes a 15 minute city

In this scenario Central London becomes much less of a focus. People are staying more in their local areas, boroughs or nearby towns to do daily activities like work, shopping, going to school, college or university or to see friends and family.

There is still travel into Central London but for most people this is usually when they are making trips for leisure activities, to meet up with people who don't live near them or for the occasional business trip.

In this scenario TfL focus on making local areas and outer London areas easier to get around. This means better cycle infrastructure and better streets and pavements for pedestrians in towns and local areas.



'The 15 minute neighbourhoods concept is to give people the option to live locally, not the requirement. Currently, too many are trapped in car-dependency because they do not have the option of meeting their needs locally.'

Sustrans, written response

#### 04

#### **SCENARIO 4**

#### London becomes a more polycentric city

In this scenario, instead of having one big centre of the city (Central London) as the most important area for work and travel, we now have multiple urban centres across outer and inner London playing a bigger role in the economy. There is now more travel around London and in outer London areas, with people moving between different parts of the city without going first into Central London.

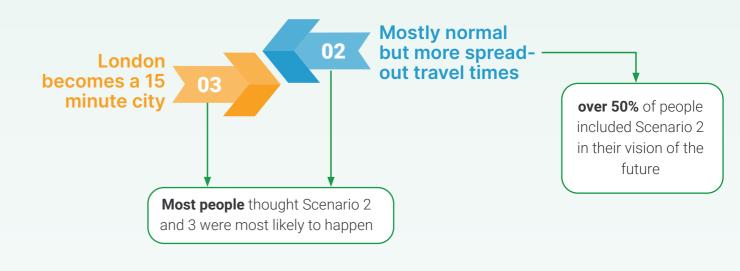
To meet these changing travel patterns, TfL focus on providing better bus and rail services which connect different parts of outer London without people having to go into the centre to make connections. There may also be better cycle connections between outer London areas.



'In terms of scenarios 3 and 4, I thought this was really great for people with caring responsibilities who are more likely to do trips within their local area rather than go from the suburbs into central London. People with caring responsibilities also need better and quicker transport for going around the outskirts and that would also save them a lot of time.'

Zhané Edwards, Child Poverty Action Group

#### What did people think of these scenarios?





When Scenario 1 was chosen it was often paired with Scenario 2, usually because whilst travel patterns will be different for many people in future, for others they will remain unchanged.

#### London becomes a 15 minute city



When Scenario 3 was chosen, it was often paired with 4, because people thought a rise in active travel would happen in local areas, and outer London centres may become more of a focus for jobs and shopping.





### LONDON TRAVELWATCH

# OUR PRIORITIES FOR 2021 AND BEYOND

- Priority 1: **On the street**
- Priority 2: **Feeling safe**
- Priority 3: **The bus**
- Priority 4: **Outer London**
- Priority 5: **Reflect changing lifestyles**
- Priority 6: **Embracing new solutions**

#### On the street

Travel in London is not just about the part of the journey on the bus, Tube or train. It is a door-to-door experience, which starts when you leave your home and ends when you arrive back home. Whether waiting for a bus, walking to the shops or hailing a cab, the street must be shared with different people and different types of transport.

The street is currently the setting of the most exciting but divisive debates in transport. London's streets have recently been the subject of TfL's Streetspace programme, which has sought to encourage the shift to active travel by allowing more priority space for walking, cycling and public transport.

It is essential that London moves away from car dependency and prioritises sustainable transport. Our research showed that how this is done, particularly by making sure that the streets are designed in an inclusive way, is the most important factor for their success.



about it and invest in it.'

Kirsty Hoyle, Transport for All

of participants raised issues with **Streetspace** 



In a survey by Inclusion London, over 60% of disabled people questioned said they had struggled to access food, medicine and necessities during the pandemic.

The issues are wide-ranging and interconnecting. Some disabled people who are visually impaired, for example, no longer feel safe going out to shops as there is a lack of social distancing infrastructure in place2.

#### **Inclusive policy-making**

Another key priority that came out of our discussions was the need to make sure that changes on the street are inclusive and equitable. This means everyone is considered in policy making decisions, and policies seek to address inequality so everyone can participate and benefit. Everyone should have the ability to walk and cycle as part of their journeys. However, this varies greatly depending on where you live, your income and your access to safe infrastructure. These barriers disproportionately affect lower-income Londoners, women, disabled people, some BAME groups and those who live in areas with poor transport connections.

We also found that different groups may have different concerns. We found in our focus group with young people that a lack of access to secure bike storage, for example, prevents many from participating. They were put off trying out cycling by the fear of having their bikes stolen because there is nowhere to store them.

'Many people can't afford or don't have access to bikes and are too far from their destination to walk as an alternative to the rising costs of travel.'

Focus group participant, Partnership for Young London

'More support, in the form of cycle skills, confidence, cycle storage and economic subsidy, is needed to ensure the benefits of cycling can reach everyone equitably.' Sustrans, written response

'[We] advocate for better connectivity into central London, because we know that communities of colour have less connectivity into central London, they pay disproportionately more for travel compared to wealthier communities.'

