

# Agenda

**Meeting: Safety, Sustainability and  
Human Resources Panel**

**Date: Wednesday 22 February 2023**

**Time: 10:00am**

**Place: Conference Rooms 1 and 2,  
Ground Floor, Palestra, 197  
Blackfriars Road, London, SE1  
8NJ**

## Members

Dr Lynn Sloman MBE (Chair)

Dr Nina Skorupska CBE (Vice-Chair)

Kay Carberry CBE

Bronwen Handyside

Dr Mee Ling Ng OBE

Mark Phillips

Marie Pye

Copies of the papers and any attachments are available on [tfl.gov.uk How We Are Governed](https://tfl.gov.uk/How-We-Are-Governed).

This meeting will be open to the public and webcast live on [TfL YouTube channel](#), except for where exempt information is being discussed as noted on the agenda.

There is access for disabled people and induction loops are available. A guide for the press and public on attending and reporting meetings of local government bodies, including the use of film, photography, social media and other means is available on [www.london.gov.uk/sites/default/files/Openness-in-Meetings.pdf](https://www.london.gov.uk/sites/default/files/Openness-in-Meetings.pdf).

## Further Information

If you have questions, would like further information about the meeting or require special facilities please contact:

James Varley, Secretariat Officer, 020 7983 4613; email: [JamesVarley@TfL.gov.uk](mailto:JamesVarley@TfL.gov.uk)

For media enquiries please contact the TfL Press Office; telephone: 0343 222 4141; email: [PressOffice@tfl.gov.uk](mailto:PressOffice@tfl.gov.uk)

Howard Carter, General Counsel  
Tuesday 14 February 2023

**Agenda**  
**Safety, Sustainability and Human Resources Panel**  
**Wednesday 22 February 2023**

**1 Apologies for Absence and Chair's Announcements**

**2 Declarations of Interests**

General Counsel

**Members are reminded that any interests in a matter under discussion must be declared at the start of the meeting, or at the commencement of the item of business.**

**Members must not take part in any discussion or decision on such a matter and, depending on the nature of the interest, may be asked to leave the room during the discussion.**

**3 Minutes of the Meeting of the Panel held on 16 November 2022**

(Pages 1 - 10)

General Counsel

**The Panel is asked to approve the minutes of the meeting of the Panel held on 16 November 2022 and authorise the Chair to sign them.**

**4 Matters Arising and Actions List (Pages 11 - 16)**

General Counsel

**The Panel is asked to note the updated actions list.**

**5 Presentation from CIRAS (Pages 17 - 28)**

Chief Safety, Health and Environment Officer

**The Panel is asked to note the paper.**

**6 Safety, Health and Environment Quarterly Report – Quarter 3 2022/23**

(Pages 29 - 82)

Chief Safety, Health and Environment Officer

**The Panel is asked to note the report.**

**7 Pan-TfL Fatigue Management Programme Update** (Pages 83 - 94)

Chief Safety, Health and Environment Officer

**The Panel is asked to note the paper.**

**8 London-Wide Ultra Low Emission Zone** (Pages 95 - 100)

Director of Transport Strategy and Policy

**The Panel is asked to note the paper.**

**9 TfL Climate Change Adaptation Plan** (Pages 101 - 128)

Chief Safety, Health and Environment Officer

**The Panel is asked to note the paper.**

**10 Human Resources Quarterly Report** (Pages 129 - 138)

Chief People Officer

**The Panel is asked to note the report.**

**11 Safety, Health and Environment Assurance Report** (Pages 139 - 152)

Director of Risk and Assurance

**The Panel is asked to note the report.**

**12 Enterprise Risk Update - Attraction, Retention, and Wellbeing of Our Employees (ER2)** (Pages 153 - 160)

Chief People Officer

**The Panel is asked to note the paper.**

**13 Members' Suggestions for Future Discussion Items** (Pages 161 - 164)

General Counsel

The Panel is asked to agree the proposed approach to future papers and the forward plan.

**14 Any Other business the Chair Considers Urgent**

The Chair will state the reason for urgency of any item taken.

**15 Date of Next Meeting**

Wednesday 24 May 2023 at 10.00am

**16 Exclusion of Press and Public**

The Panel is recommended to agree to exclude the press and public from the meeting, in accordance with paragraphs 1 and 2 of Schedule 12A to the Local Government Act 1972 (as amended), in order to consider the following items of business.

**Agenda Part 2**

**17 Enterprise Risk Update - Attraction, Retention, and Wellbeing of Our Employees (ER2)** (Pages 165 - 180)

Exempt supplemental information relating to the item on Part 1 of the agenda.



## Transport for London

### Minutes of the Safety, Sustainability and Human Resources Panel

**Conference Rooms 1 and 2, Ground Floor, Palestra,  
197 Blackfriars Road, London, SE1 8NJ  
10.00am, Wednesday 16 November 2022**

#### Members

Dr Lynn Sloman MBE (Chair)  
Kay Carberry CBE  
Bronwen Handyside (via Teams)  
Mark Phillips  
Marie Pye

#### Executive Committee

Andy Lord	Interim Commissioner (up to Minute 43/11/22)
Glynn Barton	Interim Chief Operating Officer
Howard Carter	General Counsel
Stuart Harvey	Chief Capital Officer (via Teams for Minute 40/11/22)
Lilli Matson	Chief Safety, Health and Environment Officer
Fiona Brunskill	Interim Chief People Officer

