Safety, Health and Environment Appendix 1 Quarterly report

Quarter 3 2022/23

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Introduction and Executive Summary

This report summarises our performance in Quarter 3 of 2022/23 and identifies strategic trends covering 18 September to 10 December 2022, unless specified.

During Quarter 3, we saw customer numbers increase slightly across the TfL network, ending the quarter at 0.82 billion customer journeys, representing a 0.10 billion increase from the end of Quarter 2 2022/23. Overall, we still have some way to go before reaching the pre-pandemic customer journey figures of 0.9 billion (Quarter 2 2019/20). This means many of our key safety, colleague and environmental performance indicators remain at different levels than they might have been previously. The data available shows that although weekend demand has almost recovered to pre-pandemic levels, the weekday demand is lower which may be a result of new hybrid working arrangements since the pandemic.

We have continued to implement measures to improve our short- and long-term safety, health and environmental performance. We have continued to perform well on most of our safety metrics. In Quarter 3, we met our targets for reducing injuries to people in road traffic collisions and injuries to people on or in collision with a bus. The data behind these scores is explained in the road safety section of this report. We met our targets for customer injuries but did not meet our workforce injury targets; the reasons behind this are discussed in the public transport safety section of this report.

COVID-19 remained the top cause of short-term staff absence but significantly decreased as a proportion of total staff absence, from 44 per cent in Quarter 2 to 27 per cent in Quarter 3. Mental health and musculoskeletal-related health remained the top two causes of long-term absence, which is in line with the national average. Our Occupational Health team continues to run events aimed at giving staff the tools to better look after their mental health.

In Quarter 3 we published a new Business Plan setting out our priorities and spending plans. While our funding position remains under pressure, the agreement on medium term funding that we reached with Government in 2022 means that we will be able continue to invest in safety and environmental improvements for our customers, workforce and for London.

About this report

This report explores and highlights the performance, trends and measures we are implementing to improve safety, health and environment performance.

Throughout this report, our 'customers' refers to direct users of our services, and our 'workforce' includes our directly employed staff as well as people working in our supply chain. For both groups, we use data collected directly from our operational

businesses. Some assault data comes from both our own internal reporting systems and the police.

When referring to people killed or seriously injured, the following causes of injury are excluded: an injury which results from an incident arising from a pre-existing medical condition; intentional self-harm resulting in a physical injury or death; criminal activities perpetrated by customers or members of the public on other customers or members of the public.

Unless otherwise stated, 'streets' refers to all of London's roads, including those managed by London's boroughs, which make up the majority (95 per cent) of London's roads. Where we report safety data for streets, we use data collected by the Metropolitan Police Service (MPS) and the City of London Police (CoLP), in line with Government requirements. All road safety data is provisional and subject to review and assurance, with the final data published annually in line with DfT requirements.

Reporting period

Most data covers the quarter from 18 September to 10 December 2022, except for some work-related violence and aggression data which is reported six months in arrears. Some data is provisional and is subject to change.

Mayor's Transport Strategy and Scorecard

Our role is to enable London to move safely and sustainably, in line with the goals of the Mayor's Transport Strategy (MTS). This includes increasing the attractiveness of public transport and making cycling and walking safer, easier and more convenient. One of the central tenets of the MTS is Vision Zero, aiming to eradicate all loss of life and serious injuries from London's streets by 2041. We are also striving to achieve Vision Zero on our public transport network and amongst our workforce.

Scorecard

Figure 1: Quarter 3 2022/23 Scorecard

Measure	Unit	Q3 Target	Q3 Actual
People killed or seriously injured in road traffic collisions per million journey stages	Killed or seriously injured per million journey stages	0.33	0.27
People killed or seriously injured in road traffic collisions in or by a London bus (per million surface journey stages)	Killed or seriously injured per million journey stages	0.020	0.019
Customer all injuries per million passenger journeys	All injuries per million journeys	2.58	2.31
Workforce all injuries	Number of workforce injuries	323	371

The table above sets out the relevant annual scorecard metrics, accompanying targets and actual performance. Below are brief explanations of the performance of each measure. More detailed explanations, with accompanying graphs, are set out in the relevant sections of this report.

Road safety measure

Our aim in Quarter 3 2022/23 was to reduce the rate to fewer than 0.33 people killed or seriously injured on the roads per million journeys. In Quarter 3, there were 0.27 people killed or seriously injured on the roads per million journeys. Whilst we have met the annual scorecard metric for road safety this Quarter (and previous quarters this financial year), we are not currently on track to meet our Vision Zero interim target for 2022. The Mayor's Transport Strategy sets an interim 2022 target for a 65 per cent reduction in number of people killed or seriously injured compared with 2005-09 baseline. For further details regarding how we are tracking against this interim target see 'Progress against targets in the Mayor's Transport Strategy' below.

Bus safety measure

Our ambition is for no one to be killed in, or by, a London bus by 2030. In Quarter 3, our aim was to have no more than 0.020 deaths or serious injuries per million journey stages. We achieved our target for Quarter 3 as there were 0.019 deaths or serious injuries per million surface journey stages.

Public transport safety measure

Our aim in Quarter 3 2022/23 was to have fewer than 2.58 injuries to our customers per million journeys.

During Quarter 3, there was a rate of 2.57 injuries per million journeys.

Across the quarter, our customer injury rate is 15% lower than Quarter 3 of 2021/22.

Workforce safety measure

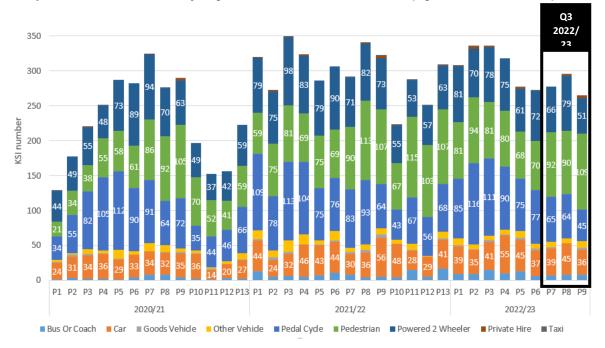
During Quarter 3 there were 371 injuries sustained by our workforce. Workforce periodic safety performance is off target but has improved compared to recent, prepandemic years. Assaults have risen to near pre-pandemic levels, while other causes of workforce injuries remain lower, including slips, trips and falls, trapped fingers, and collisions. However, this should be considered in the context of our workplace violence and aggression strategy, which aims to improve the culture of reporting of assault-related injuries.

Safety

This section summarises our safety performance across London's roads, public transport, capital delivery activities and work-related violence. It provides an overview of key trends for the year and the areas we are targeting for improvement.

Road safety performance

In Quarter 3, there were 837 people killed or seriously injured on London's roads; 813 of whom were seriously injured and 24 of whom were killed. Approximately 79 per cent of people killed or seriously injured were people walking, cycling or riding a motorcycle. The following graph shows the number of people killed or seriously injured in Quarter 3 2022/23 by mode of travel. Figure 2 and Figure 3 show the number of people killed and seriously injured respectively, for Quarter 3 compared over the last four years.



People killed or seriously injured on London's roads (by mode travelled)

Progress against targets in the Mayor's Transport Strategy

The Vision Zero action plan sets short, medium and long-term casualty reduction targets to help us achieve our ultimate 2041 Vision Zero target. In 2022, our interim target was a 65 per cent reduction in number of people killed or seriously injured compared with 2005-09 baseline. Based on the raw data available, we are currently tracking at a 42 per cent reduction in the number of people killed or seriously injured. For fatalities only, we are tracking at 52 per cent, which is closer to our 2022 interim target, however these figures highlight the scale of our challenge.

Quarterly performance

Transport Mode	Q3 2019/20	Q3 2020/21	Q3 2021/22	Q3 2022/23
Pedestrian	15	16	8	13
Pedal cycle	1	2	2	1
Powered two- wheeler**	8	3	4	6
Car	5	2	2	4
Bus or coach	1	1	0	0
Taxi	0	1	0	0
Private hire	0	0	0	0
Goods vehicle	0	0	1	0
Other vehicle	1	0	0	0
Total	31	25	17	24

Figure 2: Number of people killed on London's roads*

*Quarter 3 2022/23 figures are provisional and subject to change.

**Powered two-wheeler refers to motorcycles, mopeds and scooters.

It is useful to compare Quarter 3 2022/23 to Quarter 3 in 2019/20 because of the significant changes seen in the number of people using the road network over the last few years of the pandemic. A total of 24 people were killed on London's roads in Quarter 3 2022/23, which is significantly fewer than the same pre-pandemic quarter in 2019/20. However, the number of people killed in Quarter 3 2022/23 is more than the same quarter last year and broadly similar to the same quarter in 2020/21.

Notably, the number of people killed while walking in Quarter 3 2022/23 was not far off the pre-pandemic Quarter 3 figure, unlike in previous quarters this year where the number has been much lower than pre-pandemic figures. We will continue to monitor this trend as this is cause for concern.

Car occupant and powered two-wheeler fatalities in Quarter 3 are higher than Quarter 3 in 2020/21 and 2021/22 but lower than Quarter 3 in 2019/20. For car occupant fatalities, this follows a slight uptick during the spring/summer months of Quarter 1 and 2 this financial year.

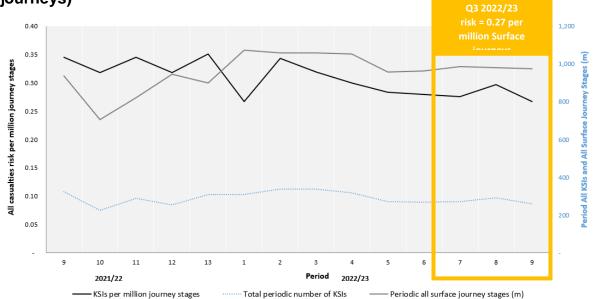
Transport Mode	Q3 2019/20	Q3 2020/21	Q3 2021/22	Q3 2022/23
Pedestrian	331	267	266	278
Pedal cycle	153	225	193	173
Powered two-wheeler	200	224	193	189
Car	120	99	111	116
Bus or coach	14	19	17	24
Taxi	1	2	3	1
Private hire	3	3	3	5
Goods vehicle	12	3	11	5
Other vehicle	3	25	19	22
Total	837	867	816	813

Figure 3: Number of people seriously injured on London's roads

*Quarter 3 2022/23 figures are provisional and subject to change.