**Runnymede Trust response** 

In London, there is a **higher proportion of men cycling** than women<sup>4</sup>

A higher proportion of white people cycle than BAME people<sup>4</sup>

A higher proportion of those aged **24-44 cycle** than older or younger people<sup>4</sup>



#### **Prioritise active travel**

What was clear from our discussions is that active travel – walking, cycling and public transport - needs to be prioritised when designing and planning the physical infrastructure of London's streets. The most common mode of transport used in London is walking yet pedestrians often face the worst barriers on the street. Vision Zero, which aims to cut the number of deaths and serious injuries on London's streets, is key to tackling this, but improvements also need to be made to pedestrian infrastructure. Too often pavements are uneven, poorly maintained or have difficult crossings that prioritise cars and not people. Sometimes the infrastructure that's available is not accessible either. For example, some cycle lanes are too narrow to be used by those with non-standard cycles. Pedestrians, cyclists and bus users should be equally considered and given the space they need to travel safely.

'I am always surprised, when out with kids, pram, scooter or bikes, how hostile London is for pedestrians. In Germany, generally, you will find a dropped kerb at any corner of a road and on the other side too.'

Jemima Hartshorn, Mums for Lungs

'I think there are quite a lot of other people who would like to cycle but are still very fearful and the infrastructure that's in place doesn't give them enough confidence to cycle.'

Caroline Pidgeon, London Assembly Member

Walking accounted for 35% of trips in 2019

In 2020, this was nearly 50% (Probably because the pandemic saw more local journeys)<sup>5</sup>



#### Feeling safe

Feeling safe when travelling was a key theme in our research. For transport users, safe means a variety of things. There is feeling safe in the physical sense such as feeling safe from crime; safety in terms of your own personal security; and also being able to safely move across roads, station platforms and when boarding buses.

There is also feeling safe in terms of your health. In the short term, this might mean avoiding contact with Covid-19 until the vaccine offers widespread protection, achieved by mask wearing compliance and physical distancing. In the long term, it is cleaning up the air we breathe and reducing emissions, which is having a lifethreatening impact on Londoners.

The pandemic has highlighted how important it is to prioritise health in transport, as certain groups have been more exposed to the risk of the virus. We have also seen how the consequences of air pollution unfairly impacts those least likely to cause it. Safety, across all meanings of the word, has risen higher up the agenda in recent years. Everyone deserves





#### **Air quality** and pollution

In recent years there have been significant strides forward in tackling the air quality crisis in London. Policies such as the Ultra Low Emission Zone (ULEZ) have succeeded in reducing vehicle emissions. However, most of London still exceeds the World Health Organisation limit for particulate matter and more than 100,000 Londoners still live in areas that exceed the legal limits for air pollution.

We know this risk unfairly falls on those who are not responsible for the high levels of pollution, including children, public transport users and those in areas of high deprivation. This injustice came up in many of the conversations we had. It is essential that policy makers address these huge inequities so that everyone has an equal opportunity to live and travel in safe conditions.

'The problems of a car dominated, car-led recovery is all the negative impacts it brings for lots of people, for communities as a whole, and for people with health issues specifically. It is well documented that air pollution, road danger and so on affect the poorest people most. And they're people who cannot afford cars. So the effect falls disproportionately on people who don't contribute to the problem.'

Silviya Barrett, Campaign for Better Transport

'Poor air quality disproportionately affects working class communities of colour. The Runnymede Trust see air quality as a racial justice and class justice issue.'

Runnymede Trust response

'We regularly hear from people who are concerned about cycling, fearing it exposes them to high levels of air pollution from cars. They are worried about their health, naturally, and several people have told us that they developed wheezing as a result of cycling or running in London.'

Jemima Hartshorn, Mums for Lungs

'Health impacts are more wide reaching than previously thought – not just respiratory. Lockdown had given a taste of cleaner air.'

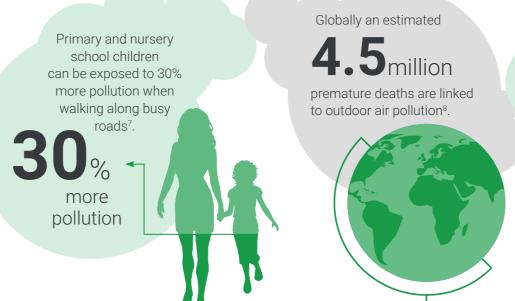
Caroline Pidgeon, London Assembly Member

'We really need to be thinking about what air pollution does, what it costs society. That someone's decision to drive a local journey rather than walk or cycle it or take a bus actually decreases the ability of other people, other Londoners to get around under their own steam.'

Caroline Russell, London Assembly Member

'Too many cars on the street and the air is really awful from the pollution. I sometimes feel sick walking near the roads.'

Female transport user, 45-54





die early each year in London due to long-term exposure to air pollution<sup>9</sup>.