#### Staff

Katherine Adams	GLA Business Partner – Procurement (for Minute 45/11/22)
Tricia Ashton	Director of Rail and Sponsored Services (for Minute 43/11/22)
Christina Calderato	Director of Transport Strategy and Policy (for Minute 41/22/22)
Tom Cunnington	Head of Buses Business Development (for Minute 44/11/22)
Laura Grant	Head of Procurement (for Minute 45/11/22)
Sam Longman	Head of Corporate Environment (via Teams for Minute 40/11/22)
Lucy Neville	Commercial Manager (for Minute 45/11/22)
Amy Pidwill	Senior Safety Strategy Manager (for Minute 42/11/22)
Stuart Reid	Head of Insights and Direction
Tim Rudin	Senior Responsible Supplier Skills Manager (via Teams, for Minute 45/11/22)
Leonie Saywell	Organisational Development Lead, HR (for Minute 47/11/22)
Mike Shirbon	Head of Quality, Safety and Security Assurance
Hannah White	Senior Safety Strategy Manager (for Minute 48/11/22)
James Varley	Secretariat Officer
Shamus Kenny	Head of Secretariat

### **34/11/22 Apologies for Absence and Chair's Announcements**

Apologies for absence were received from Dr Nina Skorupska CBE (Vice Chair) and Dr Mee Ling Ng OBE. Bronwen Handyside was attending via Teams and was able to take part in the discussions but was not counted toward the quorum. The meeting was quorate. Alex Williams was unable to attend.

The Chair welcomed everyone to the meeting. The meeting was also being webcast live to TfL's YouTube channel to ensure the public and press could observe the proceedings and decision making.

The Chair reminded those present that safety was paramount to TfL and encouraged Members to raise any safety issues during discussions on a relevant item or with the appropriate member of the Executive Committee after the meeting. Members confirmed there were no other safety matters they wished to raise, other than those to be discussed on the agenda.

9 November 2022 marked the sixth anniversary of the tram overturning at Sandilands, Croydon in 2016. The Panel had been involved in, and had oversight of this matter and would continue to do so. The thoughts of all those present remained with those affected.

The meeting scheduled to be held on 14 September 2022 had been cancelled due to the national mourning following the death of Her Majesty Queen Elizabeth II. The agenda for this meeting included items that were due to be discussed at that meeting.

### **35/11/22    Declarations of Interests**

Howard Carter introduced the item.

Members' declarations of interests, as published on [tfl.gov.uk](https://tfl.gov.uk), were up to date and there were no additional interests to declare that related specifically to items on the agenda.

### **36/11/22    Minutes of the Meeting of the Panel held on 29 June 2022**

**The minutes of the meeting of the Panel held on 29 June 2022 were approved as a correct record and the Chair was authorised to sign them.**

### **37/11/22    Matters Arising and Actions List**

Howard Carter introduced the paper, which set out progress against actions agreed at previous meetings of the Panel.

**The Panel noted the actions list.**

### **38/11/22    Safety, Health and Environment Report**

Lilli Matson introduced the report, which provided an overview of safety, health and environmental performance for London Underground, TfL Rail, Surface Transport (including London Overground) for Quarters 1 and 2 of 2022/23 (1 April to 25 June 2022 and 26 June to 17 September 2022) and notable incidents outside the reporting period.

In recent weeks, there had been a number of serious collisions involving heavy goods vehicles. Four of the collisions had resulted in the deaths of pedestrians, which highlighted the importance of the Vision Zero programme.

Performance for the year to date had been mixed. TfL was on track to reach its in year road safety target. For customer and workforce injuries, performance was just off target. The year had also seen an increase in car occupant fatalities and this was being

investigated. Engagement was also taking place with the food delivery sector with particular reference to moped and motorcycle riders.

Injuries arising from slips, trips and falls on the network accounted for over two thirds of injuries. Alcohol intoxication and failure to use handrails were significant contributing factors. Slips, trips and falls were a constant cause of injury, and while actions were taken to reduce rates, changes would be expected to occur in marginal increments as most causal factors were outside TfL's control.

Performance in capital programmes was good, demonstrated by the continual fall of the accident frequency rate.

Covid-19 remained as the largest cause of staff sickness and absence. The Braham Street memorial, which was dedicated to TfL colleagues who had tragically lost their lives to Covid-19, was due to open in early 2023.

There had been three similar 'trap and drag' events on London Overground. Meetings had taken place with the Office of Rail and Road and Arriva Rail Limited. Interventions were underway to influence both driver and customer behaviour.

Increases in workplace violence and aggression were unacceptable and actions were being taken to address recent increases in reported events. Discussions were taking place with trades unions regarding the roll out of body worn cameras to staff.

The Panel would receive an update on fatigue management at a future meeting. This would look at how programmes differed across the business areas (such as Dial-a-Ride).

**[Action: Lilli Matson]**

In response to a question from the Panel, Lilli Matson undertook to investigate and update the Members on the circumstances of a recent incident involving a Dial-a-Ride customer sustaining an injury while using their mobility scooter. **[Action: Lilli Matson]**

**The Panel noted the report.**

### **39/11/22 Safety, Health and Environment Assurance Report**

Mike Shirbon introduced the paper, which provided an overview of the effectiveness of the risk controls for Enterprise Risk 1 – Major safety, health or environmental incident or crisis.

Progress was being made in addressing overdue actions and these would be reported to the Audit and Assurance Committee.

In response to a request, the Chair would receive an update on the London Underground Civils Competence Management audit. **[Action: Mike Shirbon]**

**The Panel noted the paper.**

## 40/11/22 TfL Sustainability Report and Corporate Environment Plan Progress Report

Lilli Matson and Sam Longman introduced the paper, which provided an update on key metrics and ongoing progress. Andy Lord, Glynn Barton and Stuart Harvey explained how the sustainability and the Corporate Environment Plan (CEP) were being mainstreamed into the organisation.