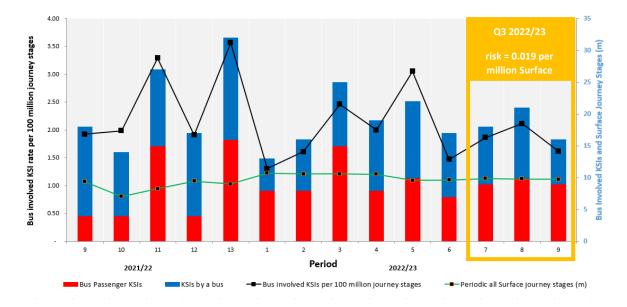
The number of people seriously injured this Quarter is similar to Quarter 3 last financial year (813 serious injuries compared to 816 in Quarter 3 2021/22) and is lower than the equivalent period in 2019/20 (pre-pandemic). The number of pedestrians and car occupants seriously injured this Quarter is higher than Quarter 3 in 2020/2021 and 2021/22 but lower than the pre-pandemic 2019/20 year. Conversely, pedal cycle serious injuries are lower than Quarter 3 in 2020/21 and 2021/22 but higher than the pre-pandemic Quarter 3 2019/20. Powered two-wheeler serious injuries are lower in Quarter 3 2022/23 than the same Quarter over the last four years, whilst serious injuries in a bus or coach in Quarter 3 2022/23 are higher than the same Quarter over the previous four years.

Scorecard measure: All casualties in road traffic collisions (per million journeys)



The number of journey stages made by Surface transport modes in Quarter 3 2022/23 decreased slightly compared to the previous two Quarters, possibly reflecting seasonal trends and industrial action on the railways. During Quarter 3, there were 0.27 people killed or seriously injured on the roads per million journeys, which meets our scorecard target and forms part of a general downward trend but shows there is still much more to be done.

Scorecard measure: Rates of fatal or serious injury experienced by people in collision with buses



Our ambition is that no one is killed or seriously injured on, or by, a London bus by 2030. The risk of a bus being involved in a collision that kills or seriously injures either a bus passenger or someone else on the roads remains extremely low.

In Quarter 3, our aim was to have no greater than 0.020 deaths or serious injuries per million journey stages. In Quarter 3 there were 0.019 deaths or serious injuries per million surface journey stages.

Whilst we have met our target this quarter, the number of serious injuries on or by a bus has been higher than usual in recent months, driven by an increase in bus occupant injuries. We are working to understand the reasons behind this and how to address them. We know already that slips, trips and falls are some of the main types of injuries to those on board buses. We've recently commenced a pilot with three bus operators to gather additional information about the causes and circumstances leading to these incidents.

Road safety updates

Vision Zero action plan progress report

The <u>Vision Zero action plan progress report</u>, published in November 2021, reiterates our focus on actions that contribute to creating a safe road network.

Inequality in road danger in London

Within our Vision Zero action plan progress report (2021) <u>https://content.tfl.gov.uk/vision-zero-action-plan-progress-report-2021.pdf</u> we committed to publish analysis describing how unequal road outcomes manifest among different demographics and communities.

Collision data analysis work has now been completed and the final report is going through approvals processes, aiming for publication in late February. The report will be published on the TfL website and shared with boroughs and other Vision Zero partners.

Safe Speeds

Lowering Speed Limits Programme

Work is progressing well on the Lowering Speed Limits programme, with almost 110km of our road network now having a 20mph speed limit. Analysis of road safety data for the first two years of the sections of roads where speeds have been reduced indicates that fatal and serious injury incidents have reduced by almost 25 per cent. Collisions involving pedestrians are 63 per cent lower, those involving powered two-wheelers are down by 49 per cent. Those associated with all vulnerable road users are down by 36 per cent.

This three-year programme has been accelerated to be completed in two years to bring road safety benefits to the public sooner. To achieve this, the programme will consist of signing and lining changes, and lamp column mounted banners only. Physical interventions to make the speed limits self-enforcing will be delivered at a later stage where appropriate.

Detailed design is under way on six further projects to deliver 28km of roads with reduced speeds, which will see a consistent 20mph speed limit on most roads across the boroughs of Camden, Hackney, Haringey, Islington and Tower Hamlets as well as West Wickham town centre in the London Borough of Bromley. Residents and businesses have been contacted by post with details of the proposals and we have updated our online digital engagement website, Have Your Say. We are aiming to deliver these schemes by the end of March 2023.

A further 65km of our road network across the boroughs of Greenwich, Lambeth, Lewisham, Southwark and Wandsworth and the Royal Borough of Kensington and Chelsea is nearing completion of concept design. A new 30mph speed limit on the A4180 Ruislip Road in Ealing is in detailed design, reducing the posted speed limit from the current 40mph. These projects are scheduled for delivery by October 2023.

Work to lower the speed limit on the final 12km of our targeted roads in London is in concept design. This will see new 20mph speed limits on selected roads in Wandsworth, Richmond, Sutton, and Merton, as well as the A312 Harlington Road West in Hounslow. A new 30mph speed limit is proposed on the A4 Great West Road in Hounslow and new 40mph speed limits will be introduced on the A4 Bath Road in Hillingdon, to complement proposed pedestrian safety improvements, as well as the A406 North Circular Road in Enfield and Waltham Forest.

Safe Streets

Safer Junctions

In April 2017, the Safer Junctions programme highlighted 73 of the most dangerous junctions on our road network, defined as those with the highest vulnerable road user collision rates. Work to 43 of these junctions is now finished.

Design work continues on the remaining 30 junctions, including detailed design of York Road roundabout and Holloway Road/Drayton Park, which are respectively delivering motorcycle and pedestrian safety measures.

A new 20mph speed limit was introduced in early December 2022 on A205 Upper Richmond Road through the junction with Putney Hill / Putney High Street. This is the first phase of a three-stage approach to reduce road danger at this location.

In November 2022, we began consulting the public on the second phase of improvements at Battersea Bridge junction with Cheyne Walk, which will include new crossings on the remaining arms of the junction, as well as safety improvements for cyclists. In November 2021, a new pedestrian crossing was introduced over Battersea Bridge, where a pedestrian was tragically killed at the beginning of 2021.

We are committed to public engagement on potential changes to 10 further Safer Junctions by the end of 2024.

Safe Vehicles

London Rental E-Scooter Trial

London E-Scooter Trial

The London E-Scooter Trial launched in June 2021 and has expanded from five to ten participating boroughs. Since launch there have been over 2 million trips made with 0 fatalities and 25 serious injuries reported by operators to TfL. The latest headline metrics can be found on <u>TfL's website</u>. In December 2022, The Department for Transport (DfT) published the findings from its <u>national evaluation of e-scooter</u> trials which only considers data from the first 6 months of the London trial. TfL will therefore assess the conclusions of the national evaluation alongside its own monitoring and evaluation programme. The DfT also recently announced that it would allow e-scooter trials across the UK to run until May 2024 and so, in response to this, TfL launched a new procurement (Phase 2) for the London trial and extended contracts with the current operators until this procurement is complete.

TfL has carried out extensive stakeholder engagement to understand specific impacts of the trial, including the impact of rental e-scooters being on pavements. The London trial therefore included a number of mitigations within the contract to minimise such impacts, including mandatory parking whereby customers can only end their ride in designated bays. The location of these bays is primarily determined by the participating boroughs, who have included a mix of both pavement and carriageway locations. Parking bays on the pavement are accompanied by a Traffic Regulation Order and a risk assessment to ensure there is minimal impact on other pavement users. If a vehicle is left outside of a designated bay, operators have contractual Service Level Agreements whereby they have to retrieve the vehicle within a certain timeframe. Due to these mitigations, TfL and boroughs have only had a small number of issues reported relating to mis-parked vehicles and generally engagement with disability groups has been positive. This is in contrast to rental ebikes which are unregulated and not contractually managed by TfL, resulting in a larger number of issues relating to vehicles being on pavements. Full details of the escooter trial engagement can be found in the trial's Equality Impact Assessment on TfL's website.

Direct Vision Standard (DVS)

TfL's world-first Direct Vision Standard (DVS), which reduces lethal blind spots on lorries, is already helping to save lives and prevent life-changing injuries. The scheme requires owners of heavy goods vehicles (HGVs) weighing more than 12 tonnes to apply for a free permit. Vehicles are assigned a star rating based on how much the driver can see directly through their cab windows to be able to drive safely in London. Those with the largest blind spots, rated as zero-star vehicles, must be

fitted with enhanced safety features, known as the safe system, as a condition of the permit.

Since its introduction in October 2019, we have issued more than 234,019 permits. Over 140,280 were issued for zero-star rated HGVs that have now had safe systems fitted, addressing blind spots and warning other road users of the danger. Over 121,518 penalty charge notices were issued where HGVs entered London without a permit up to the end of Quarter 3 2022/23.

In February 2023 we will launch a public consultation on the next phase of the DVS scheme, due for implementation on 26 October 2024. We have committed to expanding the scope of the permit conditions so that vehicles with a DVS rating of less than three stars will need to be fitted with the Progressive Safe System (PSS). The components of the PSS, will take advantage of technological and regulatory developments over recent years, forming part of the UNECE regulations which will be introduced from 2024 onwards. Those under consideration are UNECE Reg 159, Moving Off Information Systems (MOIS) and UNECE Reg 151 – lateral detection of cyclists – which will both be mandatory in new vehicles from 2024.

Bus Safety

Bus Safety Strategy

An updated Bus Safety Strategy is in development. The document looks at what we have done to date, reviews our progress against our Vision Zero targets for the bus network and estimates the gap between the activity underway and achieving our targets. The strategy sets out what our focus should be for the next few years to close this gap, address risks and improve the safety of our buses for all road users and bus customers. The strategy is undergoing final review and we plan to publish in Spring 2023.

