



TfL International Benchmarking Report 2023



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Purpose of the report

Benchmarking TfL's customer service and performance against best in class

The TfL International Benchmarking Report provides a high-level overview of performance in customer-centric areas against domestic and international benchmarks. The report highlights positive performance trends, areas for improvement, as well as signposting future benchmarking opportunities.

The report also provides a summary of how benchmarking is undertaken at TfL, and how outputs – through the identification of best practice, monitoring trends, and better understanding drivers of performance – provide an important source of information to support planning and decision-making.

We benchmark to support delivery of the TfL Business Plan

This is our first International Benchmarking Report since late 2018. The first section of the report looks at how transport networks around the world were impacted by the coronavirus pandemic and how they recovered in recent years, with a specific focus on levels of demand and financial sustainability. The report then considers the key outcomes of the TfL Business Plan, with benchmarking data structured around two of the three core themes of the Mayor's Transport Strategy (MTS) – 'A good public transport experience' and 'Healthy Streets and healthy people'. The paper does not cover the MTS theme of 'New homes and jobs', as benchmarking data is currently very limited in this area.



NEW: Pandemic recovery

MTS: A good public transport experience

MTS: Healthy Streets and healthy people

The report aims to provide an effective comparison of TfL against best-in-class benchmarks. Every effort has been made to be as comprehensive as possible in our coverage of our Business Plan, however, when reading the report it is useful to note the following:

- **The report looks at historic trends only to 2021/22:** the latest data available
- **The outcomes that TfL monitor on its scorecard are often different to those benchmarked:** common metrics are adopted by benchmarking partners to provide comparable data across a range of networks. These allow an effective way to review trends and performance
- **Most of the data sets used come from well established, structured benchmarking groups:** where data is less mature we note this and will look to improve benchmarking maturity
- **Some topic areas are more easily compared than others:** traditional operational metrics such as demand and reliability are well established, whereas benchmarking for emerging strategic priorities is less developed and/or available, e.g. the environment
- **The pandemic has impacted the benchmarking process itself:** new priorities have emerged to deal with short-term challenges, significant organisational and service levels changes provide new contexts to trends, and limited resources have constrained some members involvement

Despite these challenges, the benchmarking that takes place across TfL still enables us to draw meaningful comparisons to many cities across the world and the opportunity to learn from others.

How do we benchmark?

We collaborate with a wide range of organisations

Benchmarking within TfL takes many different forms. At one end of the spectrum, TfL maintains strong bilateral relationships with organisations that allows for regular and often more detailed collaboration. Examples include the Transport Infrastructure Efficiency Strategy (TIES) group, which includes Network Rail and National Highways; the International Association of Public Transport (UITP); and Imperial College London supported public transport benchmarking groups (summarised later in the report). More informal and/or standalone benchmarking opportunities also exist, and TfL participates where it is beneficial to do so, even if it is just openly sharing data for third party reports.

An overview of benchmarking maturity

Benchmarking is most mature in respect of London Underground (LU), Docklands Light Railway (DLR), London Overground (LO) and the London Buses network, where we are long-standing members of international benchmarking groups. These groups provide a rich historic data set, covering a wide range of operational and business outcomes. For the purpose this report we have therefore predominately focused on these groups.

Mode	Affiliation to International Benchmarking Group	Access to Annual Performance Data and Case Studies	Coverage					
			Financial	Demand	Public Transport Provision	Accessibility	Safety	Carbon & Green
London Underground	Community of Metros (COMET): Founding member 1994	Approx. 100 to 300 performance measures per group annually recorded. 3 to 8 detailed case studies per year (depending on mode).	✓	✓	✓	✓	✓	✓
DLR	Community of Metros (COMET): Member since 2013		✓	✓	✓	✓	✓	✓
Overground	International Suburban Rail Benchmarking Group (ISBeRG): Founding member 2010		✓	✓	✓	✓	✓	✓
Buses	International Bus Benchmarking Group (IBBG): Founding member 2004		✓	✓	✓	✓	✓	✓
Walking and Cycling	European Metropolitan Transport Authorities (EMTA)	Ad hoc reports	✗	✗	✓	✗	✗	✗
Roads	No	No	✗	✗	✗	✗	✗	✗
Trams	No	No	✗	✗	✗	✗	✗	✗

Benchmarking in the following areas is currently less mature, with fewer comparators available:

- **Trams** – Imperial College London have recently formed a new international trams benchmarking group. TfL is not currently a member but will continue to assess its position over time.
- **Elizabeth line** – The line recently joined ISBeRG in 2022 but has not provided data into the groups annual KPI system as yet (the next opportunity being Summer 2023).

While benchmarking coverage may not be 100 per cent across all aspects of TfL operations, by concentrating on the Underground, DLR, Overground and Buses we are still able to cover a significant proportion of public transport journeys made within London.

Benchmarking groups



Case Study: A focus on the Transport Strategy Centre (at the Imperial College London)

TfL participate in three modal-specific benchmarking groups that are administered out of the Transport Strategy Centre (TSC) at Imperial College, London. These are: COMET (Community of Metros), IBBG (International Bus Benchmarking Group) and ISBERG (International Suburban Rail Benchmarking Group). In total, these groups include over 70 members across a number of major cities throughout the world:



A note on the presentation of data and confidentiality rules

The majority of the data outlined in this report is supplied via our collaboration with the TSC (Imperial College London). Graphs relating to the Underground are shown in **DARK BLUE**, **LIGHT BLUE** for DLR, **ORANGE** for the Overground, and **RED** for London Buses.

On certain graphs we have added arrows to clearly illustrate better or worse performance (coloured green and red respectively).

Operators agree to share confidential information about their organisations to allow members to benchmark performance. To respect the confidentiality of these third parties, we are required to report their data in an anonymised form, without any specific reference to individual networks.

Due to additional commercial sensitivities, the Bus benchmarking group – IBBG – also includes a stipulation that data sets are indexed against the average performance across all members.

Structural considerations

The impact of structural factors when comparing across networks

It is important to consider differences such as city wage rates, density of population, age of infrastructure, ownership of infrastructure, government grants, and health and safety standards when comparing our network with other cities, many of whom exist in very different environments.

These are known as structural factors, and are often very difficult to change without significant investment or reform. Structural factors are most likely to impact financial metrics but can also affect (albeit to differing degrees) every metric used in this report, in some cases making TfL look better in comparisons to others, and at other times, worse. Our benchmarking groups look to adjust for structural factors where possible and undertake deeper analysis within case studies (and other activities) to learn more about the structural factors that impact performance.

Example: Structural factors between London Underground and other COMET members

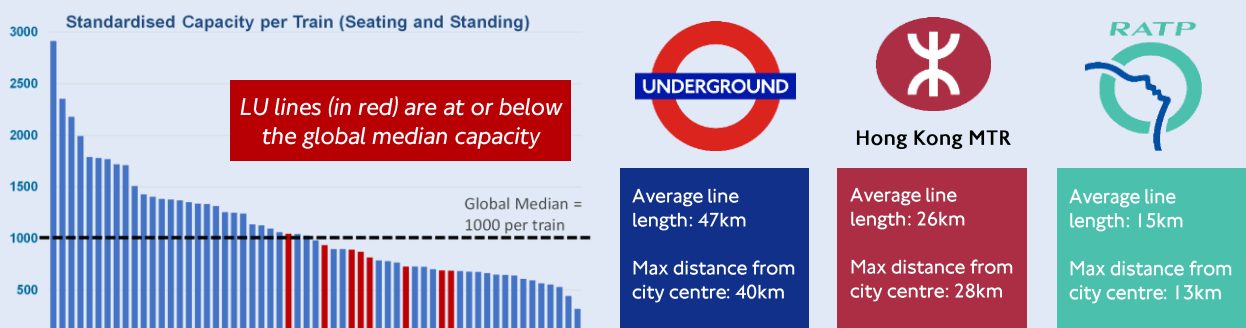
Age and construction practices

As the world's first metro, the Underground has a range of infrastructure and asset types. There are a number of older metros similar in this regard, e.g. New York and Paris, but many newer metros, especially those in Asia, are nearly entirely built using modern infrastructure and technologies:



Length of network and capacity

When we consider the Underground in the context of global metros, we see that it is one of the longest networks but is below the median for COMET group in terms of volume of passengers. This difference reveals a key structural factor in London compared to other networks - that it has a small structural capacity and low overall density (due to small tube tunnels and trains):



Wider, non-structural factors, can also have an impact on the way transport is operated, such as macro-economic circumstances and varying national cultures.

All of these examples help to demonstrate the varied nature of transport networks and the complexity of reviewing data across different locations. We have tried to review the data objectively across this report, outlining any factors that may affect a particular graph to the reader's attention.

Why do we benchmark?