#### **Using public transport during** a pandemic

Many of those we spoke to raised concerns that avoiding public transport at busy times has not been possible for a lot of people. In ordinary times, evidence shows us that certain groups are more likely to feel worried or nervous about using public transport due to fears around safety. For example, some women are particularly careful when travelling alone or at night.

This has been worsened by the threat of Covid-19, with people more aware than ever of their personal space when travelling. During the pandemic, key workers and those who cannot work from home have faced greater risk. We also found personal safety to be an incredibly important issue for young people travelling in the last year. For transport users, reassurances about safety and hygiene measures, how busy train and Tube services are, and the ability to socially distance has never been more important.

'I think we're seeing some permanent changes in the types of information that customers want, so there is much more hunger and appetite now from customers to understand how busy trains are going to be, what are the measures that operators are doing, so making sure that giving customers reassurance that cleaning regimes are in place.

Jason Webb, Rail Delivery Group

'More enforcement is needed on the bus, not only for the protection of bus drivers, but also for the protection of individuals boarding the bus. There have been various times where people will board without masks and start coughing, which makes me personally not want to go on the bus to begin with.'

Focus group participant, Partnership for Young London

'Lack of social distancing - overcrowded trains/buses, and no enforcement on the mask rule meaning there are always many people without masks which makes me feel uncomfortable.

Female transport user, 16-24

#### Some transport users are at greater risk

Something that became clear early in the pandemic was the disproportionate risk for certain groups of people if exposed to Covid-19. For example, there is a higher risk of getting seriously ill for some BAME groups and older and disabled people.

It is also apparent that a 'class divide' exists. Many parts of the network which have remained busy throughout the three lockdowns are in areas of London with higher numbers of key workers, shift workers, construction workers and trade workers, who can't work from home and who tend to earn less than those who can. Other people such as carers and those attending medical appointments have also been more exposed to risk.

Many of the inequalities that predated the pandemic have been made worse. This year has been a wake-up call for transport policy-makers. It is key that we focus on the voices of underrepresented transport users, many of whom had greater concern about safety before the pandemic, taking particular care to understand how concerns about safety intersect with wider issues and barriers to getting around. It is also essential to remember that these inequalities are inter-sectional. For example, nearly half of London's disabled population are from BAME backgrounds. meaning disabled people of colour may face even greater risk when travelling.

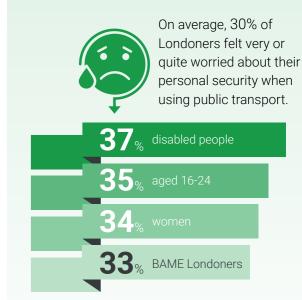
In May 2020, 65% of BAME women and **74% of BAME men** working outside the home feared for their health when going out to work<sup>11</sup>.



Research from the Runnymede Trust found that Black and ethnic minority communities are overexposed and under-protected. They are more likely to be working outside their home, more likely to be using public transport and more likely to be working in key worker roles<sup>10</sup>.

'We've got overcrowding on buses which, with low mask compliance, could cause fear of using transport particularly among people from a BAME background who are higher risk of contracting Covid and becoming seriously ill.'

> Zhané Edwards, Child Poverty **Action Group**



This was markedly higher for disabled people, those aged 16-24 women and BAME Londoners<sup>15</sup>.

Areas of higher deprivation have seen a higher number of cases and deaths, reflecting how pre-existing socio-economic disparities have played out in the pandemic. A study by City Hall's Intelligence Unit last summer found that the highest Covid-19 death rate in London is an area of Newham, where 82% of the population are BAME<sup>12</sup>.

Newham also has the highest excess death rate in Britain at 54% above average<sup>13</sup>.

Some of the busiest stations during the pandemic, Stratford, West Ham and Canning Town, are located in Newham, where large numbers of workers have continued to travel throughout the pandemic<sup>14</sup>.

#### The bus

The bus is a key service for London and came up a lot in our conversations about the future. It is often the most accessible and affordable choice, and more people travel on the bus than rail or the Tube. In pre-pandemic times there were over 6 million bus journeys a day.

Despite this, bus users have been historically under-represented compared to users of other public transport such as rail or the Tube. The bus is used most by lower income Londoners, including many key workers who have been keeping the capital running during the pandemic. It is essential that the financial risk posed to TfL due to the pandemic does not reduce the investment in London's buses, which provide a lifeline to many people and will be a key in meeting sustainable transport targets in the future. Good progress is being made in bringing London's buses up to low-emission standards, and future electrification will make it an even greener option, but the bus also needs to be prioritised on London's streets.

## Make the bus fast and reliable

Time and time again, bus users put journey time and reliability as their top priorities, and our research again confirms this. Unfortunately, in recent years bus journey times have hit historic lows. At a time when more people need to be enticed away from their cars to choose public transport, poor bus performance puts people off.

The solution to this problem is the prioritising of buses on London's streets. The debate around the allocation of road space between different types of transport has increased with the roll out of the Streetspace scheme. But it is essential that bus priority such as 24/7 bus lanes is brought in alongside improvements to the street to encourage safe walking and cycling.