Bus Safety Standard

We are continuing to roll out the Bus Safety Standard to new vehicles joining the fleet, with 874 buses, around ten per cent of the current fleet, meeting the new standards by the end of January this year.

The new safety measures include Intelligent Speed Assistance (ISA) technology which limits the speed of a bus to the posted speed limit. Around 30 per cent of London's bus fleet has now been fitted with this technology, including buses which have been retrofitted.

Now that funding for the 2023 Business Plan (covering the period from 2022/23 to 2025/26) has been agreed, we are working on extending our retrofit of ISA technology to a further 1,800 buses, with preparatory work under way to begin this

work by April this year. Other measures in the safety standard include an Acoustic Vehicle Alerting System (AVAS), which is now operating on 734 quiet-running buses, and Camera Monitoring Systems aiming to reduce blind spots, which have been fitted on 780 buses.

Confirmation of funding availability for 2023/24 has meant that we are now in the process of preparing a campaign to upgrade all existing buses with AVAS to our improved 'responsive AVAS' which enables the AVAS volume to change to pre-set levels depending on ambient noise conditions and the time of day. We will also be ensuring that all our electric buses have AVAS through a retrofit campaign that is currently in the planning phase.

These retrofit campaigns and potential of further retrofitting Bus Safety Standard technologies onto existing buses will enable a much faster reduction in the potential number of casualties than relying only on new vehicles entering the fleet being compliant with the standard. This helps bring us ever closer to achieving our Vision Zero target of no one being killed in or by a London bus by 2030.

We have developed a Bus Safety Strategy that sets out how we intend to achieve this Vision Zero target, with research showing us we need to focus on our customer safety. This document will be published in February.

We have worked with bus operators to complete an annual review of their fatigue risk management systems and we have completed research on fatigue risk assessment tools with the University of Surrey. The 10 Bus Safety Innovation Challenge projects which focus on bus driver fatigue, health and wellbeing have continued being delivered over the last few months, with the last innovation with DriveTech UK now also under way.

Pedal Confusion

Research commissioned from AECOM has now been completed and this study has been published on <u>our website</u>.

The report sets out several recommendations which are being incorporated into the work overseen by the joint TfL and bus operator Working Group and Steering Group for pedal confusion. The Steering Group is attended by senior managers representing some of our bus operators and senior TfL representatives across Bus Operations and Engineering.

Responsive AVAS

The work to develop responsive AVAS (where the sound volume alters to predetermined volume settings depending on location-based ambient noise levels and time of day) has been successful, and the Bus Vehicle Specification has been updated to require new buses to have responsive AVAS. We are also looking at how responsive AVAS could be rolled onto the existing fleet, depending on available funding.

Managing Bus Driver Fatigue

The Fatigue Risk Assessment Tool research undertaken by the University of Surrey is awaiting final sign off before next steps get underway.

Procurement for consultants to support the Fatigue Detection Technology project is in progress. This project will result in up to 450 buses being fitted with fatigue and distraction technology and will enable us to understand how this technology can be rolled out more widely onto London's bus fleet. This will provide a rich, up to date source of information about fatigue-related incidents, allowing us to further develop our bus driver fatigue workstream.

All bus operators have voluntary health kiosks or assessments in place and data is being gathered to help further develop the bus driver health and wellbeing workstream. Communications and engagement activities have been developed to encourage drivers to access the kiosks, which are free to use and give an insight into their current level of health and wellbeing, with further support signposted where necessary.

Fatigue and Health & Wellbeing Innovation Challenge 2021

The combined Fatigue, Health and Wellbeing Innovation Challenge was launched in late spring 2021 and is enabling us to trial a number of measures across London bus operators, including some bids from partnerships between bus operators, that will help to reduce fatigue and improve health and wellbeing of bus drivers. All projects are underway with varying timescales, although all are due to complete by April 2023.

Safe Behaviours

Enforcement

The MPS and (CoLP) undertake significant and wide-ranging activity to tackle crime, change behaviours, prevent harm, and save lives. This includes prevention and intelligence gathering activities, problem-solving to tackle the root causes of problems, community engagement and education initiatives and active monitoring and targeting of high-risk vehicles and drivers.

Enforcement action includes Traffic Offence Reports which are issued by police at the roadside, and arrests or Notices of Intended Prosecution for offences enforced through safety cameras or evidence provided by members of the public (for example, through headcam or dashcam footage).

The MPS has dealt with 520,040 road traffic offences through enforcement action in 2022/23 (April – November 2022). This was 45 per cent higher than April – November 2021 (an additional 160,289 offences).

The MPS prioritises its enforcement on the offences that cause the greatest risk and harm on London's roads. This includes speeding, mobile phone offences, driving under the influence of drugs and alcohol, red light offences, careless or dangerous driving, driving without a licence or in an uninsured vehicle and driving while disqualified. During 2022/23 (April – November 2022), 90 per cent of all road traffic enforcement action taken by the MPS was for priority offences, four per cent higher than 86 per cent during April – November 2021. Speed enforcement accounted for 81 per cent of all traffic enforcement, reflecting the risk and harm this causes.

In 2022/23 (April – November 2022), the MPS enforced 422,921 speeding offences. This was 60 per cent higher than April – November 2021 (an additional 159,607 offences). This is due to the planned uplift in safety camera enforcement, as part of the shared collaborative programme between the MPS and TfL, to improve the MPS's capability to enforce greater volumes of offences captured by safety cameras. This is not an indication that speeding is worsening but moreover that the MPS's capacity to issue more penalties has improved.

The above traffic enforcement results are provisional and subject to change as more offences are processed.

In Quarter 4 2021/22, we introduced the new mobile safety camera capability (five lasercam devices) that are operated by Roads Policing Police Community Support Officers. This capability complements police roadside enforcement activity and the fixed safety camera network and will enable us to deal with more offences and respond flexibly to community and borough concerns. The MPS has enforced over 28,000 speeding offences through mobile safety cameras since they were introduced at the end of January 2022.

Stakeholder Engagement

Reducing work related road risk

On 6 December 2022, we collaborated with Urban Design London to host an event exploring measures boroughs can adopt to mitigate work related road risk (WRRR). Committing to eliminating casualties on our streets through supply chains and fleets is one of our five key borough 'asks' to help deliver Vision Zero. Over 20 borough representatives attended. The event involved presentations from the external concessionaires running the Fleet Operator Recognition Scheme (FORS) and the Construction Logistics and Community Safety (CLOCS) Standard, which are key components of the Vision Zero Action Plan and have been embedded in TfL contracts for over 10 years.

This complements a wider programme to promote Vision Zero and the mitigation of WRRR through Local Implementation Plan (LIP) funding. Raising awareness of the practical steps boroughs can take is essential to expanding the uptake of enhanced safety standards within the freight sector throughout London.

Tech Innovation Event

On 25 November 2022, we hosted our first Vision Zero Tech Innovation event with vehicle manufacturers. The event was hugely successful, with the aim to promote collaboration with industry in support of our Vision Zero aspirations. We showcased examples of collaboration in current workstreams, such as our work with Mercedes Benz using vehicle sensors to indicate potential risk hotspots, and with Bosch using Artificial Intelligence to identify issues at pedestrian crossings. Initial responses from industry have been overwhelmingly positive.

Motorcycle delivery company road safety forum

On 8 November 2022, we hosted the first motorcycle delivery company road safety forum. The forum brought together grocery and meal delivery companies for the first time to talk collectively about improving the safety of their motorcycle couriers on London's roads.

The grocery and meal delivery industry has expanded dramatically since the start of the pandemic, and we estimate that up to 40,000 motorcycle couriers are now working in London. We know that people riding motorcycles are the most vulnerable group on our roads, with figures showing they are 80 times more likely to be killed or seriously injured than people travelling by car.

Motorcycle riders are also most likely, per journey, to be involved in a collision which kills or seriously injures another road user. In addition, riding a motorcycle for work can carry additional risks, with couriers required to navigate unfamiliar roads, carry loads, deliver to tight schedules, ride at night and in bad weather as well as often working long shifts.

Organisations throughout the industry came together to raise awareness of road safety, discuss issues, share good practice and secure commitment to collaborate in the future. The ongoing ambition is to improve the safety of this vulnerable group of people and everyone they share the roads with.

P2W Training Courses

Attendance on both TfL's motorcycle safety training courses remains strong. Over 750 riders have completed 1-2-1 Motorcycle Skills and 527 riders have completed

the 'Beyond CBT' training course throughout 2022. Since the inception of both courses, we have trained over 5,000 riders.

Information on all TfL's motorcycle training courses can be found here. https://tfl.gov.uk/travel-information/safety/road-safety-advice/motorcycling-in-london

Marketing

Behaviour Change Campaign – Watch Your Speed

Londoners are continuing to drive at inappropriate speeds, and speed remains the single biggest factor in collisions that result in death or serious injury on London's roads. In early summer 2023, we plan to launch a revised behaviour change campaign tackling speed, targeting drivers. Together with our creative and media agencies we are currently working on concepts to reinvigorate the successful Watch Your Speed campaign and by refreshing it, we are reminding and reengaging people about the dangers of speeding.

School Education Programmes

Travel Smart formerly Safe Drive Stay Alive

The new digital road safety programme for 16-19 year old pupils, Travel Smart is now active. The former 'Safe Drive Stay Alive' live event programme has evolved to become an interactive online programme, including filmed testimonials and quizzes as the learning tool. Travel Smart enables individuals and classes in all boroughs to learn how their decision making can have a real impact on their lives through road safety.

Public transport safety performance

In this section there are significant incidents, fatalities and updates relating to public transport that have occurred during Quarter 3 and since the last report. Our thoughts and deepest condolences remain with families and friends of the victims.

Incidents which can be noted are as below:

Taplow rail station

On 18 February 2019, an adult and their three-year-old child were tragically struck by a TfL rail train at Taplow rail station.

The inquests took place between 14 November and 30 November last year and we were one of the Interested Persons. At the inquests, witnesses gave evidence on our behalf about the management of the station and refurbishment works at the time of

the incident. The Assistant Coroner gave a conclusion of suicide for the death of the adult and a detailed narrative conclusion for their three-year-old child detailing some events preceding their death. No prevention of future deaths report was issued to TfL.