To improve our business

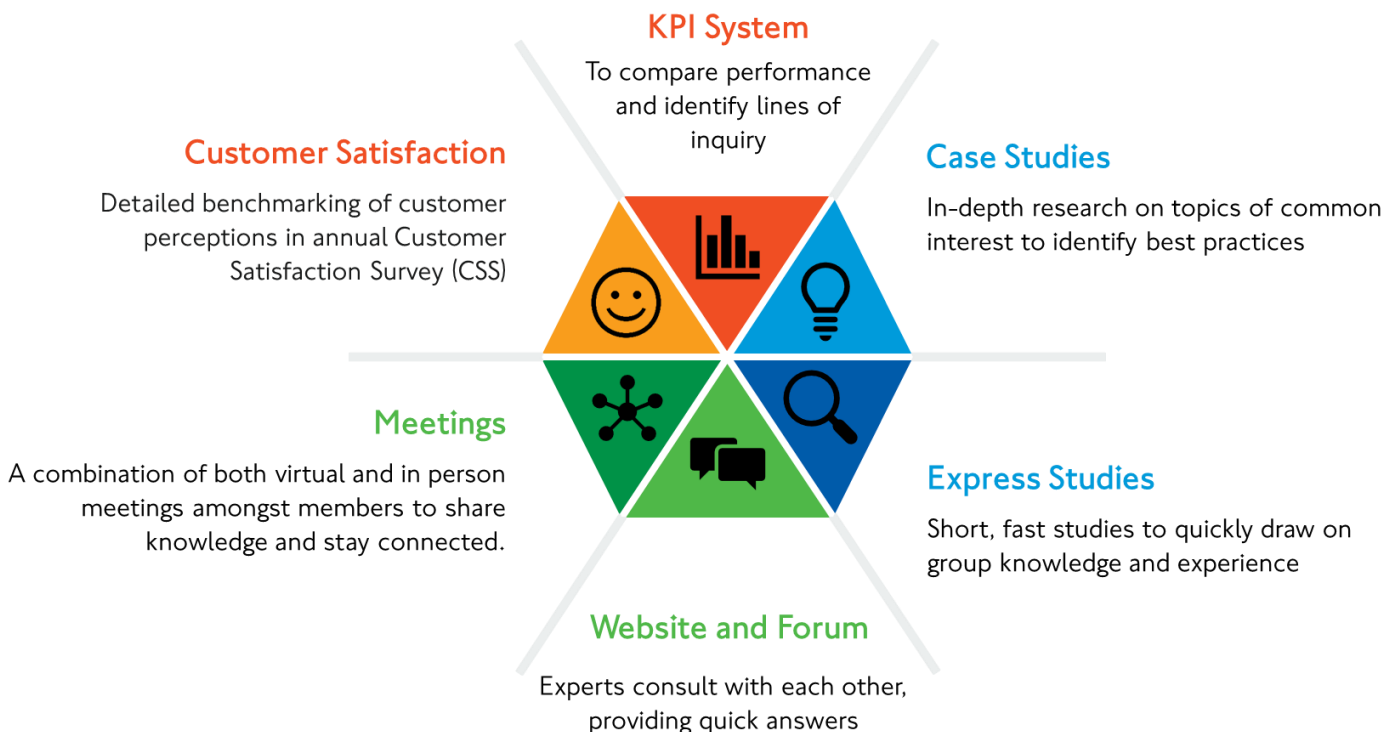
We are committed to improving value for money, year-on-year. Benchmarking is an important element of this, helping to identify best practice, prompt innovation, monitor trends and better understand the drivers of performance.

To inform our stakeholders

Customers and stakeholders have a keen interest in understanding whether funds are efficiently and effectively invested, and that the service we deliver helps London function and grow.

To provide a wealth of information that can support us in many different ways

The benchmarking groups that we participate in provide a wide range of historic and new information sources, including: ad hoc reports on important 'subjects of the day', annual Key Performance Indicator (KPI) reports, detailed case studies, group workshops and access to transport experts:



Source: Based on the TSC COMET Benchmarking Framework (may differ by group)

TfL has a good track record of utilising this benchmarking to enhance its operations and support the delivery of the TfL Business Plan. The benefits of benchmarking tend to be focused on two main areas:

1. It enables TfL to better respond to short-term operational challenges. The recent pandemic, with its various novel challenges, was a good example of this. TfL was able to engage with transport networks quickly and collaborate effectively on numerous topics such as the introduction of new anti-viral products, operational training during social distancing, mask compliance and so on.
2. Case studies, workshops and annual KPI reports present more longer-term, strategic opportunities and an insight into best practice. Recent examples include the Sustainable Fares and Funding, and Fare Evasion case studies in metros, both of which are being considered as part of developing our future plans and strategies in these areas.



Pandemic recovery

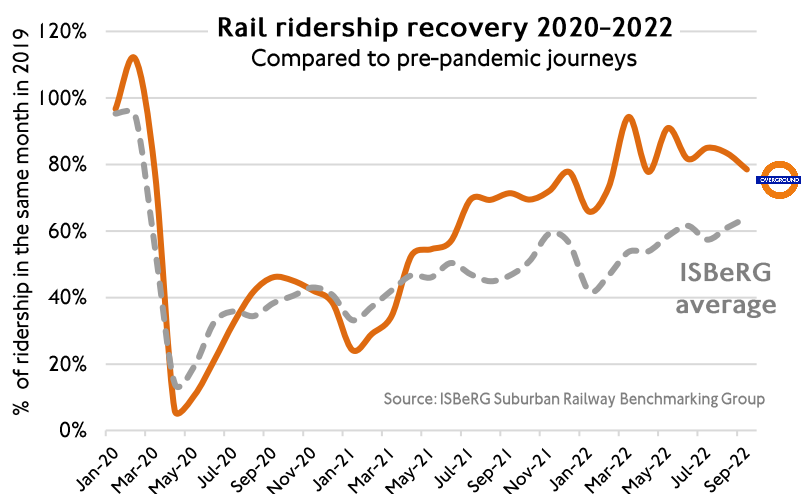
Demand trends & financial sustainability



Public transport demand

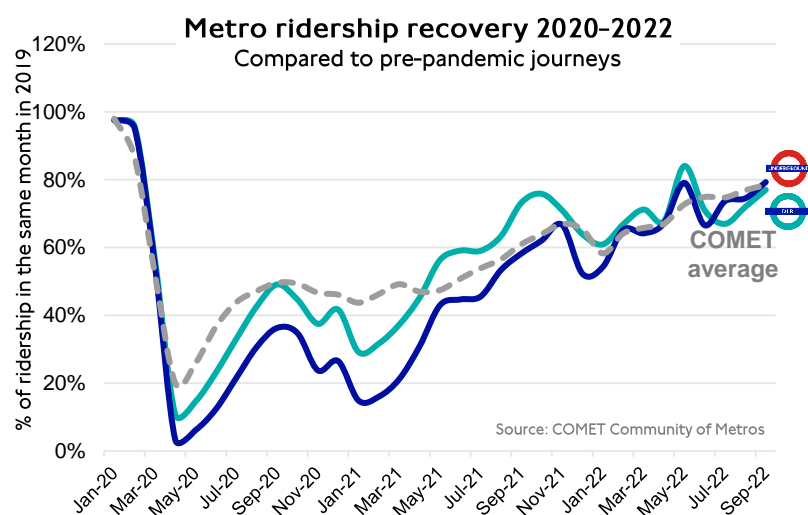
The graphs below show the percentage of demand as a proportion of pre 2019 levels (based on the latest international data available). In general, 2022 has seen a global recovery of public transport, with ridership levels growing throughout the year to their highest levels since 2019.

International comparisons in demand by mode (2019 to 2022)



Suburban rail demand grew in 2022 but lags behind 2019 levels. By September 2022, average ISBeRG group demand reached 60 per cent of pre 2019 levels, compared to 80 per cent on London Overground.

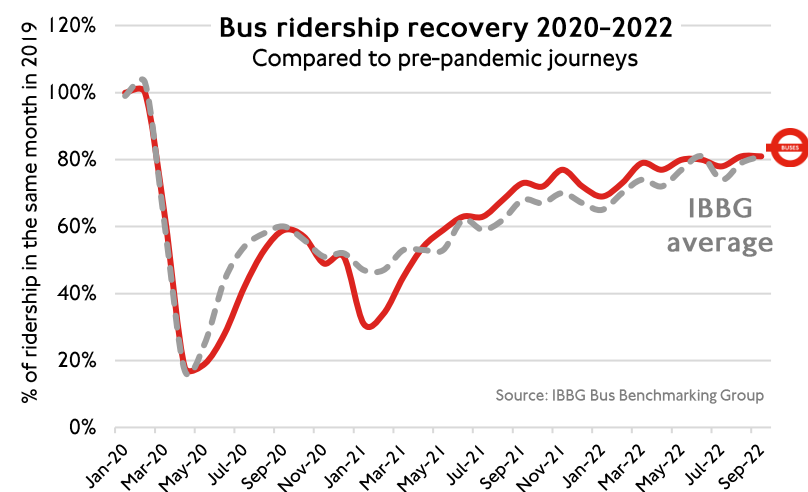
The Overground is one of the smaller networks in ISBeRG with shorter average journeys at lower speeds between closer stations, but at relatively high capacity utilisation – similar to a metro. It is therefore perhaps unsurprising that demand has recovered more strongly than some peers, as commuters seem to be making fewer journeys to/from suburbs to city centre offices.



London Underground ridership has been more impacted than DLR throughout the pandemic.

Both networks saw larger than average initial falls in ridership compared to global peers, but similar falls were seen across most European and North American metros during this time.

Since 2022, both the Underground and DLR have been closely tracking the COMET average, now at around 80 per cent of 2019 levels. But demand is lower than all European peers who have typically seen demand recover to around 90 per cent of pre 2019 levels by September 2022.