Sustainability was core to the work of TfL, it ran through its Vision and Values and work was continuing to enhance it. Communication to customers and stakeholders was also an essential part of the sustainability agenda.

In the Capital directorate, the Healthy Streets schemes were being introduced, which included cycle superhighways. This was moving people out of private transport onto more sustainable modes of transport. Carbon leads had been appointed for all the major projects and a baseline had been created for major schemes. Staff were being put through carbon literacy programmes to increase levels of understanding. Supplier engagement was also taking place to talk about carbon and the environment in general, as well as engagement with other organisations with similar aims to help to understand how the low carbon agenda could be delivered. An environmental evaluation tool had been developed to help draw out environmental impacts. TfL had ambitions around green thinking, creating an organisation that focussed on whole life costs and considered carbon from end to end.

A similar situation was to be found within the Operations directorate. A key part of operations was to drive the enthusiasm and knowledge through the business. Carbon literacy was a part of this, as well as making sure that sustainability was embedded in the decision making process. Again, a whole life approach was being used, with staff encouraged to think about sustainability on an end to end basis. Engagement was also taking place with contractors, and sustainability was being built into contracts.

Significant amounts of work were taking place to drive forward sustainability. Business processes were changing to take into account environmental impact and how the wider business benefit was being captured and communicated.

TfL had a view of its emissions baseline, from an operational and infrastructure perspective and in the context of what travel means in London. The CEP set out the steps for TfL to work on its own emissions. Actions such as the plans for zero emissions buses and the power purchase agreement would allow significant steps forward to be taken. The Panel would receive an update at a future meeting that would provide more detail on the CEP roadmap and the focus of activities. **[Action: Lilli Matson]**

While funding was acknowledged to be a challenge, efficiencies and carbon reduction would require expenditure. There was a financial cost to climate change and it was better to adapt and change ahead of regulation. A narrative was being developed to set out how short term carbon expenditure could achieve long term savings.

The Sustainability Staff Network Group was a good example of how staff wanted to support change. The group was sponsored by Lilli Matson and held events and other activities as well as communicating its work.

TfL had been working with London boroughs, utility companies and developers to progress a city-wide catchment strategy for surface water flooding. The Mayor and

Deputy Mayor for Environment and Energy were leading on the project which was informed by the Copenhagen Cloudburst Strategy.

**The Panel noted the paper.**

## **41/11/22 Direct Vision Standard and Safety Permit Scheme for Heavy Goods Vehicles**

Christina Calderato introduced the paper, which informed the Panel on the outcomes of the introduction of the first phase of the Direct Vision Standard (DVS) scheme, which was launched in October 2019 and also provided an update on progress being made to develop and implement Phase 2 of the DVS and heavy goods vehicle (HGV) safety permit scheme.

During the first year of enforcement of the DVS and HGV safety permit scheme enforcement from 1 March 2021 to 28 February 2022, a total of 191,769 Safety Permits were issued with 112,259 to 'zero star' vehicles and 4,768 to 'five star' vehicles. Compliance with the scheme was very high, with more than 94 per cent of HGVs in London operating with a Safety Permit. The number of fatal collisions involving an HGV where vision was cited as a contributory factor had fallen compared to previous years (six in 2021, compared to eight in 2020 and nine in 2019), although this needed to be considered in the context of the coronavirus pandemic. 'Zero star' rated vehicles accounted for four of the six fatal collisions in 2021, where vision was cited as a contributory factor. This indicated that direct vision offered benefits over other Safe System equipment, which further pointed to the need to further raise the minimum direct vision threshold to 'three-stars'.

Collision data related to pedestrians and cyclists and consideration would be given to how other vulnerable road users such as motorcyclists could be included.

**[Action: Christina Calderato]**

The work of the project focussed on vision, Members noted that the use of Intelligent Speed Assistance on heavy goods vehicles would provide further safety benefits.

**The Panel noted the paper.**

## **42/11/22 Vision Zero Action Plan Progress Report – One Year On**

Amy Pidwill introduced the report, which outlined progress against the action plan and put it into context against road safety trends that have emerged since the coronavirus pandemic, as well as updating the Panel on the results of installing Intelligent Speed Assistance (ISA) within TfL's vehicle fleet.

The rollout of ISA within TfL's fleet had delivered a 62 per cent reduction in speeding events but made no difference in the driving experience or journey times. The next step was to look at including fitment of ISA as part of the fleet procurement specifications. The positive impacts of ISA were also being communicated to Government.

TfL worked closely with the Metropolitan Police Service to improve the granularity of data and quality of information. A data led approach could be used to help inform predictive modelling to improve road safety.

It was acknowledged that the 70 per cent reduction in people killed or seriously injured on London's Roads by 2030 was a challenge, however, evidence had shown that the interventions such as speed reduction, bus safety and addressing safety at junctions were effective.

Reduction in road speeds due to 20mph speed limits were effective but effective enforcement by the police was required. As exceeding speed limits was a criminal offence, any changes to legislation to transfer enforcement powers to local authorities would result in de-criminalisation of the offence.

An ongoing programme of reviews of pedestrian controlled crossings was in place. Priority was being given to pedestrians.

A report on Road Safety and Deprivation was being produced and the Panel would receive a briefing on its content in due course. **[Action: Lilli Matson]**

**The Panel noted the paper.**

### **43/11/22 Vision Zero Plan for TfL's River Based Operations**

Tricia Ashton introduced the paper which set out the Safety, Health and Environment Vision Zero Plan for TfL's River-Based Operations, which built on the Mayor's River Action Plan from 2013. TfL's river-based operations had grown with the addition of the Woolwich Ferry as a TfL-run service.