Waterloo Station

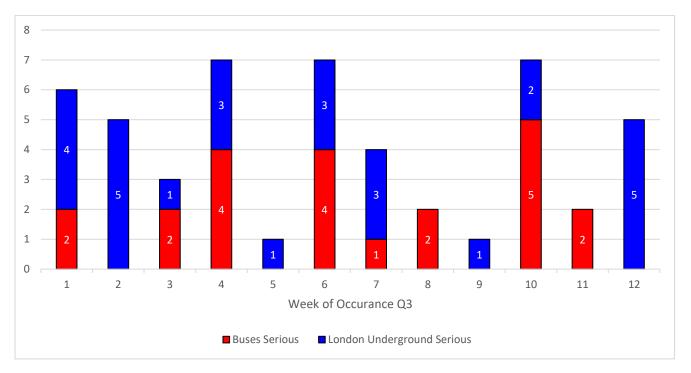
On 18 September 2019, a self-employed contractor working for Cleshar Contract Services, was tragically fatally injured while cleaning a moving walkway at Waterloo Underground station. LU is an Interested Person in the inquest. A pre-inquest review hearing took place on 2 December 2022 at Southwark Coroner's Court, and a further hearing will take place on 4 April 2023. The inquest will take place before a jury between 5 and 16 June 2023.

Waterloo station – 26 May 2020

On 26 May 2020, a passenger exited the Bakerloo line train at Waterloo and fell into the gap between the northbound platform and the train. He was struck by the departing train while trying to get back onto the platform and tragically suffered fatal injuries.

An inquest took place before a jury from 20 to 27 September 2022. The jury found that the death was accidental. Work continues on the LU platform train interface plan which includes improving customer risk assessments at significant risk platforms and tightly curved platforms and the progression of infrastructure changes at significant risk platforms for which funding has been granted as part of the TfL 2023/24 Business Plan. This includes the consideration of innovative solutions.

Quarterly performance



Customers killed or seriously injured per week in Quarter 3 (by mode)

During Quarter 3 no customers were killed on our public transport network, but sadly 49 customers were seriously injured. This is similar to Quarter 2, where again no customer was killed on our network and 50 customers were seriously injured. This is broadly comparable with data from the same quarter last year, where sadly one customer was killed on our network and 52 were seriously injured. It should be noted that the metrics excludes suicides.

Of the 49 serious injuries during Quarter 3, 27 (55 per cent) occurred on London Underground (LU) and 22 (45 per cent) happened on buses, with no serious injuries occurring on any other mode during Quarter 3. Slips, trips and falls continue to be the most common injury type, with 38 of the 49 serious injuries (77.5 per cent) across the network attributable to this as a causal or contributory factor. On our bus network, we had 19 slips, trips or falls (accounting for 86 per cent of bus serious injuries) and we saw 19 slips, trips or falls on LU (accounting for 70% of LU serious injuries).

On LU infrastructure, other serious injury causes during Quarter 3 were four occurring at the platform train interface (PTI), and one serious injury occurring on an escalator at Leicester Square, where an apparently intoxicated customer fell unconscious onto the escalator and was found at the top by a member of staff. There was also a customer who suffered a serious injury on a platform at Newbury Park, and a customer seriously injured on the stairs at Embankment, falling up the stairs

and suffering a broken wrist as a result. Finally, one customer suffered a serious injury as a result of crime/disorder at Marble Arch.

Our bus network also witnessed three other serious injuries. An incident happened outside a bus where a wheelchair user had safely alighted a bus in Southwark but then fell onto the pavement. After a bus was forced to brake harshly upon encountering an unpredictable road user at a roundabout in Bexley, a customer seriously injured themselves on a handrail. A customer also seriously injured a hand on a bus in Waltham Forest.

Quarter 3 saw a steady number of serious injuries (five) where intoxication was cited as a causal or contributory factor. This shows an improvement against Quarter 3 2021/2022 when '*intoxication was the most frequently mentioned contributory factor*'. This year we further developed our LU Intoxication Strategy and rolled this out across all modes.

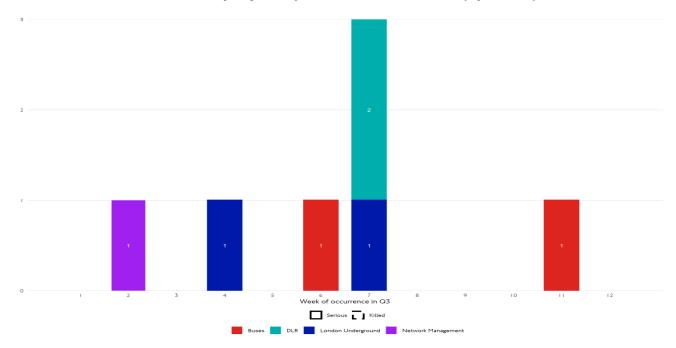
Trend in Injury Types

Although slips, trips and falls continue to dominate the causal and contributory factors resulting in customer injury across our network, this quarter we have seen a 15 per cent decrease from the same quarter in the last financial year. This encouraging trend consists largely of a decrease of injuries caused by slips, trips or falls on our LU and bus networks.

Having identified slips, trips and falls as a key strategic risk to customer safety, we are working hard to proactively manage this element of our risk profile. Using evidence including incident data, subject matter expertise, academic research and literature, we are targeting safety interventions to mitigate behaviours within our control which can lead to a customer slipping, tripping or falling. Addressing risks systematically and working to manage behaviours within our control, for example by improved driver training, focussed customer communications, and improved infrastructure, enable us to focus not just on incidents which have occurred, but also on targeting safety improvements systematically across all of our modes and infrastructure.

For example, for slip, trip and fall incidents on the bus network specifically, we commenced a pilot with three bus operators in Quarter 3 which involves gathering additional information about the causes and circumstances surrounding bus passenger slip, trip and fall incidents. This involves the CCTV being reviewed for each incident, with additional information being gathered in a central database to help look at trends in the underlying causes. Having successfully tested its application, we're extending the data gathering exercise more widely in 2023.

The risk of injury on escalators remains the second most prevalent factor in customer injuries and we have seen a steady increase in these on London Underground over the past few months. Analysis has shown that this increase is not related to the introduction of the Elizabeth line and associated escalator infrastructure. One principle, which has been applied to the design of the Elizabeth line escalators, is to reduce the amount of safety signage so we are not sending too many safety messages to customers, and instead focusing on one or two. This is done with the intention of not overloading customers with too many instructions, and we are continuing to work to understand what can be done further to manage this risk and apply appropriate interventions across our network.



Workforce killed or seriously injured per week in Quarter 3 (by mode)

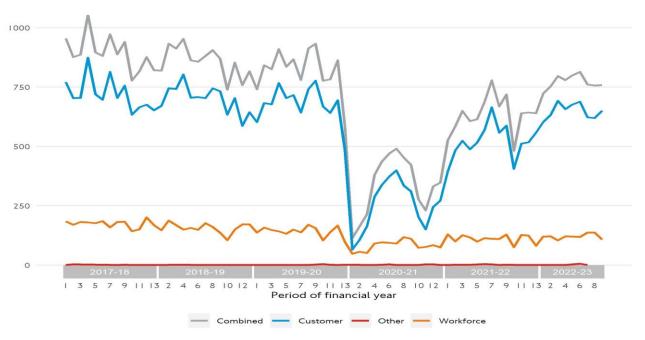
This section does not include injuries to our construction and projects workforce, which are covered in the Capital safety section below.

No one was killed whilst working on our public transport network in Quarter 3. Unfortunately, seven members of our workforce were seriously injured: two on the Docklands Light Railway, two on our bus network (in the garage environment), two on London Underground and one in our network management control room.

This compares to ten serious injuries sustained by people working on our public transport network in Quarter 3 2021/22. During the same Quarter last year, we saw seven members of our workforce seriously injured as a result of a slip, trip or fall. Two were seriously injured as a result of physical assaults and one member of our Compliance, Policing, Operations and Security team was seriously injured as a result of a struck body part. Quarter 3 this year has seen five serious injuries for our

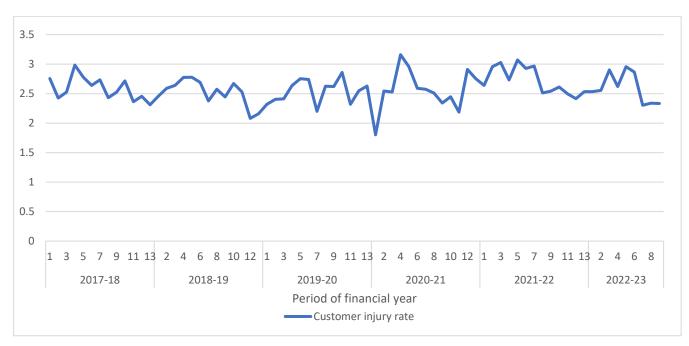
workforce attributed to slips, trips or falls, one as a result of trapped fingers and one suffering eye damage whilst cleaning graffiti from our DLR infrastructure.

Long term trend



Customer and workforce injury numbers per period since 2017-18 (total)

We have seen a steady increase in passenger numbers as we continue to welcome customers back to our network, witnessing an increase in the number of customers injured compared to the same period in 2021/2022. In period 9 2021/22, it was reported that there were 588 customer injuries in comparison to period 9 2022/23, with a reported 651.



Customer injury rates per million passenger journeys per period since 2017/18 (total)

Long term we are encouraged to continue to see a steady decrease in the rate of people injured on our network. Closing off Quarter 3 2022/23, the rate was down to 2.33 customer injuries per million passenger journeys in comparison to 2.51 customer injuries per million passenger journeys at the end of Quarter 3 last year. We will continue to work hard to continue this trend. As we continue to recover from the pandemic, we are hopeful we will see a rise in passenger numbers, and our customer engagement teams will remain focussed on identifying the behaviours within our control we can influence to maximise safety.