London bus ridership has closely tracked the IBBG group average throughout the pandemic. Ridership has now recovered to 81 per cent of pre-pandemic journeys.

London bus demand took slightly longer to recover after the first virus wave than IBBG peer cities, but had recovered to 60 per cent of 2019 ridership (the IBBG average) by September 2020.

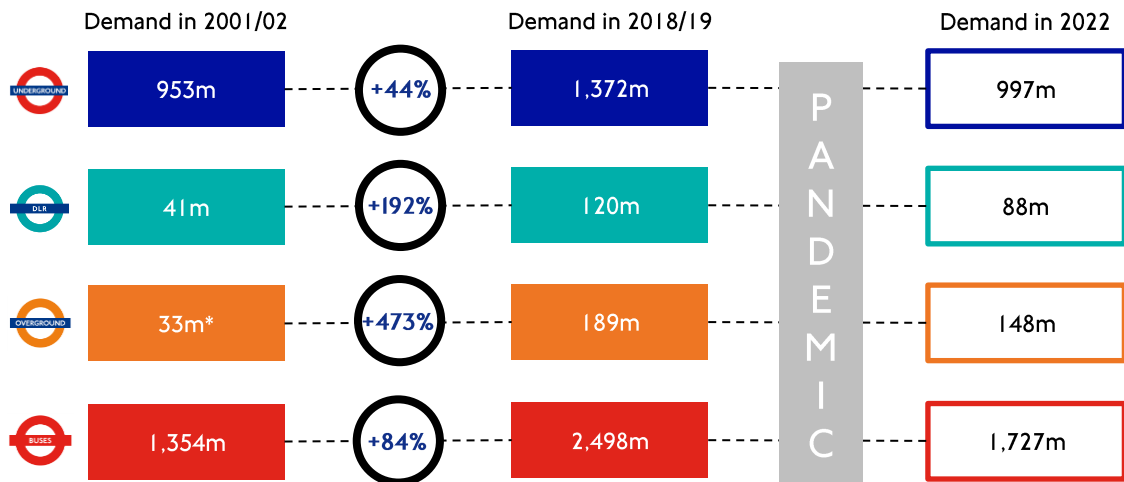
The early 2021 coronavirus wave saw a smaller drop in passengers compared to the first wave, but a significantly bigger drop compared to peer cities.

Public transport demand

Historic growth in demand (pre-2019)

The impact of the pandemic on demand should be considered within the context of the longer-term trend since 2000. Demand for TfL services, as measured by passenger journeys, grew significantly between 2000 and 2018. TfL modes experienced record high levels of ridership during this time, with demand significantly outstripping capacity at numerous locations across London (largely during peak hours):

Changes in demand (passenger journeys)



* TfL London Overground services started in 2007/08

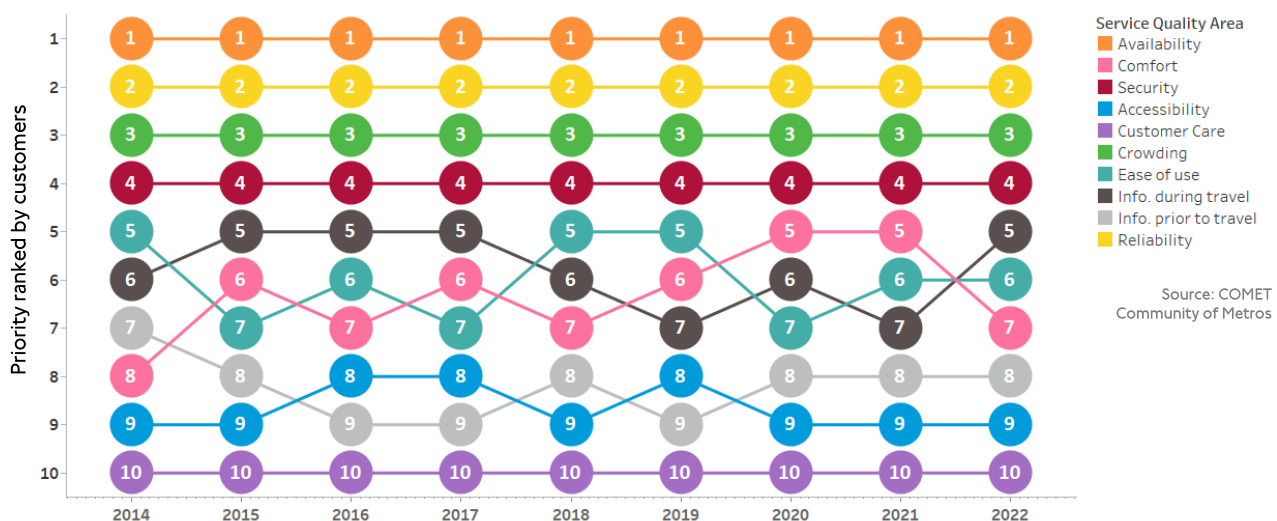
Source: TfL data

In a recent COMET study on 'Demand recovery following COVID', most members cited that they believe that the recent depression in ridership is temporary, and that customer demand will return to, or surpass, pre-pandemic levels in the medium-term, i.e. the next 5 years plus. Very recent data in early 2023 supports this view, with many members of the TSC benchmarking groups now consistently seeing in excess of 80-90 per cent of 2019 ridership levels on their networks.

Focus areas to support demand recovery

Despite fluctuations in demand, customer priorities have remained largely static over time. The chart below shows the top ten Underground customer priorities since 2014, taken from the TSC International Customer Satisfaction Survey. Availability, reliability, crowding and security/safety have remained the top four priorities for this entire period, illustrating the importance of getting the basics of our services performing well. This trend is similar to other TfL modes and transport networks more widely.

Service quality area priorities – ranked (London Underground) 2014-2022



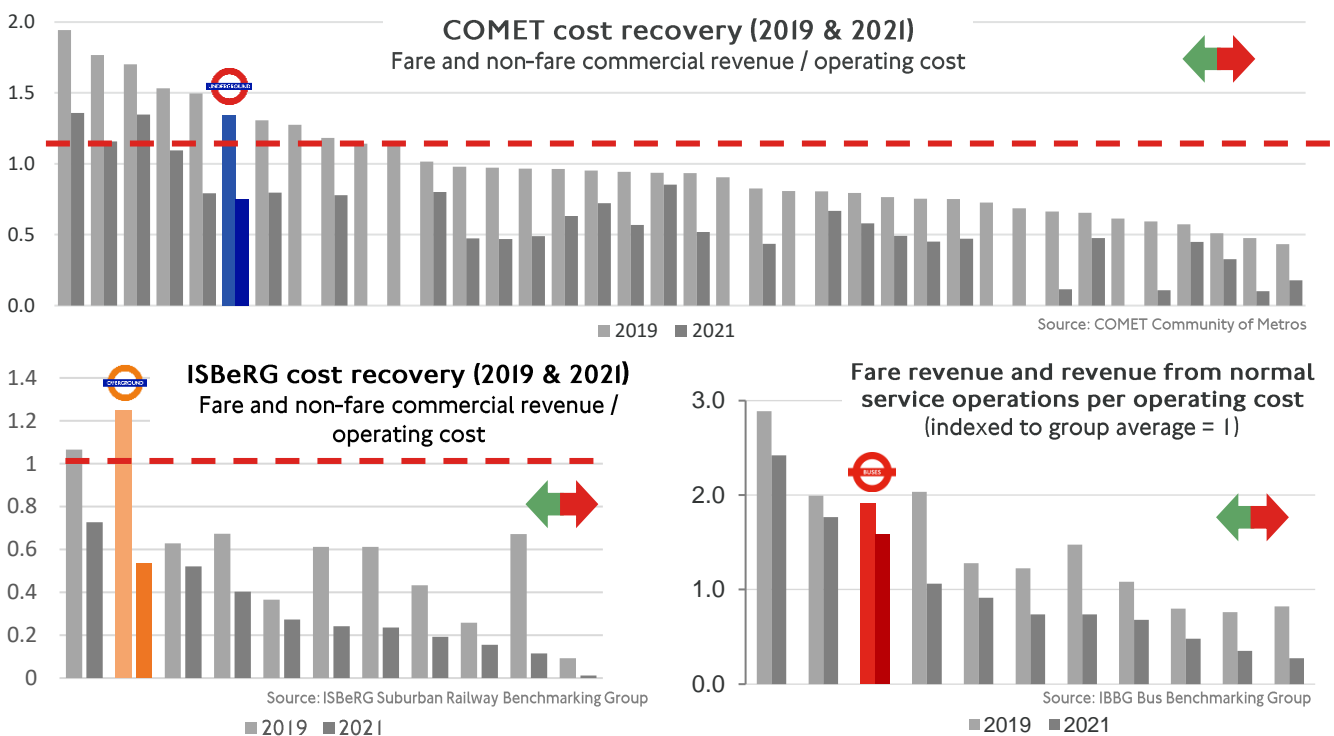
Source: COMET Community of Metros

Financial sustainability

The pandemic had a detrimental effect on our finances. Fares revenue, our largest source of income, was significantly dampened during the period whereas operating costs increased due to the introduction of new cleaning regimes and the requirement to support London by operating a full service. It remains one of our financial aims to fully cover operations and maintenance expenditure, including the cost of financing, through income. But we must achieve this without compromising safety or reliability.