Good progress was being made on river safety. Safety management systems had been fully embedded across the organisation and safety performance indicators were used to track, monitor and improve performance.

The Safety Performance Index was a set of safety performance measures that allowed a wider view of risks and enabled TfL to prioritise those risks and track mitigating actions. The relatively low level on incidents meant that backward looking indicators did not provide sufficient level of useful data and a number of forward-looking indicators were also used.

**The Panel noted the paper.**

### **44/11/22 Bus Safety Programme Update**

Tom Cunnington introduced the paper which provided an update on progress of the delivery of the Bus Safety Programme.

The programme was on track and delivering a downward trend in people killed or seriously injured on or by a bus. The impact of the new Government funding deal on bus safety projects was not yet known although a number of projects had been paused until funding became available. There was a prioritised programme for re-introduction of projects.

A number of projects were continuing, including the review of the Bus Safety Programme strategy and this would be shared with Panel Members when it was published.

**[Action: Tom Cunnington]**

The Bus Safety Standard was being introduced in phases as different technologies were at different stages of maturity. Phasing allowed early introduction of the more mature technologies to vehicles and time for development of less mature systems.

The customer injury rates varied between operators, which was the result of the different profiles of the routes and distances operated.

It was noted that there was a shortage of bus drivers in London and across the country. A part of the fatigue management training was to enable bus operators to understand the impact of requests for overtime on drivers. Details of the fatigue training would be shared with Members.

**[Action: Tom Cunnington]**

The increase in the use of both legal and illegal e-scooters on the roads and the impact that would have on bus operation would be factored into bus safety activities.

**The Panel noted the paper.**

## **45/11/22 Responsible Procurement**

Laura Grant, Lucy Neville and Tim Rudin introduced the paper, which provided an update on the Responsible Procurement programme.

The Greater London Authority (GLA) Group Central Responsible Procurement team published the revised GLA Group Responsible Procurement Implementation Plan in September 2022. This provided ambitions and targets for TfL.

The areas of responsibility for TfL were: Skills and Apprenticeships, Ethical Sourcing and Modern Slavery, Environmental Sustainability, Fair and inclusive employment practices and Supplier Diversity.

Approximately 50 per cent of TfL key suppliers disclosed their workforce diversity data through the Diversity Data Benchmarking Initiative and future reports would provide updates on the response rate.

**[Action: Laura Grant]**

A minimum of 10 per cent of the total tender evaluation score would be allocated to responsible procurement and social value for all GLA Group above-threshold contracts. This would recognise bidders who could deliver community, environmental and local economic benefits where relevant and proportionate to the subject matter of the contract. It was possible to increase the social value weighting in procurement, however this had to be balanced with potential cost implications. A proportionate approach would be used dependent on the nature of the goods and services being procured.

A new e-procurement tool was being purchased which would enhance the ability monitor to key elements of the procurement process.

The Good Work Standard brought together best employment practices and links to resources and support from across London to help employers improve their organisations. Further information would be supplied to Members. **[Action: Laura Grant]**

A pre-employment programme was in place to address the gender balance in apprenticeships in the supply chain, as the current level was 80 per cent male.

**The Panel noted the paper.**

## **46/11/22 Human Resources Quarterly Report**

Fiona Brunskill introduced the paper, which provided an update on key Human Resources (HR) led activities and performance for the period June to October 2022.

The Our TfL Programme had been established to ensure that TfL could deliver on its Vision to be a strong, green heartbeat for London, whilst also supporting its Values to be caring, open and adaptable. Further information was due to be provided to the Board at its next meeting.

The Count Me In campaign had launched and its purpose was to increase diversity declaration rates to enable TfL to ensure its activities around equality were effective. A new HR app was being developed which, amongst other functionality, would make it easier to self declare and information was provided to assist staff assess themselves.

The annual Viewpoint staff survey had taken place. While there had been a small improvement in response rate, from 54 per cent in 2021 to 57 per cent in 2022, it was acknowledged that this could be improved. Making the survey entirely paperless had helped increase the response rate. The last 12 months had been a challenging time for TfL in areas such as funding and this was expected to be reflected in the survey results.

The graduate and apprentice recruitment scheme had seen a record 54 per cent joining from a Black and Minority Ethnic community, with women starters falling slightly from 32 per cent to 29 per cent.

The Steps into Work Scheme was welcoming a new cohort of 11 people. The previous cohort of nine students had now finished the scheme after completing their 12-month programme. Three students have already secured permanent roles and the remaining students continued to be supported into either paid employment or further training.

Further work was underway to make TfL more welcoming and collaborative to embed and maximise the benefits of hybrid working.

Pay negotiations were underway, with a focus of higher increases for staff at the lower end of the pay scale. It would be confirmed whether any data was held relating to whether any staff were in receipt of in-work benefits. **[Action: Fiona Brunskill]**

Background information on the Staff Network Groups and the process of electing Chairs and Deputies would be provided to Panel Members. **[Action: Fiona Brunskill]**

Consultation activities were taking place in the Occupational Health department to strengthen its medical advisory capability and to create a strategic focus on wellbeing. Consultation was also taking place in trauma counselling and physiotherapy, in recognition of the constraints of those services being available in a single location at the present time.

**The Panel noted the paper.**



## **47/11/22 Leadership Development at TfL**

Leonie Saywill introduced the paper, which set out the approach being taken to develop leaders at all levels in TfL and how this supported the mitigation of Enterprise Risk 2 on the attraction, retention and wellbeing of our people.

An employee led approach was being used to give people the opportunity to develop and grow. The development of values led leaders at all levels was important to TfL and fed into retention and succession planning.