Public transport safety updates

Managing intoxication on our network

Inevitably, some of our customers use our network intoxicated. Whilst this can occur at any time of the year, Christmas parties, the Men's Football World Cup and it being the first unrestricted Christmas since the pandemic encouraged more Londoners to head out for a drink this festive season. Although we know that most intoxicated customers use our network safely, it is important we understand our intoxicated customers can be vulnerable, and we take appropriate steps to care for our all of our customers, as well as our workforce, using an approach with four elements:

Engagement – We are engaging with customers and staff to proactively
prevent incidents linked to intoxication. Initiatives, such as <u>Westminster Night</u>
<u>Stars</u>, provide support to anyone who becomes vulnerable due to intoxication,
to reduce the risk to their safety or prevent them from being a victim of crime.

- 2. **Education** By co-ordinating our messaging across our network we are reminding customers of local dangers and hazards.
- 3. **Enforcement** Prioritising the safeguarding of our vulnerable customers we are deploying our CPOS operational officers to key locations at strategic times and days, such as busy central London stations.
- 4. **Encouragement** We are continuing to work with partners to provide support and amplify messaging.

Capital safety performance

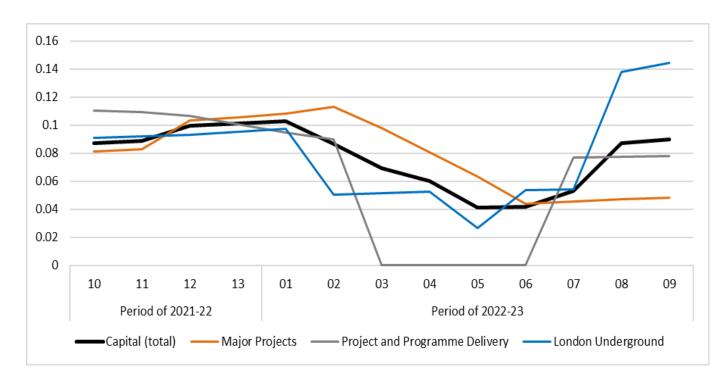
Capital works cover a broad range of activities across our former Major Projects, Project and Programme Delivery areas, LU Capital Delivery and TfL Engineering. Some are essential asset renewals and maintenance to keep our frontline services operating efficiently. Other activities represent new and significant investments to improve existing infrastructure. Within the Capital area, teams comprise employees from both TfL and supplier organisations. Likewise, worksites may be managed by TfL or by suppliers acting as our Principal Contractor. We do not distinguish between TfL or supplier hours worked or incidents within this section of the report.

During Quarter 3, the Capital area workforce completed 1.95 million hours worked, just below the 2 million hours worked during the previous quarter. Compared with Quarter 3 of 2021/22, there have been 500,000 fewer hours worked, predominantly as a result of some of our major projects, such as Bank Station Capacity Upgrade and Barking Riverside Extension reaching or nearing their conclusion.

Quarterly performance

To enable accurate analysis of data, some of our key measurables are quoted as a frequency rate per 100,000 hours worked. Frequency rates are calculated using a moving annual average based on performance over the previous 13 periods.

In addition to reporting on performance across the Capital teams individually, we also report on our overall Capital performance. Over the coming quarters, the composition of the Capital area and the data we report on within this section will continue to evolve in line with changes to TfL's organisational structure.



RIDDOR accident frequency rate (per 100,000 hours worked)

In Quarter 3, there was a total of four incidents reported under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR) within the Capital area. As a result, the accident frequency rates have increased across the Capital area, with the overall rate ending the quarter at 0.08; an increase on Q2.

One of the injuries occurred within our Major Projects and Project and Programme delivery areas, with the combined rate ending the quarter at 0.05. Whilst this demonstrates an increase on Q2, overall performance remains below the 2022/23 annual target of 0.10.

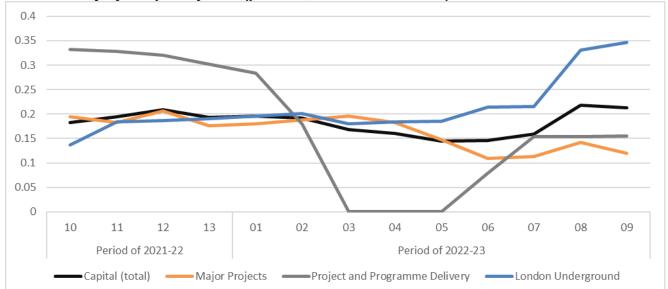
The RIDDOR reportable incident occurred when two operatives working on the Old Street Roundabout project were in the process of carrying a sheet of plywood from the compound on the roundabout to the sub-surface area in St Agnes Well. Whilst carrying the sheet, the plywood wobbled, and the Injured Person (IP) felt a pain in their right shoulder. The IP attended hospital and returned home. They were away from work for more than 7 days, requiring the incident to be reported under the RIDDOR regulations.

The three further RIDDOR reportable incidents this quarter occurred in LU, where all the incidents resulted in a greater than 7-day absence from work. The first occurred when an operative slipped and fell when working on ballast, resulting in injuries to their hands and wrists when trying to break their fall. The second injury occurred when an operative was struck in the face by a jack handle after selecting the incorrect equipment to complete the task. The final injury occurred when an

operative was loading battery power packs and lost their grip. causing the battery pack to fall. The IP took the total weight of the packs, jarring their back.

0.4 0.35 0.3 0.25 0.2 0.15 0.1 0.05 0 10 11 12 13 01 02 03 04 05 06 07 08 09 Period of 2021-22 Period of 2022-23 ——Major Projects ——Project and Programme Delivery — Capital (total) London Underground

There were no RIDDOR reportable incidents in Quarter 3 in TfL Engineering.



Lost time injury frequency rate (per 100,000 hours worked)

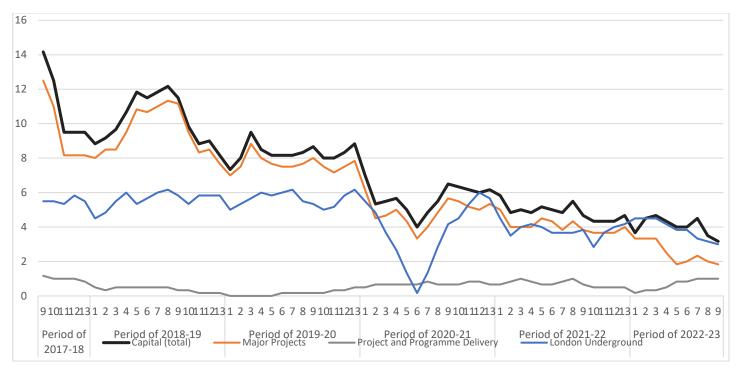
Lost time injuries (LTIs) are injuries which cause an employee to be absent for one or more shifts. There were six LTIs reported in our Capital teams during Quarter 3, an increase of one compared with Quarter 2. The lost time frequency rate for the Capital area ended the quarter at 0.21, an increase of 0.06.

Two of these LTIs occurred in our Major Projects and Project and Programme Delivery areas, resulting in a combined LTI rate of 0.12, below the target of 0.25. An LTI at Bank Station Capacity Upgrade occurred when an operative was loading temporary wooden escalator steps onto a lorry. One of their fingers got caught between the step and back of the lorry, causing a small cut, which was later discovered to be a small fracture to the tip of the finger.

The four additional LTIs occurred within our LU teams. One of the LTIs occurred at South Harrow sidings, where the IP was operating a handheld, battery-operated grinder to install a double-sheeted metal fence panel. The IP was wearing gloves and safety glasses as he was grinding. The sparks from the activity made contact with the IP's face who rubbed his face and eyes, causing irritation and resulting in a small splinter needing to be removed from their eye at hospital.

There were no LTIs recorded within TfL Engineering during Quarter 3.

Long-term injury trend



Total Capital workforce injuries (six-period average since 2017/18)

There were fourteen injuries reported in the Capital area during Quarter 3, which is a decrease of ten on the previous quarter. All were classified as minor injuries. 'Cuts and abrasions' were the top immediate cause of injury, with noncompliance with safe systems of work the most common root causes.

In our Major Projects and Project and Programme delivery areas, the eight injuries that occurred during Quarter 3 fall within our "stretch target" of five injuries or fewer per four-week period and are in line with our drive for improvement from last year.

In the LU teams there were five minor injuries reported for the quarter, a decrease of seven based on the last quarter. Within TfL Engineering there was one minor injury reported in the quarter, a decrease of one in comparison with Q2.

SHE Performance in Capital Projects

In addition to recorded injuries, we also capture and review near-misses. A brief selection of such incidents from the capital area (in no order of significance) includes:

King's Cross London Underground Station

A contractor was undertaking the planned movement of materials on escalators 4, 5 and 6 at King's Cross LU station and had taken out the relevant permits to work.

When the site team went to move materials, they noticed that the escalators had been switched off and barriers placed across them and discovered that LU Lifts & Escalators staff were in the machine chamber without a permit.

The relevant LU team was identified and spoken to by their senior manager. Rule Book 10 Station Access briefings are planned. Local incident investigation has been carried out. All staff members have been briefed on the importance of following process when taking possession of machines for maintenance. Unannounced site audits have taken place on two sites following the incident with a few minor infringements being found, which were immediately rectified, and staff were reminded of the correct procedure.

Further audits are planned.

SHE in Capital

SHE Capital Delivery & Maintenance Strategy

This quarter, the main strategic focus for SHE within Capital was the continued integration of safety, health and environment requirements within our procurement and supplier management processes. In November 2022, the new Managing SHE with Suppliers guidance was launched as part of the SHE Management System improvement project. The guidance pages mirror the new internal Management Framework for TfL's Procurement & Commercial (P&C) activities, simplifying the process, making it easier to follow and find key information, and integrating SHE seamlessly into procurement and supplier management activities, creating a more consistent approach across TfL. This will be of particular benefit to the Capital area.

Keeping in Touch Events

During Quarter 3, two Capital "Keeping in Touch" events were held. These events have been developed for the sharing of information between TfL and our Capital suppliers. The meetings are focussed on topics relating to Safety, Health, Environment, Sustainability, Wellbeing, Social Value, Responsible Procurement and Diversity & Inclusion. This enables TfL to share good practice when things go well, and to be open and honest when things do not go as planned, so both TfL and its supply chain can all learn from the experiences of others.