How are we performing?

A good indicator of financial sustainability is operating cost recovery. That is revenue (excluding concessionary fare subsidies) divided by operating costs. Prior to 2020, TfL was making good progress towards financial sustainability, consistently ranking amongst the best performing operators across the TSC groups. DLR does not have 2021 data due to resource constraints, but it has also historically performed well in this area.



The red line on each chart represents the point when total operating costs have been recovered by revenue (apart from the bus graph, where the recovery ratio is indexed against the group average). All members across the TSC groups have seen an impact on their recovery ratio as a result of the pandemic, with many, including the Underground and Overground, no longer being able to cover their operating costs. In fact, in 2021, only four TSC benchmarking members returned a recovery ratio over one (all of which were metros outside of Europe).

Supporting the TfL Business Plan

Prior to 2020, all TfL modes were amongst the highest performers for recovery ratio and were delivering gradual improvements over time. The TfL Business Plan sets out our strategy for rebuilding our finances, improving efficiency and helping to secure our future, with an overall aim to achieve operational financial sustainability by April 2024.

Our approach to achieving operational financial stability will include many different elements. Research from the TSC groups highlight three key areas for focus, other than more technical financial mechanisms such as borrowing and cash levels. First, to find ways to actively encourage customers back onto the network through improved service levels and/or fares structures. Second, the creation of new sources of revenue to reduce the overall reliance on fares income. Thirdly, by continuing to deliver recurring cost savings and efficiencies (embedding this into the culture of the organisation).

Fares

We reinvest all of our revenues in operating and enhancing our services, but we must provide affordable services to our customers – fare levels should not be a barrier to travel on public transport. This section shows the average fare revenue per passenger kilometre, adjusted for local purchasing power (in US Dollars).

How are we performing?

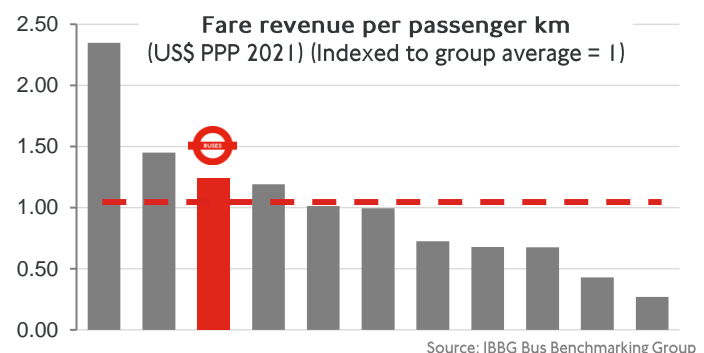
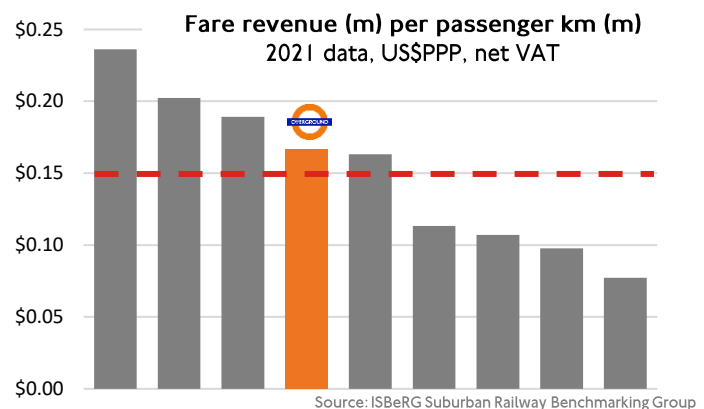
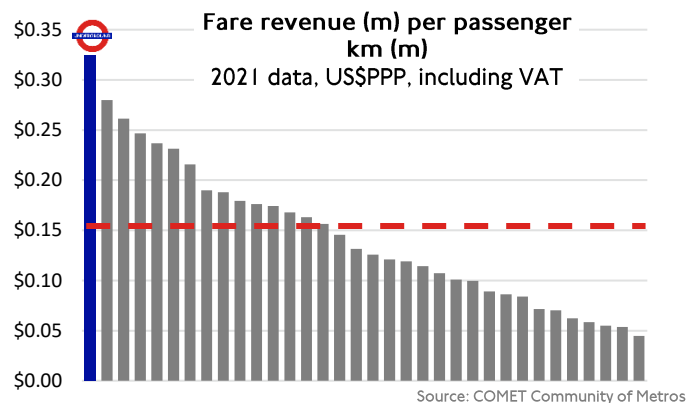
TfL receives less operating subsidy support from government than other cities and zero grant in the years pre pandemic. As a result fares contribute a far higher percentage of our income compared to the majority of our peers.

TfL has received several packages of pandemic related financial support from the UK Government. More recently, TfL also received a longer term funding deal which includes a condition of achieving operational financial sustainability by 2024. The deal set out an assumption that TfL would raise fares in both in 2022/23 and 2023/24.

Fares are a key contributor to overall financial sustainability, supporting the cost of day-to-day operations as well as contributing to the delivery of key asset renewals and capital investment, both of which are crucial to maintaining and enhancing our network.

Supporting the TfL Business Plan

London has a higher reliance on fares income and less operating support from government. The potential to increase fares in the future may therefore be seen as fairly limited and/or result in close stakeholder scrutiny. Higher fares may also hinder TfL's aim to maintain and grow passenger journeys over our Business Plan. As such, TfL is considering the potential impact of different fare systems and ticketing types in a post-pandemic London. As per previous Mayoral commitments on fares, including the 2017-20 TfL fares freeze and Bus Hopper fare, we must also continue to find ways to support the lowest paid members of society and remove any financial barriers to using TfL modes. This may be in the form of new concessions, such as the recently announced provision of free travel across the network to some of the lowest paid transport workers (non-TfL employees).

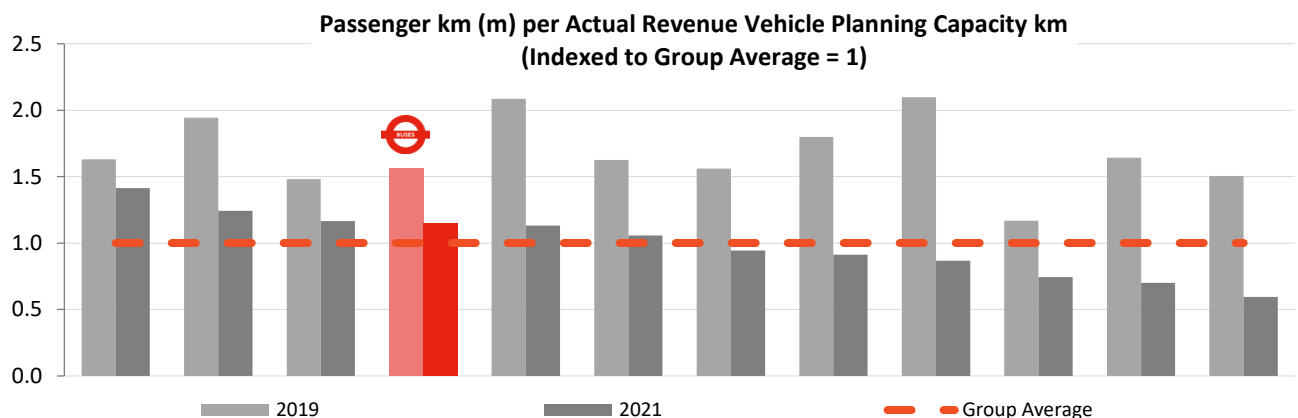
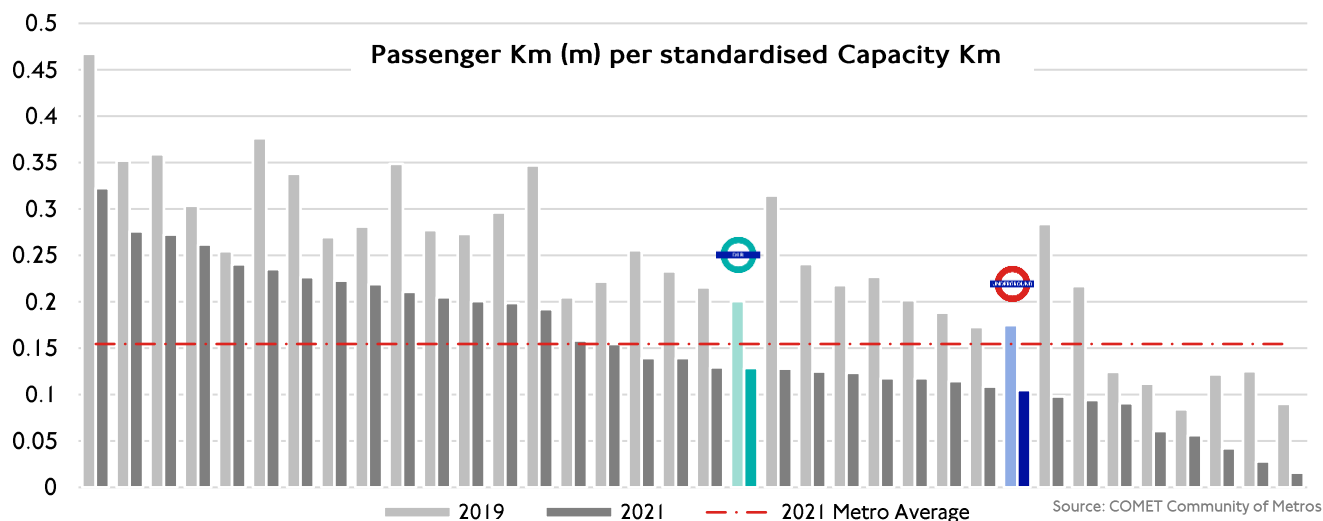




A good public transport experience



Capacity provision and congestion



How are we currently performing?