Two frameworks, Senior Leadership Strengths and People Leadership, provided clarity and consistency, and their role was to shape the development offering for leaders. TfL's leadership needed to be diverse and applications from underrepresented groups were welcomed.

Critical roles were being identified and from that, succession plans would be developed. It was essential that the succession pipeline was sufficiently diverse to ensure appropriate representation. The use of robust data to inform the programme as well as highlight the retention aspects of the programme was necessary

**The Panel noted the paper.**

## **48/11/22 Plan for Managing our Safety, Health and Environment Enterprise Risks**

Hannah White introduced the paper, which provided an update on the progress in developing Safety, Health and Environment (SHE) Enterprise Risks and the Strategy and Plan for effective management. The risk was assessed as 'above tolerance' and 'requires improvement'.

The approach was to build the confidence that TfL was proactively managing its controls around the risk of failure to prevent SHE incident/meet commitments.

Changes had been made to the way the risk was articulated and the associated governance and improvements had also been made to key controls. The visibility of leading indicators was being increased to highlight areas of concern. Collaborative working was being encouraged to manage SHE risk across the business areas in line with roles, accountabilities and influence.

**The Panel noted the paper.**

## **49/11/22 Members' Suggestions for Future Discussion Items**

Howard Carter introduced the item.

An update on the Gender Pay Gap would be presented to a future meeting.

The Chair and Chief Officers would be reviewing the plan and it would be updated in due course.

**The Panel noted the forward plan.**

**50/11/22 Any Other Business the Chair Considers Urgent**

There was no urgent business.

**51/11/22 Date of Next Meeting**

The next scheduled meeting of the Panel would be held on Wednesday 22 February 2023 at 10.00am.

The meeting closed at 1.00pm.

Chair: \_\_\_\_\_

Date: \_\_\_\_\_

**Date:** 22 February 2023

**Item:** Actions List

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**This paper will be considered in public**

## **1 Summary**

1.1 This paper informs the Panel of progress against actions agreed at previous meetings.

## **2 Recommendation**

2.1 **The Panel is asked to note the Actions List.**

### **List of appendices to this report:**

Appendix 1: Actions List

### **List of Background Papers:**

Minutes of previous meetings of the Panel

Contact Officer: Howard Carter, General Counsel  
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## Safety, Sustainability and Human Resources Panel Actions List (reported to the meeting on 22 February 2023)

### Actions from the meeting held on 16 November 2022

Minute No.	Description	Action By	Target Date	Status/note
38/11/22 (1)	<b>Safety, Health and Environment Report: Fatigue Management</b> The next update on Fatigue Management to include detail on how the programme operates across different business units.	Lilli Matson	February 2023	<b>Completed.</b> On agenda for this meeting.
38/11/22 (2)	<b>Safety, Health and Environment Report: Dial-a-Ride incident</b> Update Members on the incident on Dial-a-Ride involving a customer using a mobility scooter.	Lilli Matson	February 2023	<b>Completed.</b> Update sent to Members on 13 February 2023.
39/11/22	<b>Safety, Health and Environment Assurance Report: London Underground Civils Competence Management Audit</b> Panel Chair to receive an update on the London Underground Civils Competence Management audit.	Mike Shirbon	November 2022	<b>Completed.</b> Update sent to the Panel's Chair on 18 November 2022.
40/11/22	<b>TfL Sustainability Report and Corporate Environment Plan (CEP) Progress Report</b> The Panel would receive an update at a future meeting that would provide more detail on the CEP roadmap and the focus of activities.	Lilli Matson	September 2023	On agenda forward plan.

Minute No.	Description	Action By	Target Date	Status/note
41/11/22	<p><b>Direct Vision Standard and Safety Permit Scheme for Heavy Goods Vehicles: Collision Data</b></p> <p>Consideration would be given to how other vulnerable road users such as motorcyclists could be included in collision data.</p>	Christina Calderato	February 2023	<b>Completed.</b> Collision data is monitored and the current rate of motorcyclist fatalities involving a heavy goods vehicle is approximately one per year. Direct Vision Standard data presented at the meeting focussed on collisions where vision was cited as a contributory factor.
42/11/22	<p><b>Vision Zero Action Plan Progress Report – One Year On: Road Safety and Deprivation Report</b></p> <p>The report would be presented to the Panel at a future meeting.</p>	Lilli Matson	February 2023	Informal briefing taking place after SSHR Panel meeting.
44/11/22 (1)	<p><b>Bus Safety Update: Strategy Document</b></p> <p>Provide Panel Members with the new Bus Safety Programme strategy document when available.</p>	Tom Cunnington / Louise Cheeseman	May 2023	To be included in the next Bus Safety Update.
44/11/22 (2)	<p><b>Bus Safety Update: Fatigue Management</b></p> <p>Share information on the fatigue management training for bus operators.</p>	Tom Cunnington / Louise Cheeseman	May 2023	To be included in the next Bus Safety Update.
45/11/22 (1)	<p><b>Responsible Procurement: Supply Chain Diversity Data</b></p> <p>Future reports to provide updates on the disclosure rate through the Diversity Data Benchmarking Initiative.</p>	Tim Rudin / Laura Grant	September 2023	Information will be included in future reports.