If buses are prioritised on London's roads, they will provide faster journey times and be a more reliable option. With its commitment to zero emission vehicles, the bus is already at the heart of TfL's sustainability plans, but this must be coupled with a prioritisation of the bus on London's streets.



'Many of our members have relied on public transport, particularly buses. We are concerned that they may be reduced in frequency if there is falling demand.'

London Forum of Amenity and Civic societies, written response

'Buses are cost-effective, demand responsive and efficient
people movers. The case for the bus is arguably stronger
than it has ever been and it is imperative we quickly reduce
modal shift from public to private transport. Any post-Covid
recovery plan should promote rebuilding back better, based on
public transport commutes that are clean, accessible and affordable.'

Go-Ahead London, written response

'Delays due to driver instructed to wait a while to even out the service. Secondly, bus destinations are changed unexpectedly leading to delays in case one has an important appointment. This makes bus unreliable.'

Female transport user, 55+

Buses emit **less air pollution** than the equivalent number of car journeys



A fully loaded doubledecker bus can take up to 75 cars off the road<sup>18</sup>.

In 2019/20 average bus speeds were only **9.3 miles per hour** for the third successive year<sup>16</sup>.





As part of a trial from 13 September 2020, most bus lanes on TfL roads now operate **24 hours a day, 7 days a week**. We want more bus lanes implemented on borough roads too<sup>17</sup>.

#### **Keep it affordable**

The great advantage of the bus is that fares are kept relatively low compared to most other transport options. This is essential as bus users tend to be on lower incomes than other modes, particularly rail users who tend to earn higher incomes. Our conversations highlighted how the Hopper Fare has been a great help to many passengers, particularly for those on lower incomes.

The importance of concessionary schemes was another key theme, as they provide vital access to jobs, education and social interaction for many Londoners. Last year we campaigned to keep the Zip card as a lifeline for young people, particularly those living in poverty. Concessions such as the Zip card, 60+ Oyster card and Freedom Pass are critical for younger and older Londoners. Concessions also help keep car ownership levels low.

Affordability of the bus is even more important in the wake of the current economic crisis faced by London. Poverty and inequality have worsened during the pandemic, with older and younger Londoners more likely to be out of work long-term and families struggling due to loss of income. Keeping bus fares as low as possible is key to ensuring that the bus is available for everyone to use and to provide an attractive alternative to using a private car.



'We would like more policies like that of the Hopper fare which reduces travel costs for those on low incomes especially as people on low incomes are more likely to travel using a bus.'

Zhané Edwards, Child Poverty Action Group

'Imperative to maintain Freedom passes and free travel for school children.'

Female transport user 55+

'Please continue allowing the Freedom Pass to be used: without it I would be house-bound most of the month!'

Male transport user, 55+

'Bus hopper fare has been key in allowing flexibility, and really helps the night-time workers. We know in particular there are jobs that you're much more likely to be paid less if you work at night for doing the same job.'

Amy Lamé, London Night Czar

## A key service for under-represented transport users

Across the UK and London, the bus is the mode of choice for many people. We know that the bus is used more often by women than by men; by the older and younger rather than the middle aged; by those with lower-income rather than higher-income; by disabled people more often than non-disabled; and by ethnic minorities, particularly black people. Many journeys made by bus are not just to get to work but for caring responsibilities, health purposes, shopping and often involve lots of stop-offs along the way – particularly for women and those with children.

These transport users have historically had a lower-profile and been less well represented in transport policy conversations. They are all more likely to use the bus, and many will have no choice apart from the bus, yet we know very little about what would help them most. We found in our research that more needs to be done to represent these key user groups to make sure the transport network works for everyone.

Four in five key workers in the education,

health and social care industries are women<sup>23</sup>

'The conversation [about travel choices] too often hinges on the assumption that people have an alternative.'

Focus group participant, Partnership for Young London

'The hopper fare is so good for women. You're leaving work, you're picking up a bit of shopping, then you're hopping on the bus, picking up the kids from school, get the kids on the bus, go home. It's that kind of flexibility and the way that women travel that is why the Hopper Fare has been so brilliant.'

Amy Lamé, London Night Czar



**Hopper** 

journeys

of London's children are living in poverty, which is why keeping the Zip card is essential.

That's **800,000 children living in poverty** – more than at any time since the data series began in 1994/5<sup>20</sup>.

The Financial Conduct Authority found that people born between 1946 and 1964 are **just as likely** as 20 to 39-year-olds **to have been made redundant** during the pandemic<sup>19</sup>.

Bus use is noticeably higher in BAME groups of women take the bus at least - 65% use the bus at least once a week once a week compared to 57% compared to 56% of white Londoners<sup>21</sup>. of men. Women are also less This is even higher for **black Londoners**, of likely to cycle or travel by train, whom **73% use the bus** at least once per Tube or motorbike<sup>25</sup> week, much higher than other ethnic groups<sup>22</sup>. Women are more likely to use the bus **Women** in London take a greater number of trips on a weekday than men (On average, that's 8% more of key workers trips per day are **women** than men)<sup>24</sup>

As of 12 September 2019, 368 million Hopper journeys had been made since its launch<sup>21</sup>.