The first session was held in October and 50 people were in attendance to discuss Temporary Works and Work-Related Road Risk. A second session in December focussed on health. The next joint TfL/Supplier "Keeping in Touch" event in Q4 will be featuring the importance of controls on emissions from non-road mobile machinery. During Q3 it was good to see that the team behind the Old Street Roundabout project gained a notable 'Excellent' certificate from the 'Cleaner Construction for London' scheme. The award recognised the team's use whenever possible of low emission machinery on site.

Four Lines Modernisation (4LM) Safety Week

- In October, the 4LM programme held an ambitious "Safety Week", with a large number of events aimed at maximum participation from those on the 4LM Programme from TfL and our major supplier, Thales. There were daytime sessions at TfL's Endeavour Square office, as well as night sessions at the Thales Beckton depot. The sessions covered a great selection of topics, including Fatigue
- Defibrillator Use/Awareness
- Construction Hazards
- TfL health checks
- An all-day series of events from Super Wellness
- Noise & the Environment
- CDM
- Systems Safety

One of the highlights was a presentation by former Olympic Triple Jumper Nathan Douglas on resilience and stress management. The week provided a great deal of interest and ideas for maintaining a positive approach to safety, health and environment.

Health

COVID-19 and winter preparations

Since the start of the coronavirus pandemic, our focus has been to protect the safety and health of our customers and workforce. This remains our focus as we emerge out of the pandemic and transition to living with COVID-19.

With winter in mind, we are encouraging colleagues who are eligible to make sure they have their annual flu vaccination and the COVID-19 booster. We are also paying for anyone who cannot get a free flu vaccination to have one if they wish to.

In anticipation of an increase in numbers of people with colds, COVID-19 and flu, we have revised our posters and communication to remind people to stay at home if they feel unwell, to maintain hand hygiene and to wear a mask if it helps them to feel confident and safe.

Knowing that member of staff are concerned about the cost of living crisis, we have also updated advice on the intranet with energy saving tips and sources of support and information.

Deaths in service

Our sincere condolences remain with the families and loved ones of the 105 members of our workforce who have sadly passed away from COVID-19 since the start of the pandemic. We are working on a memorial site which will provide a permanent location to remember those transport workers who lost their lives to COVID-19. We expect this to open early in 2023. Everyone at TfL pays tribute to the vital role they played in our fight against the pandemic.

Our Employee Assistance Programme continues to be available to all employees and their dependants, and provides support, guidance, and information on a range of topics, including bereavement. The safety of all our staff and customers continues to be our top priority, and we are absolutely committed to doing everything in our power to keep everyone safe on our network.

Face coverings on public transport

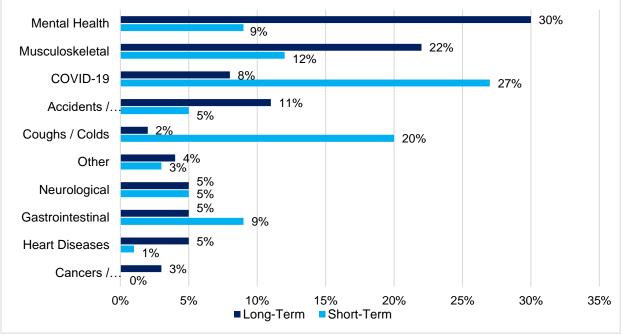
Our customer and staff messaging has been adapted to encourage people to take appropriate action to keep themselves safe, including wearing a face covering if this helps them to travel and work with confidence.

We are continuing to provide free Type IIR masks for those working in our operational areas for those who wish to wear them.

Sickness absence data

When looking at our sickness absence data, short-term absence is any absence of fewer than 28 days and long-term absence is of 28 days or more.

By looking at the underlying causes of absence in detail, we gain meaningful insight into where we can best target preventative measures. Around 60 per cent of absences at any time are caused by long-term sickness.



Top causes of long- and short-term absence in Quarter 3 2022/23

In Quarter 3 2022/23, COVID-19 remained the top cause of short-term absence, but significantly decreased from 44 per cent in the previous quarter to 27 per cent in Quarter 3. This can be explained by the latest Government figures of the R rate for England which decreased from an estimated 1.3 during Quarter 2 to 0.8 during Quarter 3. For the week ending 3 October 2022, in England, 1,513,700 people tested positive, equating to 2.78 per cent of the population or around one in 35 people. There was also a notable increase in the short-term absence for coughs and colds, rising from 7 percent in Quarter 2 to 20 per cent in Quarter 3. This is because colds, flu and other related viruses are currently circulating at high levels. All other absence types are holding fairly stable.

In Quarter 3, the top two causes of long-term sickness absence averaged the same levels as Quarter 2. Mental health remained the top cause, accounting for 30 per cent of all long-term absences. Musculoskeletal-related absence was again the second highest cause at 22 per cent. These categories remain the top two causes typically accounting for the majority of long-term sickness absence in the UK. Our Occupational Health team has several initiatives aimed at prevention of ill health and to support those who become unwell to return to work earlier.

Health updates

Health Surveillance

Last year, we increased our focus on the way we manage health risks our workforce are exposed to. This includes updating our approach to managing health surveillance, for example implementing health surveillance programmes for those who may require it.

We are continuing with our health surveillance programme, with a focus on managing and reducing the health risks in areas with an elevated level of exposure to hazardous substances/activities as part of their roles. This quarter, we have created a 3-year TfL Health Assurance plan which outlines our approach and actions in terms of demonstrating and providing assurance that we are compliant around health surveillance legislative requirements.

We recognise the importance of engaging with our managers and operational teams not only around the legal requirements of our health surveillance programme, but also to ensure that everyone understands the human side of our programme and what we are trying to achieve to ensure that we are protecting all our people who currently undertake work with potential health impacts, as well as those that may carry out this work in the future. To this end, we are creating a new communications and engagement plan tailored to each of our front-line teams which we will roll out in spring 2023.

Building on the reporting to senior management which commenced last quarter, in early 2023 we will carry out an internal audit of our management system, tools and reporting with regards to health surveillance before commencing a wider health surveillance audit across our front-line delivery teams later in 2023/24.

During the first half of 2023, we will be looking to expand the focus of our health surveillance programme to encompass other risk areas such as noise and hand arm/whole body vibration issues.

Well@TfL

Well@TfL Mobile Health Unit

The Well@TfL mobile unit has continued to make its way around the network, delivering wellbeing checks, health surveillance and medical checks onsite. During Q3 247 wellbeing checks were delivered on the mobile unit. 61% of those assessed were classed as overweight or obese. A total of 31% were referred to their GP as a

result of raised blood pressure, high cholesterol or high blood sugar. This highlights the importance of this initiative in early identification of health issues.

Roczen (previously called RESET Health)

We have been working with Roczen for a year now and 108 colleagues have now joined the program. We continue to see positive results with weight loss and improved diabetes control. A total of 39 members have now been on the programme for more than 24 weeks and their aggregated 24 week results are shown in the table below. We hope to be able to extend the programme to offer places for more colleagues to join in the next quarter.

Indicators	Baseline Average	Week-24 Average	Change	Sample Size
Weight (kg)	100.0	92.0	-8.0 (-8.0%)	27
BMI (kg/m2)	33.97	31.2	-2.7 (-8.0%)	27
Waist Circumference (cm)*	107.5	100.7	-6.8 (-6.4%)	24
Systolic BP (mmHg)	125	126	+1 (+0.7%)	19
Diastolic BP (mmHg)	79	79	-	18
HbA1c (mmol/mol) - T2D and PT2D only	52.4	45.6	6.8 (12.9%)	5

Data accurate as of: 8 December 2022. Asterisk denotes certain measurements are excluded due to self-reporting error.

Gambling Awareness training

Latest government data has estimated that 0.5% of the adult population have a problem with gambling, 3.8% are gambling at at-risk levels, and 7% are affected negatively by another people's gambling. Gambling-related harms have considerable cost to society, likely to be in excess of £1.27 billion. The evidence suggests that harmful gambling should be considered a public health issue because it is associated with harms to individuals, their families, close associates and wider society.

We are committed to supporting colleagues who experience any of the harms associated with problem gambling. In December, nine members of our Occupational Health team received training from GamCare, a leading national provider of information, advice and support for anyone affected by this problem. We are working to build a productive relationship with GamCare, which includes the development of a direct referral pathway via our Drug and Alcohol Treatment Service for any of our staff who need treatment and support. The objectives of the training were to raise awareness of the signs and symptoms of this harmful behaviour and to improve the health and wellbeing team's understanding of the referral process.

Working with a terminal illness

On 22 November 2022, our Head of Occupational Health and Wellbeing represented TfL at a House of Lords round table event hosted by Lord Gus O'Donnell, Patron of the What Works Centre for Wellbeing, to mark the publication of the latest research on wellbeing at the end of life: specifically, the role of work and employment.

Current estimates suggest there are around 100,000 people of working age living with a terminal diagnosis. Many of these people find themselves forced to give up work, without appropriate support to consider options and make informed decisions. In many cases this brings anxiety and uncertainty for individuals and has long term financial implications for their families and loved ones.

London Lifesavers

TfL accompanied the Mayor of London and other members of the Greater London Authority (GLA) on London Life Saver training. They were taught how to perform CPR and use a defibrillator by medics in a training session at City Hall.

It comes as part of the Lifesavers Initiative launched by the London Ambulance Service (LAS) to equip at least 100,000 Londoners with the knowledge and confidence to act in an emergency situation until ambulance crews arrive at a scene.

Over 2,000 lifesavers have been trained since September last year, with the LAS set to scale up the campaign further in the coming months.

The LAS estimate that more than 100 lives every year could be saved if it reaches its target. So far this year, medics have responded to 9,500 cardiac arrests in the capital.

TfL have also come together with London Ambulance Service to offer London Life Saver (LLS) training to our staff and the general public held at Palestra every month.

TfL have agreed with GLA that they will host a London Life Saver webpage, the page will bring together everything London Life Saver that GLA, TfL and LAS are working on together from the roll out of defibrillators to all of our London Underground stations and key Surface locations to hosting the joint TfL/LAS London Life Saver training video to be released in the New Year.