Minute No.	Description	Action By	Target Date	Status/note
45/11/22 (2)	<b>Responsible Procurement: Good Work Standard</b> Provide Members with further information of the Good Work Standard.	Tim Rudin / Laura Grant	January 2023	<b>Completed.</b> Information circulated to Members on 24 January 2023.
46/11/22 (1)	<b>Human Resources Quarterly Report: In Work Benefits</b> Confirm whether TfL held any data on whether any of its employees were in receipt of in work benefits.	Fiona Brunskill	February 2023.	<b>Completed.</b> TfL does not hold this information.
46/11/22 (2)	<b>Human Resources Quarterly Report: Staff Network Groups</b> Provide background information on the Staff Network Groups and the process of electing Chairs and Deputies.	Fiona Brunskill	May 2023	On agenda forward plan.

**There were no outstanding actions from previous meetings**

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**Date:** 22 February 2023

**Item:** Presentation from CIRAS

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## **This paper will be considered in public**

### **1 Summary**

- 1.1 Each year the Confidential Incident Reporting Service (CIRAS) presents an annual comparator with other sectors, examining trends and themes which point to lessons that can be learnt by TfL.

### **2 Recommendation**

- 2.1 **The Panel is asked to note the paper and presentation.**

### **3 Background**

- 3.1 CIRAS is an independent confidential reporting system for member organisations across the UK for staff to report safety, health and environmental concerns. It offers a service that allows employees to raise such concerns in confidence which are captured, investigated and concluded. This external service complements our internal reporting systems and procedures.
- 3.2 TfL ensures that all employees are aware of CIRAS and we take all reporting seriously. We always investigate, provide a prompt response and take action as necessary.
- 3.3 For noting, TfL also uses SafeLine and Crimestoppers which allow our staff to raise safety and security concerns in confidence.

#### **List of appendices to this report:**

Appendix 1: CIRAS presentation

#### **List of Background Papers:**

None

Contact Officer: Lilli Matson, Chief Safety, Health and Environment Officer  
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Confidential  
Reporting  
for Safety

# Insights from confidential reports across TfL

February 2023

# Key points

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## Elizabeth Line

Transition to operations prompted concerns on training, staffing and procedures.  
Good news! Staff spoke up so management could tackle issues early.  
No new reports since July 2022

## Bus companies

Sustained reduction in confidential reporting since the pandemic.  
Improved internal reporting or a reporting gap?

## Safety Culture

Whilst  $\frac{3}{4}$  reporters say safety reporting is encouraged, most of those reporting to CIRAS do so because they don't feel internal channels are effective.

## TfL-CIRAS partnership

Effective collaboration with CIRAS across TfL – raising awareness of the importance of reporting with all staff, and responding to reports.  
Exploration of opportunities for further closing the reporting gap, for example on hard-to-raise culture issues within teams.  
Reporting App for staff to be launched soon.



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Reporting  
for Safety

Report hotline 0800 4 101 101

Text 07507 285 887

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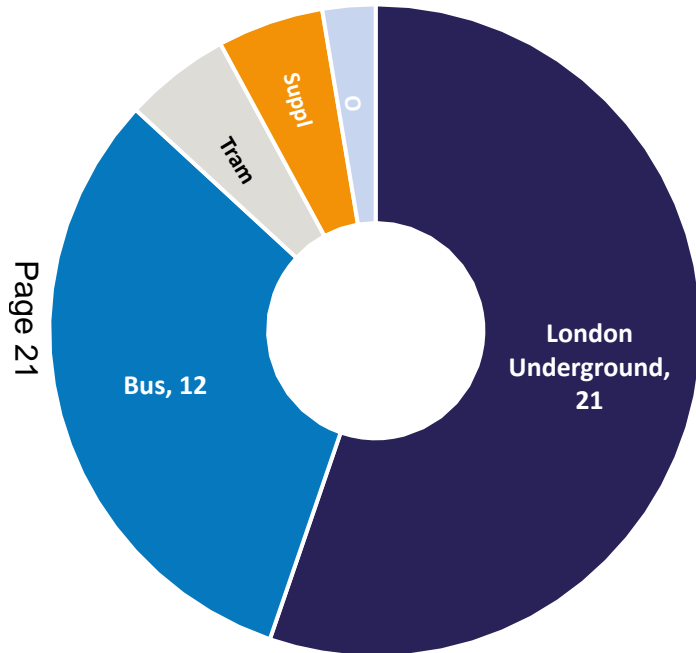
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# CIRAS report numbers: April 2020 – P10 22/23

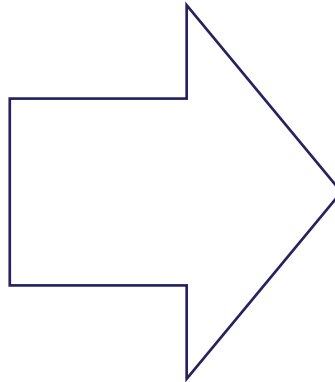
## TfL reports

April 2020 – end P7 21/22

14% reports went to TfL organisations



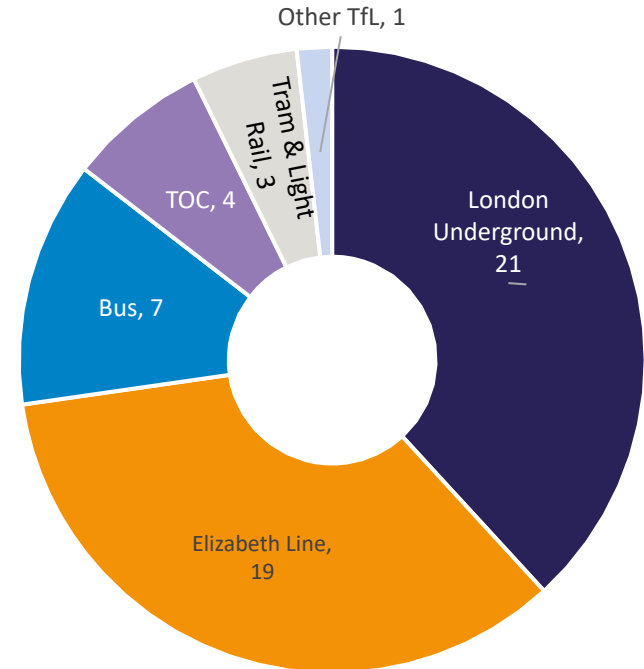
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## TfL reports