#### **Outer London**

London is not the same everywhere, and strategies for the future will need to reflect the different transport challenges facing inner and outer London. For many, outer London is defined by poorer public transport connectivity, higher car ownership and a lack of transport options to other parts of outer London.

The challenge of shifting away from private car use will therefore be even greater in outer London and will require a long-term strategy focussing on several potential solutions. Better buses will clearly have to be a key part of efforts to encourage people away from their cars. Accessibility improvements on the transport network will also be crucial to remove barriers from many people who cannot currently use public transport. New personal transport options and walking and cycling infrastructure will also offer exciting opportunities and are likely to only increase in popularity.

To highlight the challenges facing outer London and potential answers to them, we will look at the example of the Borough of Harrow in north west London, which came up in a number of conversations as part of our research.

#### **Better bus**

In outer London, restoring confidence in the bus will be key to creating a shift away from car use. Better services across boroughs and orbital routes that go around London rather than into the centre have the potential to open up more sustainable travel possibilities in outer London. Better orbital bus services can connect transport interchanges in neighbouring boroughs, making it easier to get around for work, education, healthcare and shopping. More express bus routes could be provided in London, which have fewer stops and faster journey times. In Harrow, for example, route X140 provides key links between Harrow and Heathrow Airport, stopping in other key outer London locations.

'In terms of public transport London has great radial links out from the centre, but the cross-radial links further out are not great. Currently, if you want to use public transport you have to travel into central London to interchange in order to make a cross town journey beyond zone 3. Because of this the car is still viewed by many living further out as a better alternative.'

Jaime Powell, Berkeley Group

'In the context of further education (rather than higher education where people may be travelling in and out of central London) and skills based training, it was very much about how you could enhance orbital, crossborough transport links because transport access for learners is likely to be an issue. And I think the same would go for those in lower income, physical or peripatetic jobs, for example in the care market, where people are likely to be living, travelling and working in neighbouring boroughs.'

Alison Moore, London Assembly Member

'We used to have a hail and ride 'hopper' bus from the shopping centre around the local streets, really miss that service as it was so easy to get shopping home, seems everything is geared towards people having access to cars now.'

Female transport user, 55+

68%

of outer London households own a car

40%

of inner London households own a car<sup>27</sup>.



Research by Transport Focus revealed that once Covid-19 no longer poses a significant risk, 40% of people in London said that they will drive more than they did before, compared to 33% nationally<sup>26</sup>.

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#### **Increased accessibility**

Accessibility is key in making the transport network more useable in outer London, and will help to move people away from high car dependence.

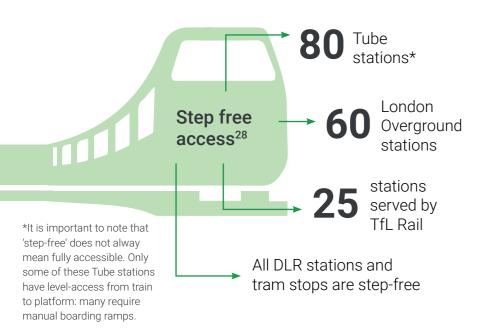
In our survey responses and conversations, we picked up a problem with a number of Tube stations in the Harrow area which have either partial or no step-free access. In the case of Stanmore station, which is only partially step-free, this is the closest station to a busy hospital. Improved step-free access would encourage people to travel to the hospital via public transport. This problem is not unique to Harrow and examples can be found across London, with a lack of access excluding a large number of potential passengers from the public transport network.

'We cannot encourage people to come to the [Royal National Orthopaedic] hospital by public transport, because we don't have step-free access [at Stanmore station] so they have to drive to it. If we're going to be joined up about this and we want people to use public transport you have to enable them to be able to do it.'

Bob Blackman, MP for Harrow East

'Not all tube stations are accessible which makes travelling for families with young children quite difficult.'

Zhané Edwards, Child Poverty Action Group



#### More active travel options

Another key challenge in outer London is encouraging more active travel, creating safe routes between town centres, places of education and residential neighbourhoods. Many people have been walking more throughout the lockdowns, and this can be further encouraged by creating the links and infrastructure to make active travel easy and convenient. As with the street's priority, this should be done in a way that is inclusive and collaborative with local residents. There is also a role to play for micro personalised transport, whether that is a bike, e-bike or e-scooter. If this is planned for carefully, it will allow for individual flexibility without adding to car traffic on the roads.

Only 60% of journeys are done on foot, by cycle or using public transport within outer London, with cars currently being used for the remaining 40%.

"

'In my borough, if you want to go east to west into London not a problem. If you want to go north to south, it's a nightmare. And that's where personalised transport comes into play, to provide that flexibility.

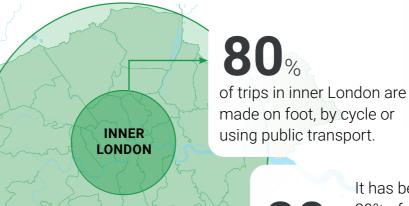
Keith Prince, London Assembly

'It is clear that more investment in orbital and local journeys outside central London needs to take place and should be a consideration for public transport (particularly buses) and cycle route planning.'