Work-related violence and aggression

Work-related violence and aggression (WVA) affect the health and wellbeing of individuals. The impact on our people, operators and contractors is unacceptable. Concerted action is underway to tackle it.

Volume of incidents in Quarter 3

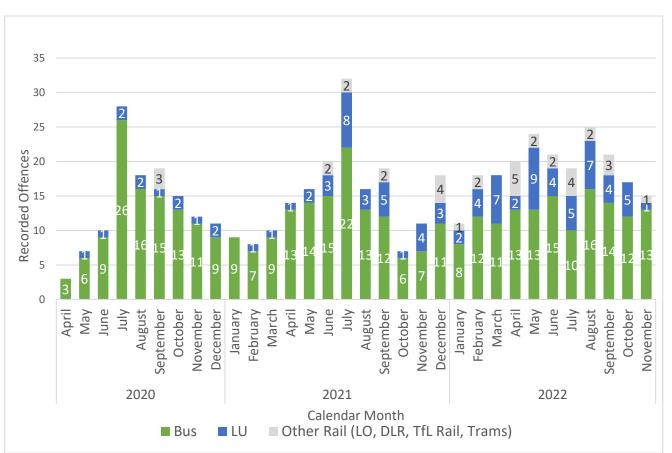
During Quarter 3, there were 2,195 incidents of WVA reported across all modes. This is 211 fewer than in Quarter 2. The Quarter 3 figure comprised 986 incidents of WVA reported by staff working on LU (158 fewer incidents than in Quarter 2) and 1,209 incidents reported on all other modes (buses, roads, Elizabeth Line, LO, DLR and London Trams (11 fewer than recorded during Quarter 2).

Triggers of WVA incidents

Fare evasion continues to be the most common trigger for WVA, accounting for 34 per cent of all incidents. During Quarter 3, 350 WVA incidents were triggered by fare evasion on the LU network, and 332 across the other travel modes (buses, roads, Elizabeth line, London Overground (LO), DLR and London Trams).

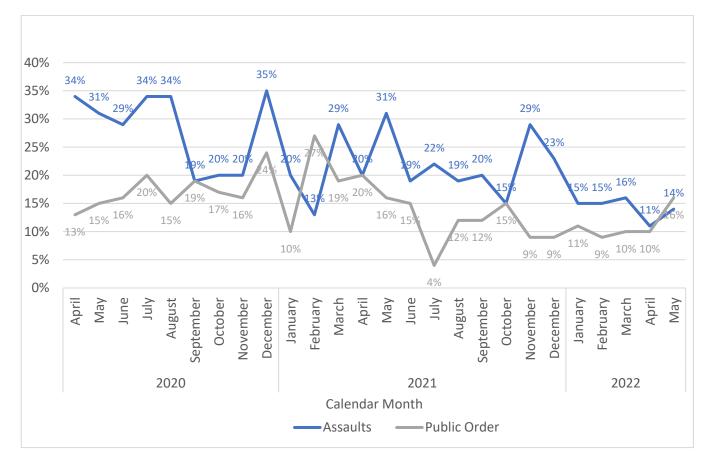
Despite fare evasion remaining the most common trigger of WVA, 33 percent of incidents in Quarter 3 were triggered by customers behaving aggressively or antisocially. A total of 672 WVA incidents were triggered in this way, which is an increase of 117 from Quarter 2.

225 WVA incidents during Quarter 3 involved a customer who was believed to be intoxicated at the time of the incident. This is an increase of 49 incidents from Quarter 2, rising from 7 per cent in Quarter 2 to 10.2 per cent in Quarter 3. 21 per cent of the WVA incidents that were triggered by aggressive or anti-social behaviour involved an intoxicated customer.



Police recorded work-related violence with injury offence from 2020 to 2022

The level of bus-related violence with injury offences between April to November 2022 (108 offences) is approximately 2 per cent higher than the same period in 2021 (106 offences). Police data for LU and other rail modes (LO, DLR, Elizabeth line and London Trams) shows there were 57 violence with injury offences between April to November 2022, compared with 33 in the same eight months in 2021. The lower offence numbers on the rail network in 2021 reflect the lower levels of passenger journeys at the time.



Solved rate for WVA offences investigated by the police from January 2020 to May 2022

We are working closely with policing partners to improve the solved rate of offences. This includes prioritising the investigation of WVA incidents, providing access to body-worn video cameras, and continuing to support police investigations by providing Oyster card and CCTV information and victim and witness statements. The solved rate is the percentage of offences investigated by the police that have resulted in action against the suspect, for example being charged with an offence, summonsed to attend court, or a restorative justice outcome. Figures are reported six months in arrears to allow time for police investigation to take place and for cases to progress through the criminal justice process. This section compares figures for June 2021 to May 2022 (current), with June 2020 to May 2021. (previous).

During the current period, the combined solved rate was 15 per cent for violence and public order recorded offences against our workforce; lower than the previous 12-month period (22 per cent).

The solved rate varies by mode during the current period, with a rate of 14 per cent for bus-related offences, 18 per cent for LU, and 10 per cent for all other rail modes combined. Across all modes, the solved rates increase in line with the severity of the

incident. The solved rate is higher for violent offences (with or without injury) compared to public order (for example verbal abuse or threatening behaviour), as the police allocate more resources to identifying and apprehending offenders for the former, with, for example, media appeals for information for violent incidents. The solved rate in the current 12-month period for violence (with/without injury) offences was 18 per cent, compared with 11 per cent for public order offences.

Percentage of Staff Willing to Support from April 2020 to May 2022 (all violence and public order offences)



A key factor in being able to bring offenders to justice is staff support for and consent to partake in the criminal justice process. As part of our strategy, we are encouraging the reporting of incidents, working closely with the police to address staff concerns and improve the support we collectively provide throughout the process.

During the current period, the percentage of staff willing to support a police investigation was 67 per cent for violence and public order recorded offences against staff, down from 71 per cent in the previous 12 month period. Due to the increased interaction with passengers, bus drivers comprise a greater proportion of staff victims and historically they have been less willing to support police investigations

However, the support of bus drivers in supporting police investigation has improved significantly in the last 2-3 years. Between March 2019 to February 2020, only 37 per cent of bus drivers supported investigations; this has risen to 65 per cent. We will

continue to work with our bus operators on direct engagement, communication activity and support during investigations to further increase this figure.

Progress against the 2021/22 annual action plan

WVA is unacceptable. To ensure we deliver against our WVA Strategy, in October 2022 we re-established TfL's WVA Steering Group, attended by Directors of Security, Policing and Enforcement, Customer Operations: LU, Buses and Rail & Sponsored Services. This group is accountable for progress on the delivery, implementation and impact of the pan-TfL WVA strategy to eradicate work-related violence and aggression.

To support the delivery of our WVA Strategy, we committed to doubling the size of our WVA Team and have now appointed to eight new roles within the Team. These new roles will work on activity to prevent WVA and provide support to colleagues who may experience it including providing investigation services to our policing partners.

Our plans to provide staff with technology to help reduce WVA continue. In November 2022, we completed the rollout of body worn video cameras to River Services, Woolwich Ferry, Dial-a-Ride and a number of other teams that undertake customer-facing activities. There are now 4,777 cameras in use, available for 7,829 unique users based at 323 locations. We have also completed procurement for a further 500 Emergency Communications Devices (ECDs) to help keep our staff safe. ECDs are small and portable keyring devices, which when pressed in an emergency connect direct to an emergency services operator, opening a two-way communication channel. Using advanced real-time data technology, they provide all information needed to dispatch a priority response – this includes location, name and contact details.

Our Transport Support and Enforcement Officers continue to play a key role in tackling WVA against our people by dealing with anti-social behaviour and enforcing TfL byelaws. In Quarter 3, our officers carried out over 1,500 station/network visits, dealing with over 2,000 non-compliant individuals. Officers gained compliance through advice and guidance in approximately half these cases. In those cases where compliance could not be obtained, 456 individuals were directed to leave our network or premises, 319 individuals were refused entry or to travel and 45 individuals were physically guided/removed from our services for their anti-social behaviour. Officers reported 244 individuals for prosecution. Officers also dealt with 71 safeguarding incidents, providing support for vulnerable customers.

Environment

Air Quality

In November 2022, the Mayor announced that to help decrease air pollution and increase public health, the Ultra Low Emission Zone (ULEZ) will expand across all London Boroughs from 29 August 2023. While significant improvements to London's air quality have been made, the London Atmospheric Emissions Inventory (LAEI, 2019), road transport is the single biggest contributor of nitrogen dioxide and particulate matter emissions in Greater London. Poor air quality continues to negatively impact the health of Londoners contributing to illnesses such as cancer, asthma, lung disease and dementia.

The ULEZ expansion means that anyone who drives within the ULEZ, including the expanded area from 29 August 2023 whosevehicle does not meet emissions standards must pay a daily charge of £12.50. More than four out of five vehicles already meet the emissions standards. To check if a vehicle is compliant with ULEZ emissions standards, anyone can access our vehicle checker.

There are several measures in place to support Londoners through this change. From 30 January 2023, Londoners receiving low income or disability benefits can apply to the Mayor of London's £110 million scrappage scheme to scrap a vehicle or choose a lower payment plus one or two TfL Annual Bus & Tram passes. London-based sole traders and businesses with 10 or fewer employees and registered charities can also apply to scrap or retrofit a van or minibus. The existing ULEZ grace periods (temporary exemptions) will be extended and the £10 annual fee to register a vehicle for Auto Pay will be removed from 30 January 2023. In addition, recipients of a number of benefits are now eligible for the new Disabled Benefits grace period until 24 October 2027, while all owners of wheelchair-accessible vehicles are now eligible for a grace period until the same date.

Expanded Ultra Low Emission Zone six months on report

The report updates on the impact from six months since the ULEZ expanded up to, but not including, the North and South Circular Roads, and more than a year on from the enforcement of tighter Low Emission Zone (LEZ) standards. The data indicates that these schemes are having a significant impact on the number of older, more polluting vehicles seen driving in London and the levels of harmful pollution Londoners are exposed to.