High service frequency is important to customers, especially at peak times when congestion can be an issue. Our highest peak hour rail frequency is provided by the Victoria line, operating 36 trains per hour in the peak. This compares favourably with global best-in-class. Key to achieving this has been modernisation and the introduction of highly automated signalling systems and trains.

Comparing total capacity provided against the number of passengers carried provides a gauge of supply versus demand, as well as congestion. Whilst it is beneficial to use as much of the capacity provided as possible, this must be balanced with services not becoming so overcrowded that they discourage customer travel or become a cause of service delays. Capacity utilisation has fallen globally following the pandemic. Underground and DLR performance is relatively moderate in comparison to their peers, while bus capacity utilisation remains just above the group average and lower than pre-pandemic.

While in general it may be true to say that London has public transport capacity to utilise, in practice the data obscures potential differences across specific times and locations within a city.

Supporting the TfL Business Plan

Investment in additional rail capacity has been deprioritised to align with our latest demand forecasts, which show that we will have public transport capacity in the medium term. The exception is for programmes that are financially committed, fully funded by third-parties, or deliver some capacity benefits as a secondary objective, for example where additional public transport capacity is required to unlock new housing. Bus capacity will continue to be reviewed, with a specific focus on supporting outer London.

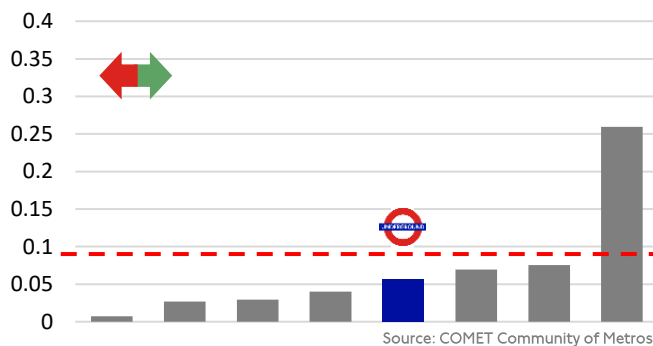
Rail reliability

Reliability is key to attracting customers to the network and providing a good service. However, reliability has many influencing factors when benchmarking globally. As a result it is important to consider the operating context of each metro before comparing their reliability.

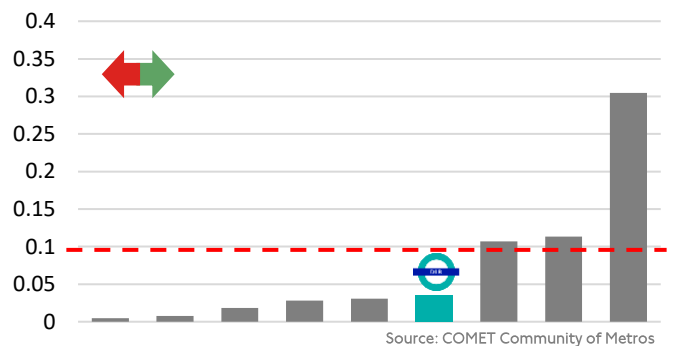
When looking globally, Asian metros typically perform the strongest. This is down to many factors but they are predominantly much newer systems with fewer asset legacy challenges, in addition to very different operating environments and staffing models.

As a result, for the purposes of this report we have benchmarked our rail modes against what we consider the most similar comparator members to us. For Underground this group consists of the older, western Europe and north American metros. And for DLR, the newer western Europe and north American metros.

Million car kilometres between incidents causing a delay > 5 minutes to service (2021 data)



Million car kilometres between incidents causing a delay > 5 minutes to service (2021 data)



How are we performing?

The Underground is the oldest metro of the group, and has a set of very unique infrastructure challenges. Reliability, which has improved over the past decade, is above the median of the group, but below the average which has been skewed by one high performing member. Good performance is a result of improving and maintaining the condition of key assets, the introduction of modern signalling systems and fleets, and dedicated and determined management action focussed on identifying and addressing issues. It should also be noted that the Underground has high levels of utilisation of its train fleet during the peak. This means that it has fewer spare trains available if train failures do occur but allows high frequency services for customers. Metros in general have also suffered from staff absenteeism challenges leading to delays. This is a significant opportunity in the short to medium term.

DLR also represents one of the oldest systems in its group and was pioneering in train automation at the time of its introduction. As a result some of the newer metros with more current technology have achieved high reliability, although DLR's performance is still above the median of the group.

Supporting the TfL Business Plan

The continued investment in our assets remains a priority for rail reliability. Train and signalling failures account for a significant impact on performance, with old and life-expired assets a key reason for delays. The TfL Business Plan looks to provide sufficient funding for asset renewals, including key infrastructure such as track and the planned introduction of new train fleets on the DLR and Underground (initially on the Piccadilly line).

Bus reliability and information

Bus Punctuality & Speeds

This measure is strongly influenced by road traffic conditions. The prevalence of bus priority lanes and technologies in comparator cities has a major impact on performance.

In London, our latest data shows that overall reliability has been on an improving trend over the past decade as traffic improvements and bus priority lanes have been added. The year 2020 showed an even bigger improvement, this was due to lower traffic levels on the road as a whole because of the pandemic. As a result performance dropped in 2021, but this still represents an improvement over 2019.

In comparison to global peers, our buses travel at lower average commercial speeds. Due to the same reasons as 2020 recorded good performance, while 2021, despite dropping, shows good improvement over 2019 which has more comparable traffic levels.

What are we doing to improve?

We are investing in bus priority schemes, route and traffic management, and traffic signal timing reviews, to make journeys quicker and more reliable.

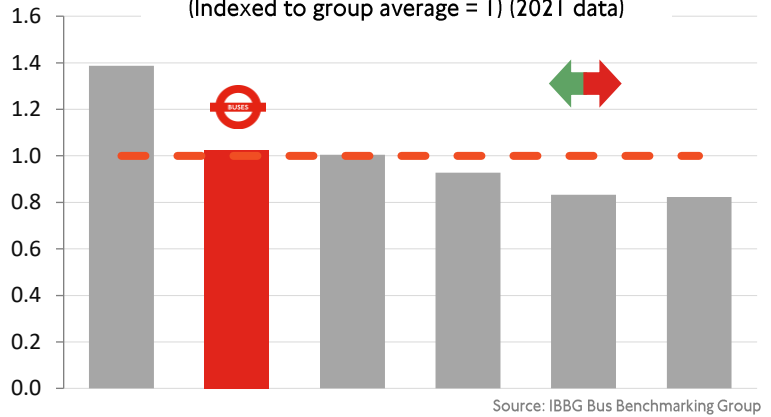
Bus customer information

Despite 14 per cent of bus stops providing dynamic information TfL is below the average coverage. However, TfL still remains within the top 5 of comparators.

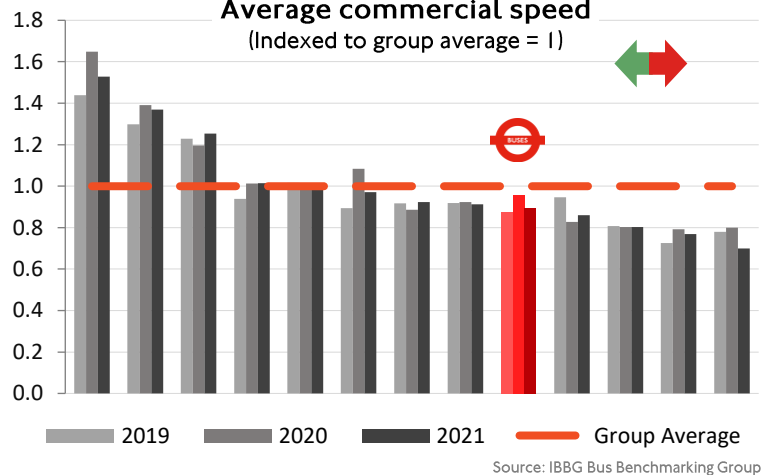
All of our buses are equipped with iBus and automatic vehicle location which enables customers to obtain real time information through mobile technology throughout the network. We are also trialling new technology to improve the information available to customers such as digital displays at bus stops.

We have also introduced the TfL Go app helping our customers get the latest real time travel information.