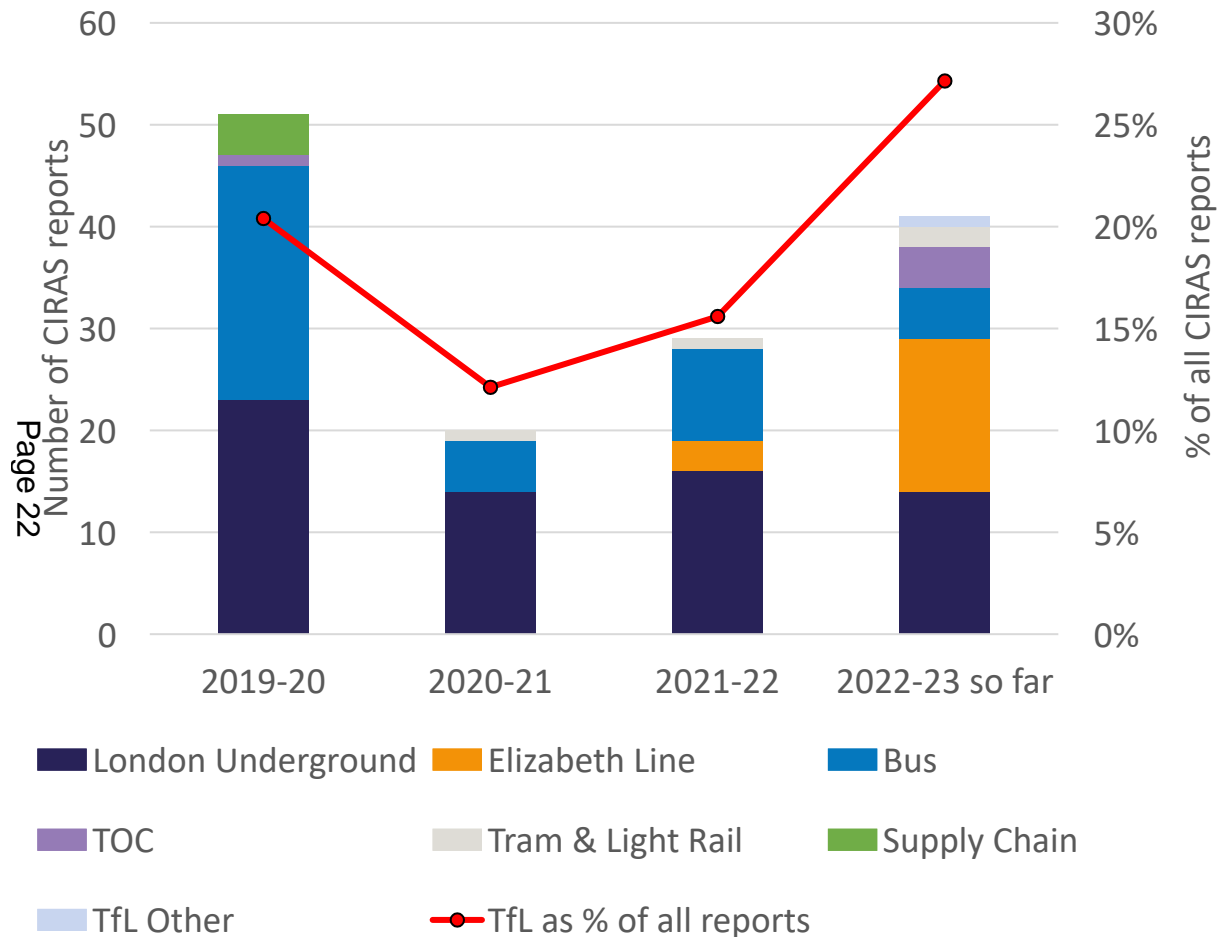
P8 21/22 – P10 22/23

23 % reports went to TfL organisations



Elizabeth line includes delivery project, infrastructure management and operations. Positive that staff are speaking up during the period of significant change