A bigger share of vehicles in London are cleaner

Six months after the launch of the ULEZ expansion, nearly 94 per cent of vehicles seen driving in the whole zone meet the strict ULEZ standards on an average day. This is up from 87 per cent in the weeks before the zone expanded and up from 39 per cent in 2017 when impacts associated with the ULEZ began. The compliance rate on boundary roads is 90 per cent and the compliance rate in outer London is 85 per cent.

There are fewer older, more polluting vehicles in the zone

There were 67,000 fewer non-compliant vehicles in the zone on an average day in May 2022 compared with the period right before the ULEZ expanded, down from an average of 124,000 daily vehicles (based on indicative data gathered between 12 and 20 October 2021 prior to launch). This is a reduction of 54 per cent.

There has been an overall reduction in vehicles and traffic flows in the zone

Overall, the daily average number of vehicles seen in the zone in May 2022 was 21,000 fewer compared to October 2021 prior to the scheme being launched, a reduction of two per cent. Early estimates suggest traffic flows are also around two per cent lower within the expanded zone than the weeks before the expansion launched. However, many factors are currently affecting traffic trends in London and we will continue to review the data to better understand the impact of ULEZ expansion in the longer term.

Drivers are ditching diesel cars

On average there were 44,000 fewer diesel cars driving in the zone each day, a 20 per cent decrease since the weeks before the ULEZ expanded.

This means people in the zone are breathing cleaner air

The concentration of pollution in the air is what impacts people's health. Harmful nitrous oxide (NO₂) concentrations alongside roads in inner London are estimated to be 20 per cent lower than they would have been without the ULEZ and its expansion. In central London, NO₂ concentrations are estimated to be 44 per cent lower than they would have been. This decrease in concentrations close to roads would have also led to reduced air pollution in locations away from traffic.

The air is also cleaner on the boundary

All monitoring sites on the boundary of the expanded zone have seen reductions in NO₂ concentrations, with an estimated 17 to 24 per cent reduction in pollution on the boundary compared to without the ULEZ.

The Low Emission Zone continues to have an impact

Heavier vehicles which fall under the London-wide LEZ have a compliance rate of 96 per cent, up from an estimated 48 per cent in February 2017.

Climate Emergency

Trial of cooling solutions for the deep Tube network

In summer 2022, we completed the latest stage of trials of a new state-of-the-art cooling panel solution. The trial was completed on a disused platform at Holborn LU station and was undertaken to test its suitability for reducing temperatures on TfL's deep Tube network (comprising the Bakerloo, Central, Jubilee, Northern, Piccadilly, Victoria and Waterloo & City lines).

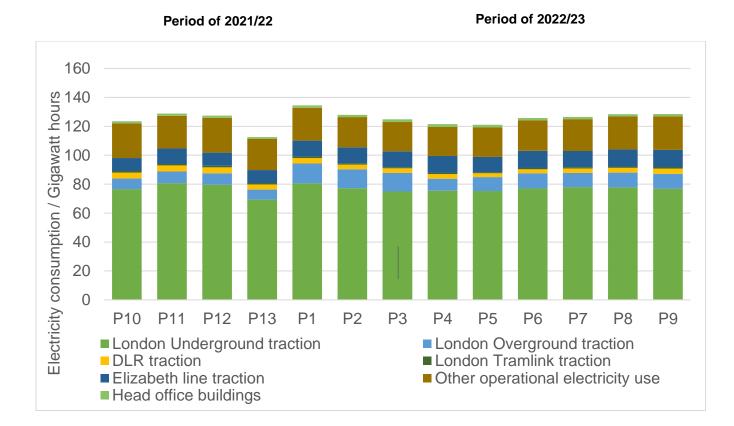
The cooling panel aims to provide cooler air to passengers waiting on platforms, as well as mitigating potential temperature increases associated with increased train frequencies introduced by in-flight and future trains and signalling upgrade programmes.

The cooling panel works by circulating cold water around pipework within a curved metal structure to chill it. It then circulates air, using an industrial-sized fan, through gaps in the panel's structure, which in turn is cooled. The panel could also have the additional benefit of halving operational and maintenance costs compared to existing technology used to manage temperatures on Tube lines.

The trial was part of the Government's TIES Living Lab programme, a collaboration of 25 partners focusing on 10 infrastructure, data research and digital demonstrator projects, of which the cooling panels are one. The cooling panel project was 70 per cent funded by the Department for Transport and Innovate UK following a successful bid by the Piccadilly Line Upgrade (PLU) team. The convection cooling system has been designed by TfL and developed by SRC Infrastructure, which also managed its build.

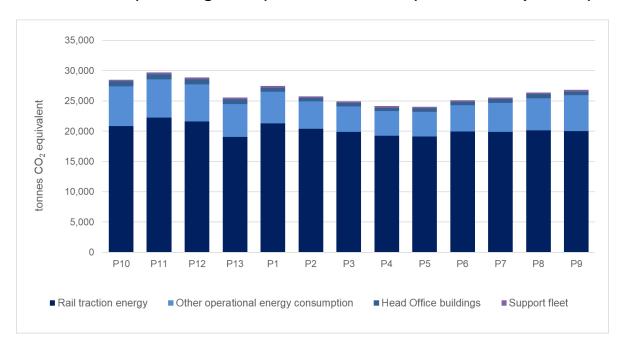
Following the successful trial at Holborn LU station, the intention is to complete the proof of concept with a trial in an operational platform, currently planned for Knightsbridge LU station. This will take no more than a year and will facilitate a ready-to-roll-out cooling solution to be included in plans for future upgrades, or which could be available for a future standalone scheme in response to emerging adaptation challenges.

Energy consumption and carbon emissions from our operations



Electricity consumption – provisional – Quarter 3 2022/23 (Gigawatt hours)

Our electricity consumption this quarter was within two percent of Quarter 3 2021/22. We continue to ensure that our operations are as efficient as possible, including through the rollout of energy efficient assets such as LED lighting.



CO₂ emissions (excluding buses) Quarter 3 2022/23 (tonnes CO₂ equivalent)

Carbon dioxide emissions from operations, excluding buses, track closely to electricity consumption. Emissions decreased by approximately seven per cent this quarter compared to the same period in 2021/22, partly due to a reduction in the emissions intensity of grid electricity.

Sustainability training, engagement and embedding

Executive Sustainability Training and Sustainability Summit

In December 2022, we held sustainability training for the TfL Executive Committee. The training included a briefing and workshop session run by Will Day, Sustainability Advisor to PricewaterhouseCoopers UK. Will is also a fellow of the University of Cambridge Institute for Sustainability Leadership and previously sat on the UK's Sustainable Development Commission.

As a result of the training, the TfL Executive Committee have a clearer understanding of sustainability and how considering environment and social impacts in everything we do will not only enable TfL to better serve London and participate more fully in its global supply chain but will increase savings and provide the possibility for vital mitigations to future financial risks as a result of a changing climate. This training will now be rolled out to all directors in the coming months, and we will explore how best to continue to this cascade to ensure these learnings including key messages, information and tools are available to everyone at TfL. To support this, we are also planning an internal TfL Sustainability Summit later this year to provide a platform open to all TfL colleagues to raise awareness about sustainability and recognise the agency every colleague has in contributing to London's future.

Carbon Literacy Training Programme

At the close of Q3, nearly 400 staff had completed the one-day accredited Carbon Literacy training and we remain on track to train 500 colleagues by the end of 2022/23. In addition, the Executive Committee and Directors have completed or are aiming to complete Carbon Literacy training, by the end of the financial year 2022/23.

Youth Panel

On 2 December, the Youth Panel which consists of around 25 volunteers, aged 16 to 25, who regularly travel in London, continued its exploration on sustainability. The Youth Panel held two sessions at City Hall in November and December. At these sessions, Youth Panel members asked experts and diverse leading voices in sustainability for their views as part of their broader investigation into what connects issues of the environment with social inclusion and equality. This exploration will continue in 2023.

Sustainability Graduates and Apprentices Programme

We launched our first Sustainability Graduates and Apprentices scheme this past autumn. In September 2023, 5 Sustainability Graduates and 5 Sustainability Apprentices will join TfL for a two-year programme, working in various areas across the business. This experience will provide development opportunities across a range of different roles and with the aim of approaching each role through the lens of sustainability. This scheme aims to attract and nurture top talent, provide a pathway for individuals expand their careers and enable TfL to improve its capabilities and ensure sustainability is at the core of everything we do. Applications for the apprenticeship scheme will open soon. Applications for the graduate scheme have now closed. This graduate scheme received the highest number of applications among all our graduate programmes.

TfL Budget

In December, we also published our Business Plan from the period 2022/23 to 2025/26. It sets out investment to help us transition to becoming a more sustainable organisation. Recognising the increasing number of extreme weather events, £2m has been committed in the business plan to better understand the impacts of the changing climate and how to adapt our network to keep London moving safely, sustainably and inclusively. In addition to transitioning our bus fleet to zero carbon

emissions, we are also considering how best to decarbonise our buildings. With £108m investment, we estimate we could reduce our carbon emissions by 34 per cent and energy costs by 21 per cent, and that this investment would payback in just nine years. Therefore, £39m is being invested over the next four years to start to decarbonise our buildings.

Beyond this, we have changed the way we manage roadside verges, so that wildflower verges are now standard where safe and operationally feasible, to encourage biodiversity. We are looking more broadly at how we embed green infrastructure, including sustainable drainage systems, into the fabric of London. Additionally, the commitments in this Business Plan help to pave the way for more innovative ways to embed sustainable practices into the delivery of our ongoing renewals and maintenance programmes. We have also committed to eliminating the use of Glyphosates by the end of 2024.

GLA Climate Budget

In parallel to the TfL Budget, we worked closely with GLA colleagues towards the publication of the first GLA Family Climate Budget in December. The Climate Budget sets out our approach, and the approach of other members of the GLA family, to reach our 2030 net zero targets. This Budget recognises that individual organisations cannot achieve the challenges of reaching net zero in isolation and that collaboration among various stakeholders in London, the UK and globally, including through our supply chain is essential.