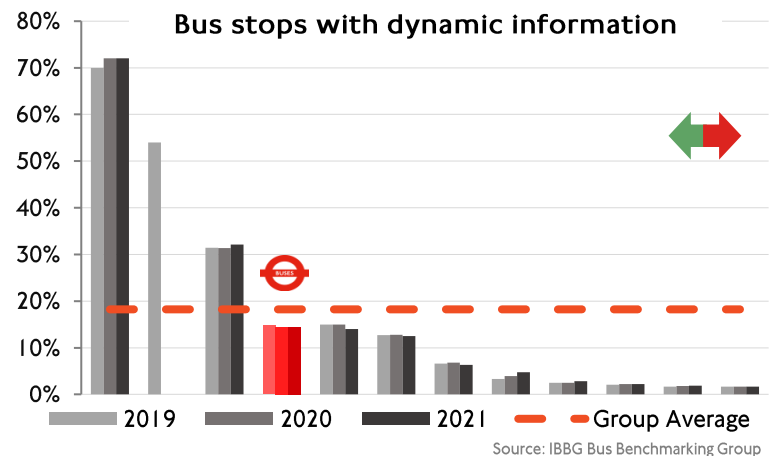
Punctuality for low frequency routes
(Indexed to group average = 1) (2021 data)



Average commercial speed
(Indexed to group average = 1)



Bus stops with dynamic information



Making transport more accessible

How are we performing?

The Underground network has a lower percentage of step-free stations than most international comparators.

This is predominantly a legacy issue driven by the age of our network - the Underground being the oldest metro in the world at 160 years old - and infrastructure in comparison to newer metros, especially those in Asia, which tend to have been designed and built with step-free access (SFA).

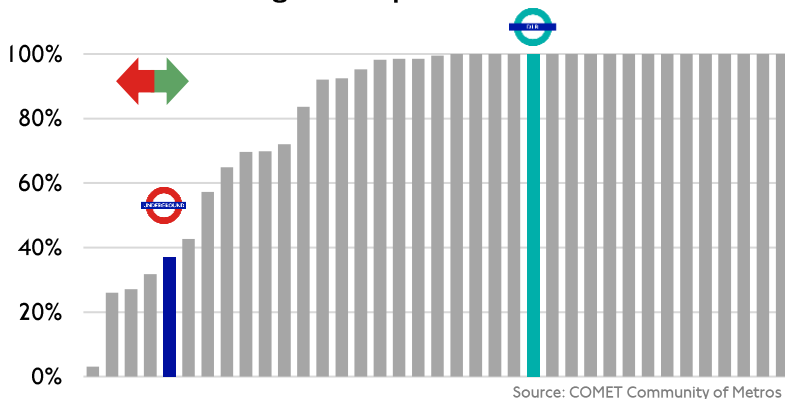
The DLR and Trams are both fully step-free, as is the Elizabeth line.

Like the Underground, our Overground network is below average amongst its peer group. This is down to similar infrastructure challenges, with old stations that we never designed with accessibility in mind. A large proportion of the stations served by the Overground are also not owned by TfL, limiting TfL opportunities to make improvements.

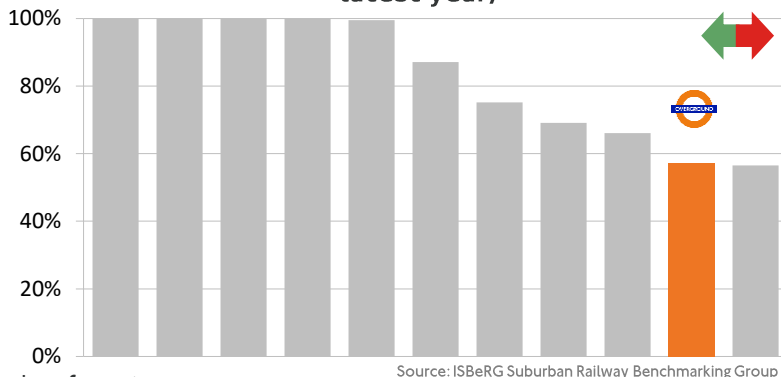
Where we build new stations and/or extensions we include step-free access, such as the Barking Riverside and Northern line Extensions.

Of thirteen comparator bus operators we are one of eleven world leaders for whom their entire fleet is comprised of low-floor vehicles.

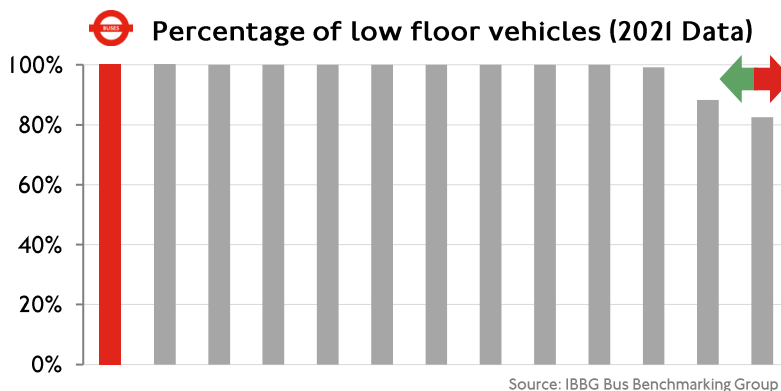
Percentage of step-free stations (2021 Data)



Percentage of step-free stations (2021 or latest year)



Percentage of low floor vehicles (2021 Data)



Supporting the TfL Business Plan

Future plans for accessibility are being developed, with a pipeline of potential projects being considered following the recent TfL public consultation. In the short-term, with overall funding limited, we will need to seek opportunities for third-party funding to deliver further accessibility benefits. Examples include the recent successful bids to the Government through the 'Levelling Up' funding to make Colindale and Leyton stations step-free. Other key focuses will be improving our information provision for step-free users such as the introduction of the TfL Go app and step-free planning tool. TfL also provides the Dial-a-Ride service, a free non-rail service aimed at improving transport across the capital for disabled travellers.



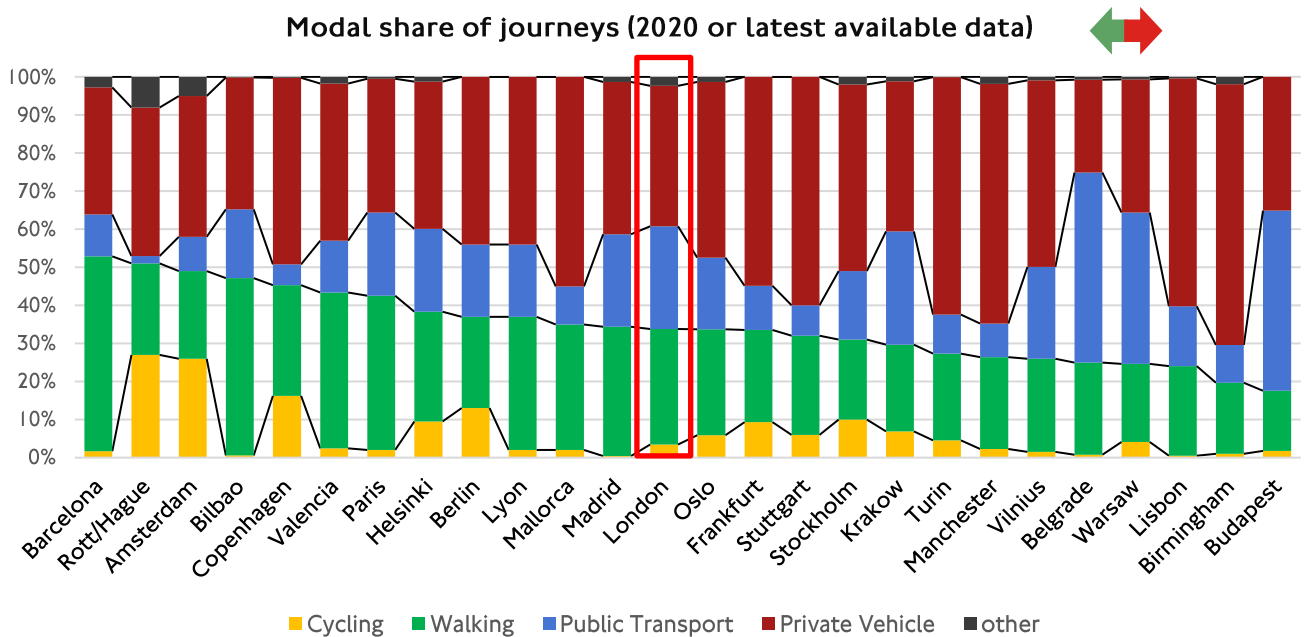
Healthy Streets & healthy people



Walking and cycling

We will ensure that sustainable modes have the capacity to cater for a constantly growing population and the ability to attract that demand through high levels of service.

Modal share of journeys (2020 or latest available data)



Source: EMTA Barometer 2020

How are we performing?

One third of journeys across the network are completed either via walking or cycling according to the 2020 European Metropolitan Transport Authorities (EMTA) barometer data. If you include public transport that increases to two thirds. This places us at approximately the average for the level of active travel modes, and slightly above average if you include public transport.

We are committed to encouraging a modal shift towards more sustainable travel as set out in the Mayor's Transport Strategy. To accomplish this we will reduce traffic and make walking, cycling and public transport safer and more attractive.