Sustrans, written response



In recent research done by FareCity, with sixth form students at Northolt High School, nearly 70% of the students surveyed said that ease and convenience was key when choosing their mode of travel, rating higher than speed, cost and safety<sup>29</sup>.



**OUTER LONDON** 

It has been calculated that about 80% of car journeys in outer London 80% of car journeys in outer Lor are short enough to feasibly be switched to active, efficient and sustainable modes now30.

#### Reflect changing lifestyles

Covid-19 has accelerated many existing employment and lifestyle trends. This has included a sharp increase in the number of people working from home, which has been a revolutionary change for many. Post-pandemic, many temporary changes in society may become permanent and so planning a transport network to assist this change will be crucial. We found in our conversations that what people need is flexibility and better options that reflect changing lifestyles.

Despite the huge changes for some, many people cannot work from home and core services will need to still support journeys at peak times. Careful consideration of the different needs of London's transport users will be needed.



## Flexible options matching passenger needs

The working from home revolution has been a striking consequence of the pandemic. However, it was clear in our research that there was a big question as to how much working from home will continue and how much of the typical 9-5 journey will return. A common view was that people will still commute but do so less frequently and, even when they do, they may decide to do so outside of the traditional peak hours.

If such a change were to happen, a more consistent service pattern with fewer peak hour vehicles might better serve those who travel at different times of the day. Season tickets, already falling in demand pre-Covid, will need to reflect the flexible, part-time work pattern of many passengers. They will also need to be attractive enough to ensure that public – rather than private – transport remains the default option for those who travel. There is already a recognition within the rail industry that changes need to be made.

The pandemic has highlighted that the option of working from home only includes certain jobs and sectors and is often only available for those in better paid jobs. In industries such as construction, retail and catering, along with much of the night-time economy, the option of working from home simply does not exist. So, whilst some travel patterns may change, core services that help early morning and evening peak workers to get around the city must be protected.



'We will try and make rail as attractive as we can. Things like flexi seasons should be attractive to people changing their commuting habits. Season tickets weren't fit for purpose for many commuters really even before the pandemic.'

#### Billy Denyer, Rail Delivery Group

'London will still be a hub for face-to-face interactions, but perhaps more people will be coming into London less frequently and that would change who the passengers are and what they want from public transport.'

#### Adam Tyndall, London First

'People will want to return to normal, and there will still be a general shift towards what people will consider to be normal but also retain some of the positives that we've gained through this new way of working.'

Spencer Palmer, London Councils



### Longer distance commuting

In a changed landscape where for some Londoners, a daily commute becomes the exception rather than the norm, the option of living further from the workplace might become more of an attractive option. This could encourage moves to areas where property prices are more affordable. For those who commute into central London this may mean moving further into the suburbs or even moving outside London entirely. This possible growth of the London commuter belt could lead to a potentially expanded labour pool for the capital, bringing in workers from towns and cities further away from London. Again, if this happens, passengers will be better served by more flexible ticketing options.

'If you are coming in you might choose to come in from further afield. There is an issue that London is still an unaffordable city for many people. Many people on lower incomes, if they want a decent place to live they already have had to go further out. This will add weight to that.

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Alex Williams, Director of City Planning Transport for London

73,950
Homes bought this year

A Hamptons report has found that 73,950 homes were bought in 2020 by people moving out of London: a 4 year high<sup>33</sup>.

Research by TotalJobs found:

38%

of Londoners report that their job commitments had previously stopped them moving out of the city<sup>34</sup>.

43%

say that flexible working offered by their employer would encourage them to move away from London<sup>34</sup>.

## A network for all journeys

London's transport network will need to reflect broader changes in society such as the rise of online shopping and working from home, but also social changes such as the growing number of unpaid carers and an ageing population. The way people travel differs according to occupation and journey purpose and may require different responses. There are many who travel for unpaid work such as caring or volunteering, as well as people with different shift patterns and who travel during the night. In this case, services such as the Night Tube prove invaluable.

We need to remind ourselves that whilst much of the focus has been on the homeworking revolution, the majority of journeys are not to paid work. Journeys to get to places of education, social care duties and health appointments will continue to take place at all times. Travelling for the purpose of social events, entertainment, shopping and leisure will also return soon and the transport network needs to be ready for this too.

'The cultural, social, leisure assets that London affords I think have been sorely missed by people over the last six months. And it really wouldn't surprise me if there is a resurgence of people just getting out to appreciate a little bit more about the amazing city that we have on our doorstep.'

Mark Evers, Chief Customer Officer, Transport for London

'[night-time workers] These are often the people that are hidden, that we don't see and we might not necessarily think about when we are planning for our cities, so that's part of my job – to make sure that these people are represented.'

Amy Lamé, London Night Czar

'There's obviously a big focus on working from home and people needing to travel less for work but that's just a small proportion of all the journeys made. There are many journeys for other purposes including school run, leisure, retail and there's some scale down in the demand for these with online shopping and entertainment at home. But I feel like people will want to go out once they have these options.'

Silviya Barrett, Campaign for Better Transport



## Embracing new solutions

London has always been eager to experiment with innovative solutions to long-standing problems. In transport, there is lots of scope for London's transport network to become one which can meet both existing and future demand and still meet its sustainability goals by avoiding a car-based future.

With so many competing demands for road space, innovative policy solutions will need to be part of the answer. This may include a distance-based road user charging scheme, along with car clubs that aim to reduce the number of vehicles on the road. New technology is bringing new options, with the increasing popularity of micro-mobility offering more flexible ways to travel. To make the most of all the travel options, there are exciting opportunities through new technology to put all sustainable public transport options in the palm of an individual's hand.

## Innovative policy solutions

One idea that came up in a number of discussions is the trialling of a distancebased road user charging scheme. This has been debated for many years but it may be that the time is approaching for it to be put in place. Coupled with an investment in public transport options, a new charging scheme could replace existing charges like ULEZ. This could help ensure people fairly contribute towards the environmental cost of their journey and provide a way to reduce congestion. It will also mean those needing to drive can do so in much less congested conditions and have more reliable journey times.

In our interviews, we found other solutions to congestion that had been tried but not implemented on a wider scale. For example, a number of conversations looked at the potential for car clubs to combat high car ownership, particularly in outer London. Car clubs allow people to borrow and pay for the use of a car as and when they need it. They lower the ongoing costs of owning a car and reduce the number of vehicles on the road. By using car clubs rather than owning a car, people may be more likely to think twice about using a car for shorter journeys which could be easily done by bus, cycling or walking.



'Whether it's jumping into a car club car because they need to go and carry something that's too heavy for other options, whether it's getting a bus, whether it's walking, whether it's cycling, whether it's electric bike, whether it's scooter – giving people more options is the way forward.'

#### Keith Prince, London Assembly Member

'To protect lives and health we need a strong overhaul of the transport system: smart road pricing, higher parking charges and more costly resident permits, cleaner buses, cheaper and more reliable public transport, safe segregated cycleways and bike storage are all part of the solutions needed, so we can all be happy and healthy again.'

Jemima Hartshorn, Mums for Lungs



#### **New technology**

Micro-mobility, with its offer of more flexible modes of journey by scooter, cycle or electric bike, is increasing in popularity. A 12 month trial of rental e-scooters in the capital, led by TfL and London Councils, will begin this spring. This will help policy-makers work out how they can be safely and fairly integrated into the active travel offering in London. Electric vehicles offer a further option to reduce harmful emissions from private vehicles. With nearly 6,000 charging points now installed around the city, they will be a key part of improving air quality in London in the future. Embracing electric vehicles is something that TfL are committed to, an example being the increasing number of electric buses providing TfL services in London.

'There has been a drive towards personalisation especially the growth of ride hailing, next day deliveries, online shopping and micro-mobility. People are more mode agnostic and there are more people keen to use individual forms of transport rather than collective ones and I don't think we've quite caught up with what that means.'

Adam Tyndall, London First



The **total e-mobility sales** at retailer Halfords rose 184% in the first six months of financial year 2020/21<sup>37</sup>.



More than **400 all-electric buses** have been introduced in London including the UK's first full routes of electric double decker buses<sup>38</sup>.

## Better information for planning journeys

A key priority coming out of our discussions was the importance of live and reliable information when planning journeys. This will be crucial to retain the confidence of those using the transport network and to encourage people to switch to more sustainable ways to travel.

Apps will be a critical way of bringing journey planning and live information together in one place. By expanding what is currently available to provide journey and travel options across more than just TfL services, they can encourage changes of travel patterns and more sustainable choices.

'The TfL Go app is currently just about journey planning but it can be so much more than that, providing different mobility options within it and pulling in bike hire, scooter trials, car club providers. What would be key to this being successful is information – the information being adequately and well communicated to Londoners so that they know what their full range of travel options are.'

Silviya Barrett, Campaign for Better Transport

'The apps are brilliant they make travelling easy, my car use is down by a lot.'

4 Priority 6: Embracing new solutions

Male transport user, 55+



42% of Londoners

TfL's open data powers over **600 travel apps** in the UK, with over **42% of Londoners** using apps powered by TfL data<sup>39</sup>.