Supporting the TfL Business Plan

We have combined all our streets funding into a Healthy Streets portfolio, prioritising walking, cycling and public transport. Now, following our latest funding agreement, we have been able to resume spending on our Healthy Streets programme. Within this Business Plan, we will continue to invest £150m per year in our Healthy Streets programme, working with boroughs to enable more people to walk, cycle and use the bus, as part of our aim for 80 per cent of trips in London to be by sustainable modes by 2041. The programme includes:

- Major street improvements for safer walking and cycling
- Development of new pedestrian priority signals
- Over the next two years, as well as completing existing schemes, we will begin construction on up to 14 km of additional cycleways and progress with design work for a further 16 km of cycleways

Creating efficient streets will require measures to manage demand. We have now started to explore how a new kind of integrated road user charging scheme could be implemented in the future to improve safety, air quality, address climate change and reduce congestion. This could also support health and wellbeing for Londoners by creating a greener, more sustainable city for active travel.

Safer London

Road safety

TfL is working with the Organisation for Economic Co-operation and Development (OECD) International Transport Forum (ITF), as part of the Safer City Streets initiative on benchmarking road danger reduction.

<https://www.itf-oecd.org/safer-city-streets>

How are we performing?

Analysis by the OECD shows that London's average road fatalities per 1,000km of road network is 7.8 and 10.5 in Greater London and inner London respectively.

This puts Greater London within the top ten performing areas of the benchmark.

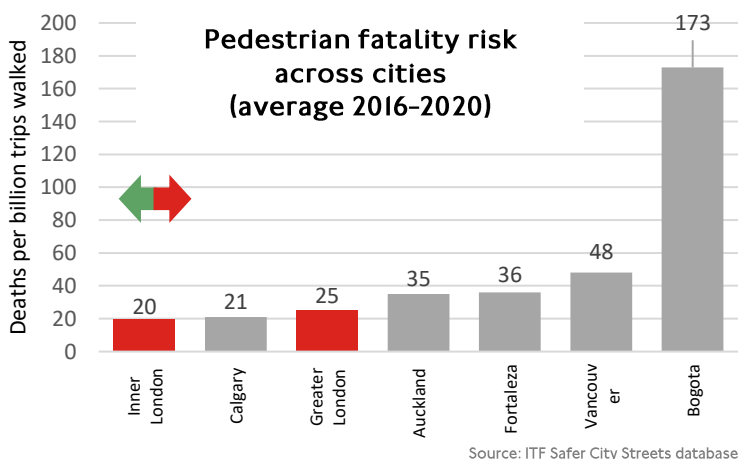
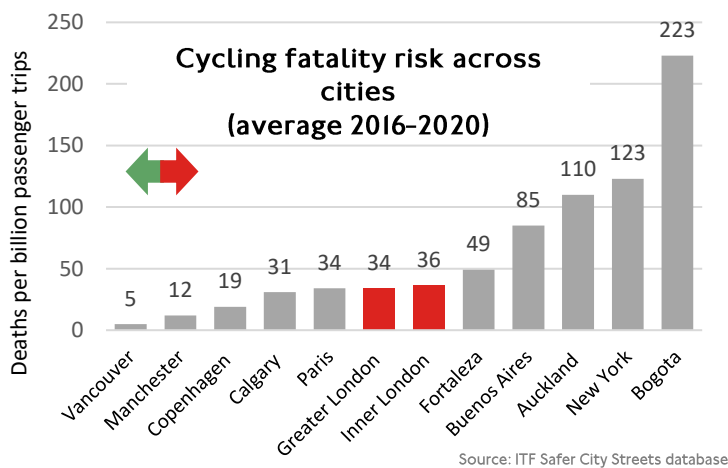
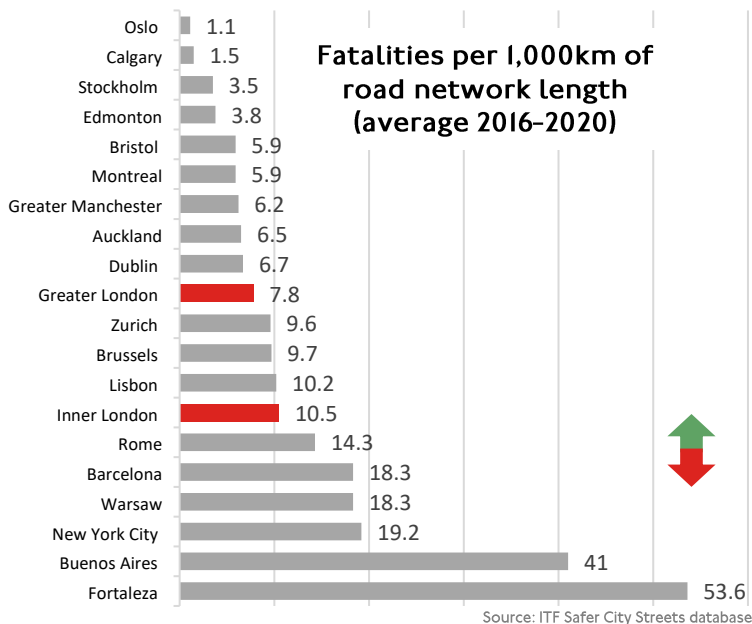
When looking at cycling fatality risk, London currently sits slightly better than average, and when assessing pedestrian fatality risk inner London is currently the best performing (however it is a relatively small sample size).

Supporting the TfL Business Plan

We have adopted a 'Vision Zero' approach to road safety, with the reduction of all road dangers a core principle of the Healthy Streets portfolio, as set this out in the 'Vision Zero action plan', released in 2018.

As part of our Safe Systems approach, we will continue to invest in safe and healthy streets. We will continue work to progress the next stage of our HGV Direct Vision Standard (DVS), continuing to make our buses safer through our Bus Safety programme, while also lowering the speed of vehicles in London. Lowering speed is key to reducing both the likelihood of a collision and the severity of the outcome. By working with London's boroughs, nearly half of London's roads now have a 20 miles per hour speed limit, as do more than 100 kilometres of our roads. We will continue to lower speed limits across London to reduce road danger.

This is in addition to our Safer Junctions programme which target's locations where the greatest numbers of people have been killed or injured while walking, cycling or riding motorcycles, we have already redesigned 43 junctions as part of it, and will continue to invest in further locations going forwards.



Safer London

Major cities around the world are taking a stand to end the toll of deaths and injury seen on their roads and transport networks by committing to Vision Zero. London is fully committed to this approach and the Mayor’s Transport Strategy sets out the goal that, by 2041, all deaths and serious injuries will be eliminated from London’s transport network.

Rail safety

We have benchmarked railway safety on fatalities due to illegal activity and accidents, but excluding suicides against the number of journeys.

Newer metros tend to have a higher proportion of stations with Platform Edge Doors (PEDs), which restricts access to the track and reduces platform-train interface incidents. Newer stations are also often better designed with safety in mind as a result.

We are continuing to carry out initiatives across our modes to prevent suicides. This includes providing training to staff and undertaking customer awareness campaigns to promote safe behaviours on our networks.

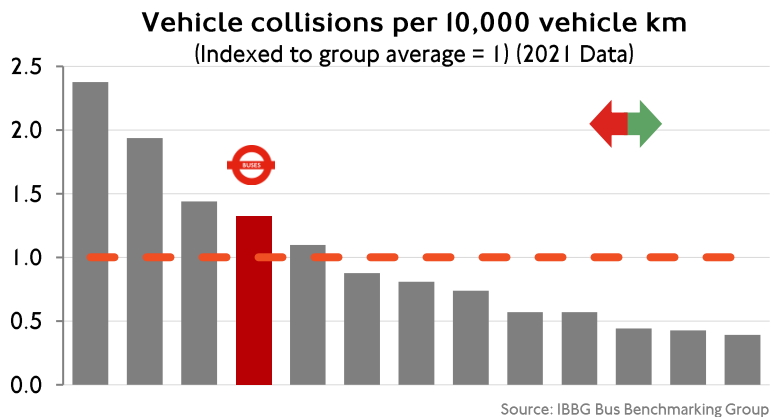
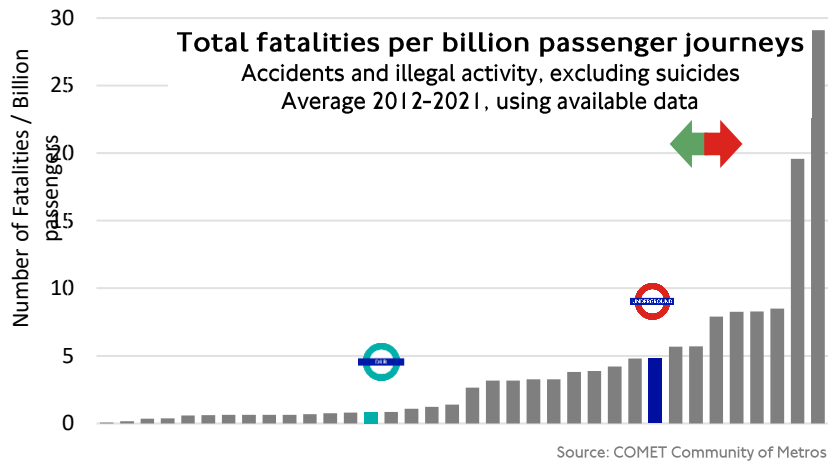
As part of our pandemic response we introduced enhanced cleaning and have installed UV escalator handrail cleaners to encourage passengers to hold on to handrails. We are also committed to our colleagues safety working closely with the British Transport Police (BTP) and our enforcement officers as well as rolling out body worn cameras to minimise crime on the network and improve the safety of our frontline teams and customers.