## COMMENDATIONS

#### LONDON TRAVELWATCH

A cross-cutting priority will remain equality, social justice and equal access to jobs, services and opportunities

Spencer Palmer, London Councils

We want London's decision-makers and policy-makers to prioritise the travelling public in any future vision of London transport. These are our recommendations:



#### **ON THE STREET**

- Transport authorities should engage with disabled people to develop collaborative, co-produced solutions to street changes
- Streets policy needs to be inclusive and equitable, making sure everyone has the option to walk and cycle as part of their journeys
- Public transport should be seen as part of active travel alongside walking and cycling



#### **OUTER LONDON**

- Improve walking and cycling infrastructure alongside bus priority measures to encourage the shift away from car
- Explore more orbital and express buses in outer London
- Invest in accessibility at stations and on Tubes and trains to help people make more public transport journeys



#### **FEELING SAFE**

- Air pollution affects people in inequitable ways and needs to be drastically reduced so everyone has an equal opportunity to live and travel in safe conditions
- Transport providers need to make sure services are as safe and as clean as possible, ensuring people can physically distance
- More research and emphasis should be given to under-represented voices in transport to help improve journeys for all



#### REFLECT CHANGING LIFESTYLES

- Adapt future services and provide more flexible ticketing to reflect changing travel patterns
- Maintain a reliable core service pattern to support those who can't travel off-peak and who need to get around at any time of the day or night



#### **EMBRACING NEW SOLUTIONS**

- Commit to trialling innovative solutions such as a new road charging scheme and car clubs to manage demand on London's roads
- Commit to exploring how new e-mobility and personal transport options can be integrated into London's transport offering
- Create new apps which integrate live information and journey planning with more travel options to give people greater choice



#### **THE BUS**

- The bus must be prioritised on London's roads to improve performance and reliability, provide faster journey times and restore passenger confidence
- The concessionary schemes must be protected and the bus must remain as affordable as possible so that no one is excluded from using it

## REFERENCES

#### LONDON TRAVELWATCH

Thank you to everyone who took the time to speak to us, send us a written response or fill out our survey. If you have any questions or would like to contact us, please email info@londontravelwatch.org.uk or sign up to join our digital community of transport users and help us continue to represent London's travelling public.

**EMAIL US TODAY** 



SIGN UP FOR UPDATES >>>

#### 6

#### References

- 1 Perceptions of safety on public transport key drivers analysis (d3cez36w5wymxj.cloudfront net) Key drivers analysis January 2020
- 2 Abandoned, Forgotten and Ignored Final (inclusionlondon.org.uk)
- 3 Pave The Way, Transport for All
- 4 Cycling action plan (tfl.gov.uk)
- 5 Travel in London Report 13 (tfl.gov.uk)
- 6 Cycling action plan (tfl.gov.uk)
- 7 Air pollution and children's health Impact on Urban Health
- 8 Ambient air pollution (who.int)
- 9 King's College London report on mortality burden of NO2 and PM2.5 in London | Air Pollution | Nitrogen Dioxide (scribd.com)
- 10 Runnymede Covid19 Survey report v3.pdf (runnymedetrust.org)
- 11 New data reveals "crisis of support" for BAME women Women's Budget Group (wbg.org.uk)
- 12 Mayor introduces risk assessments for BAME staff | London City Hall
- 13 London boroughs have seen the ten highest 'excess death' rates in Britain during Covid pandemic On London
- 14 Mayor introduces risk assessments for BAME staff | London City Hall
- 15 Safety & Security Annual Report 2017-18 (tfl.gov.uk)
- 16 content.tfl.gov.uk/travel-in-london-report-13.pdf
- 17 Bus lanes Transport for London (tfl.gov.uk)
- 18 Improving-Air-Quality-in-Towns-and-Cities-PROF-DAVID-BEGG-Final.pdf (greenerjourneys.com)
- 19 Coronavirus and intergenerational difference the emerging picture | FCA Insight
- 20 Poverty in London 2018/19, London Datastore
- 21 https://tfl.gov.uk/info-for/media/press-releases/2019/september/new-figures-show-popularity-of-the-mayor-s-bus-hopper-fare-since-launch
- 22 <u>Understanding Diverse Communities (tfl.gov.uk)</u>
- 23 Key workers: key facts and questions Institute For Fiscal Studies IFS
- 24 Travel in London Report 11 (tfl.gov.uk)
- 25 women.pdf (tfl.gov.uk)
- 26 <u>Travel during Covid-19, Tracking research</u> 14 <u>August 2020 (d3cez36w5wymxj.cloudfront.</u> net)
- 27 travel-in-london-report-12, 2019 (tfl.gov.uk)
- 28 <u>Step-free access Transport for London (tfl.gov.uk)</u>
- 29 Fare city Generation Z Part One FareCity
- $30\ \underline{https://www.london.gov.uk/sites/default/files/mayors-transport-strategy-2018.pdf}$
- 31 <u>Travel during Covid-19, Tracking research 14 August 2020 (d3cez36w5wymxj.cloudfront.net)</u>
- 32 RDG response to ORR data showing rail journeys at lowest levels since mid-nineteenth century (raildeliverygroup.com)
- 33 Number of people moving out of London reaches four year high in 2020 | Metro News
- 34 Covid-19 accelerates migration from London as 1.6m plan moves out of the capital | Totaljobs
- 35 travel-in-london-report-12.pdf (tfl.gov.uk)
- 36 Car clubs and car-sharing Sustrans.org.uk
- 37 Halfords sees popularity of e-scooters surge in lockdown BBC News (November 2020)
- 38 London buses pass milestone on the road to net zero | Infrastructure Intelligence (infrastructure-intelligence.com) January 2021
- 39 Open data policy Transport for London (tfl.gov.uk)