Bus safety

Positive progress had been made reducing collision rates since 2017, and furthermore when road use changed during the pandemic. Buses are the safest form of road transport in London. However, more recently bus collisions are above average and we’re currently fourth highest of the IBBG members.

We have set ourselves the target of zero fatalities on the bus network by 2030 and zero serious injuries by 2041, with reducing bus collisions a key priority. We will continue to further enhance and deliver our Bus Safety Programme to reduce collisions, with measures including the continued roll out and development of our Bus Safety Standard, which is evidence-led and is focussed on vehicle design and safety system performance; embedding innovative safety training for bus drivers and their instructors; and reducing fatigue and distraction while improving bus drivers health and wellbeing.

We have rolled out the Bus Safety Standard on new buses with approximately 10 per cent of the bus fleet (890 vehicles in February 2023) now featuring safety measures including Intelligent Speed Assistance, Acoustic Vehicle Alerting Systems, Camera Monitoring Systems, features to reduce pedal application error, technology to prevent runaway buses, and improved occupant friendly interiors including enhanced slip-resistant flooring, with work ongoing in preparation to introduce Advanced Emergency Braking and improved bus front end design to new vehicles from 2024.



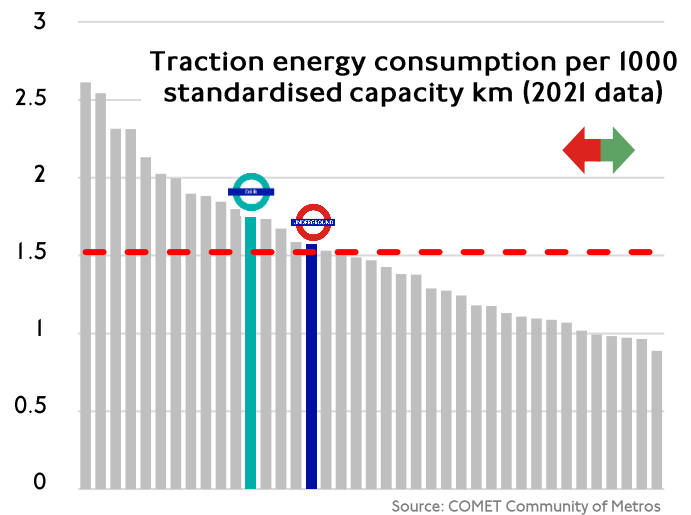
Carbon reduction and energy efficiency

The TfL Business Plan outlines our ambition to deliver net-zero TfL operations by 2030, and to seek out opportunities to reduce energy consumption. Environmental benchmarking data across the TSC benchmarking groups, and public transport organisations more generally, is currently less detailed than for other strategic priorities, e.g. reliability and safety. This topic is however receiving more focus, with clear ambitions to improve benchmarking in this area.

Metro energy consumption

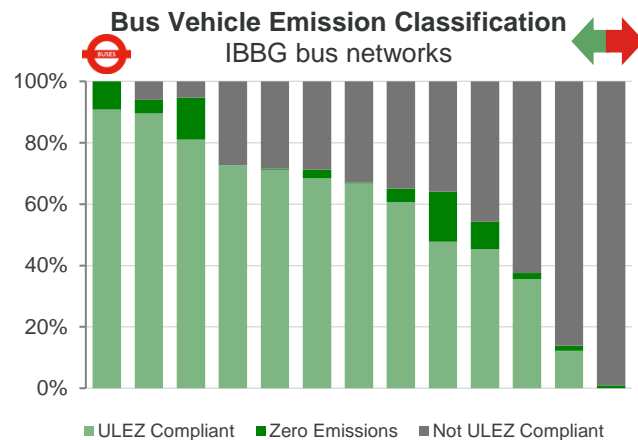
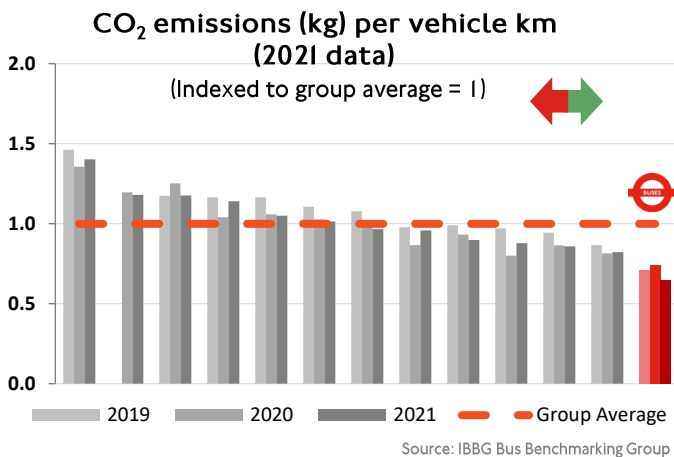
An emerging COMET case study on energy efficiency indicates that the short-term priority for metros is primarily on energy consumption rather than carbon levels. As a major user of electricity, metros operating costs are significantly impacted by energy supply issues and increasing energy prices.

Both the Underground and DLR have relatively high energy consumption levels as a proportion to service capacity compared to COMET peers. Potential improvements can be linked to the introduction of modern infrastructure, signalling and trains, all of which are more energy-efficient than legacy asset types.



Bus carbon and vehicle emissions

London buses are amongst the best-in-class in terms of vehicle emissions and continue to improve year-on-year. TfL continue to target the removal of all petrol and diesel buses by at least 2034, and those that do currently use fossil fuels meet Euro VI regulations in line with ULEZ requirements:



Supporting the TfL Business Plan

Public transport modes generally provide a more environmentally sustainable way to travel. This highlights the need to encourage mode share and the increased use of active travel modes such as walking and cycling. Where public transport is used, TfL wants to provide carbon free services wherever possible. Our Corporate Environment Plan sets out our key priorities, including our target to have a full fleet of zero-emission buses by 2034 and the decarbonisation of our buildings.



Summary



Summary

Whilst it is not always straightforward to make direct benchmarking comparisons across public transport operations, we can use data to provide an indication of how our performance, and progress towards improvement, compares to others, prompting questions as to how we can improve further.

This report shows areas where we perform well, and in some cases are best-in-class. The report also shows where there is the potential to seek out improvement opportunities.

Pandemic recovery

- Demand continues to be impacted by the after effects of the pandemic and remains lower than it was prior to 2019. However in recent months London has shown strong resilience and is recovering in line with most of its peers. Transport remains at the forefront of the capital's recovery and by continuing to provide for the needs of its people we can ensure that demand returns and grows.
- The pandemic had a huge impact on our finances, however London has led the way in providing an example of how to achieve financial sustainability in the past and continues to perform well despite the current challenges.

A good public transport experience

- Capacity across the network is currently high, this partly due to dampened demand from the pandemic but also because of the improvements made to provision in recent years. We are performing above the average across modes except for the Overground where the varied membership infrastructure influences the average.
- Reliability is impacted by the structural factors that influence performance of a wide variety of metro members within the COMET group particularly. When comparing our rail modes we are currently performing similarly to our peers. However, there are members that have achieved very high reliability with similar constraints to us which can learn from, especially in terms of delays relating to staff availability.
- In terms of accessibility, we continue to perform well in our newer modes and infrastructure as well as on our buses. Structural factors and levels of investment continue to affect London Underground but progress has been made in recent years to improve step-free journeys across the network.

Healthy Streets and healthy people

- Safety remains our top priority at TfL. Performance remains good when compared to peers however there is still more work to be done to be industry leading and achieve Vision Zero.
- Active Travel has seen large increases over the last decade, however progress has slowed over recent years. We remain committed to making active travel a viable and attractive option. When considering use of sustainable modes as a whole (including public transport) we continue to see a good modal share.
- London is at the forefront of a global drive to make cities more sustainable and environmentally friendly, and we currently perform well against our peers – continued delivery of our Corporate Environment Plan and initiatives will ensure that we continue to set the pace for reducing carbon emissions. This is an increasing area of interest amongst international peers and an area of benchmarking that will be developed further.

Benchmarking priorities for 2023/24

As international benchmarking is a collaborative process, TfL has to work with its partners to collectively agree priorities for the period ahead. Typically, members propose new areas of benchmarking at certain points during the year, with the final agreement on topics agreed via a majority voting system (with all members having one vote).

This report has highlighted a number of opportunities where benchmarking may be able to support the TfL Business Plan, and these topics – summarised below – present an initial list of benchmarking goals for 2023:



- A continued focus on customer demand trends and how public transport networks adapt in a post pandemic world, both in terms of service provision and encouraging passenger journeys



- Wherever possible, ensure that future benchmarking considers value for money of public transport operations to highlight potential efficiency/savings opportunities



- Embed the Elizabeth line into the ISBeRG benchmarking group and consider both; the case for joining the new Imperial College benchmarking group for trams and developing benchmarking in less mature areas such as Walking and Cycling



- Continue to increase the focus on new benchmarking priority areas such as environmental sustainability and climate change adaptation. Understanding the role transport operators can play in reducing our impact on the environment



- Considering structural factors, continue to explore how we can increase reliability and provide the good service our customers have come to expect



- Continue to prioritise safety across all of our operations, progressing towards Vision Zero and working collaboratively across transport operators to achieve ambitious targets