# Trends over time

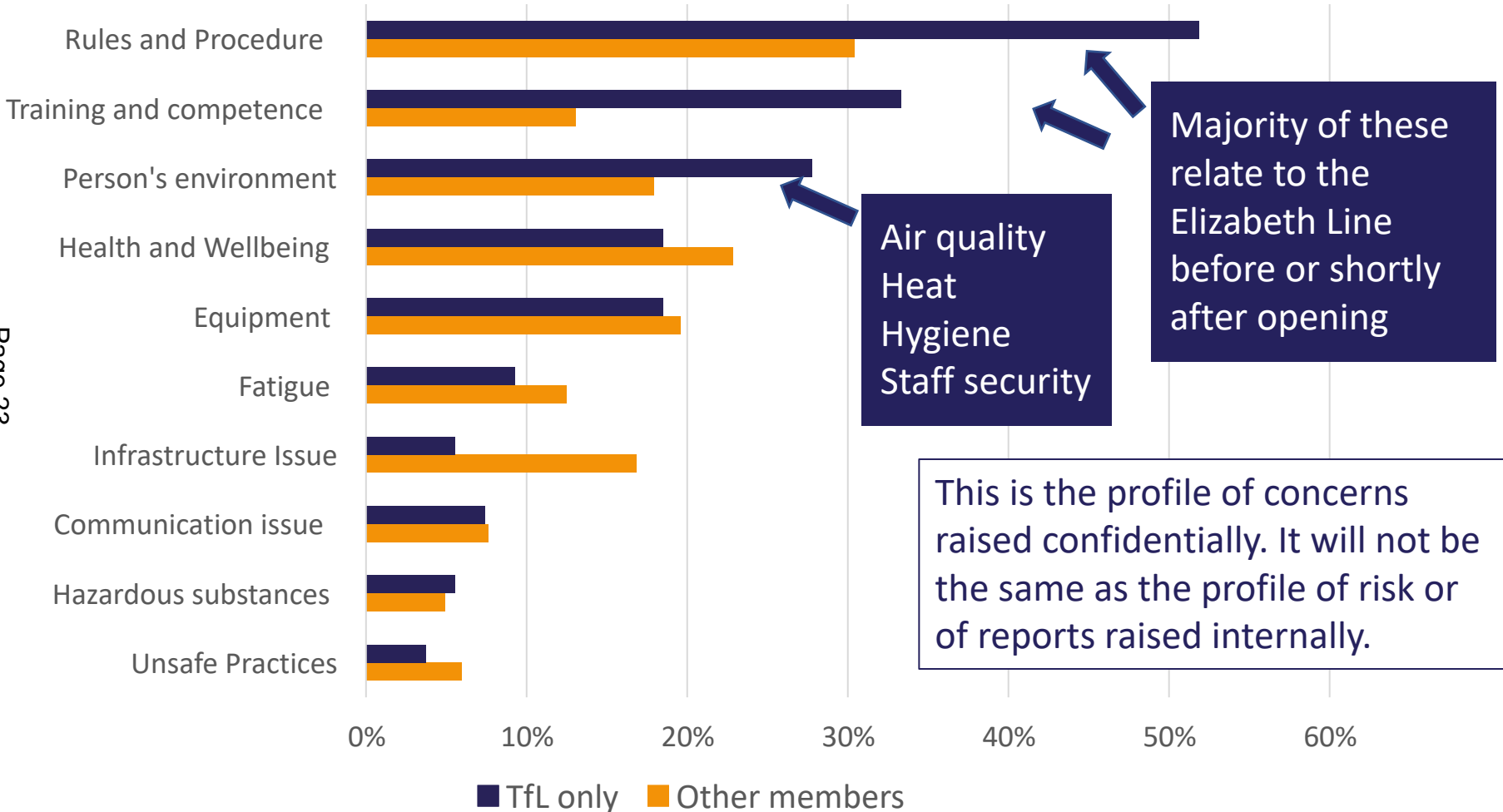


Reports for London bus companies still running well below pre-Covid levels

Elizabeth Line includes infrastructure and train operations

# Reporting themes profile (P8 21/22 – P10 22/23)

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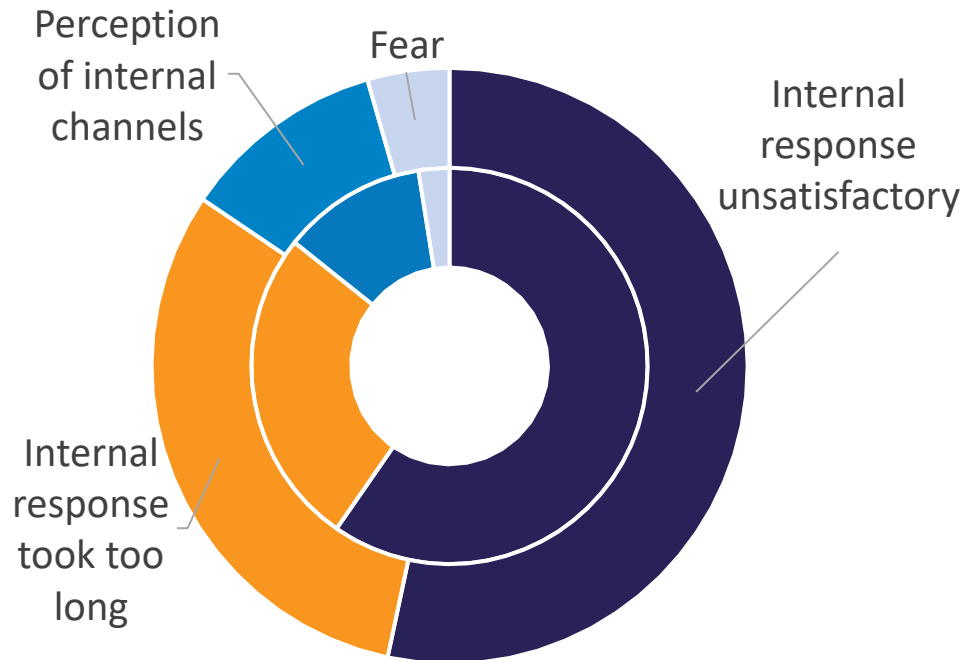
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# Why do staff say they bring concerns to CIRAS\*?

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OUTER RING: TfL reporters  
INNER RING: Non-TfL reporters\*\*

**Most** reporters come to CIRAS because they perceive internal channels to be ineffective

### Sector comparison

The profile across TfL of why for people raise concerns confidentially with CIRAS mirrors the national picture.

### Concern raised internally first?

Since P8 21/22 70% (38 reporters)

This has returned to 19/20 levels having dropped to 57% during the period April 2020 – November 2021

\*Excludes anonymous concerns

\*\*Excludes reporters who come because their concern is not for their own employer. This is about 25% nationally but not seen in TfL in this period.



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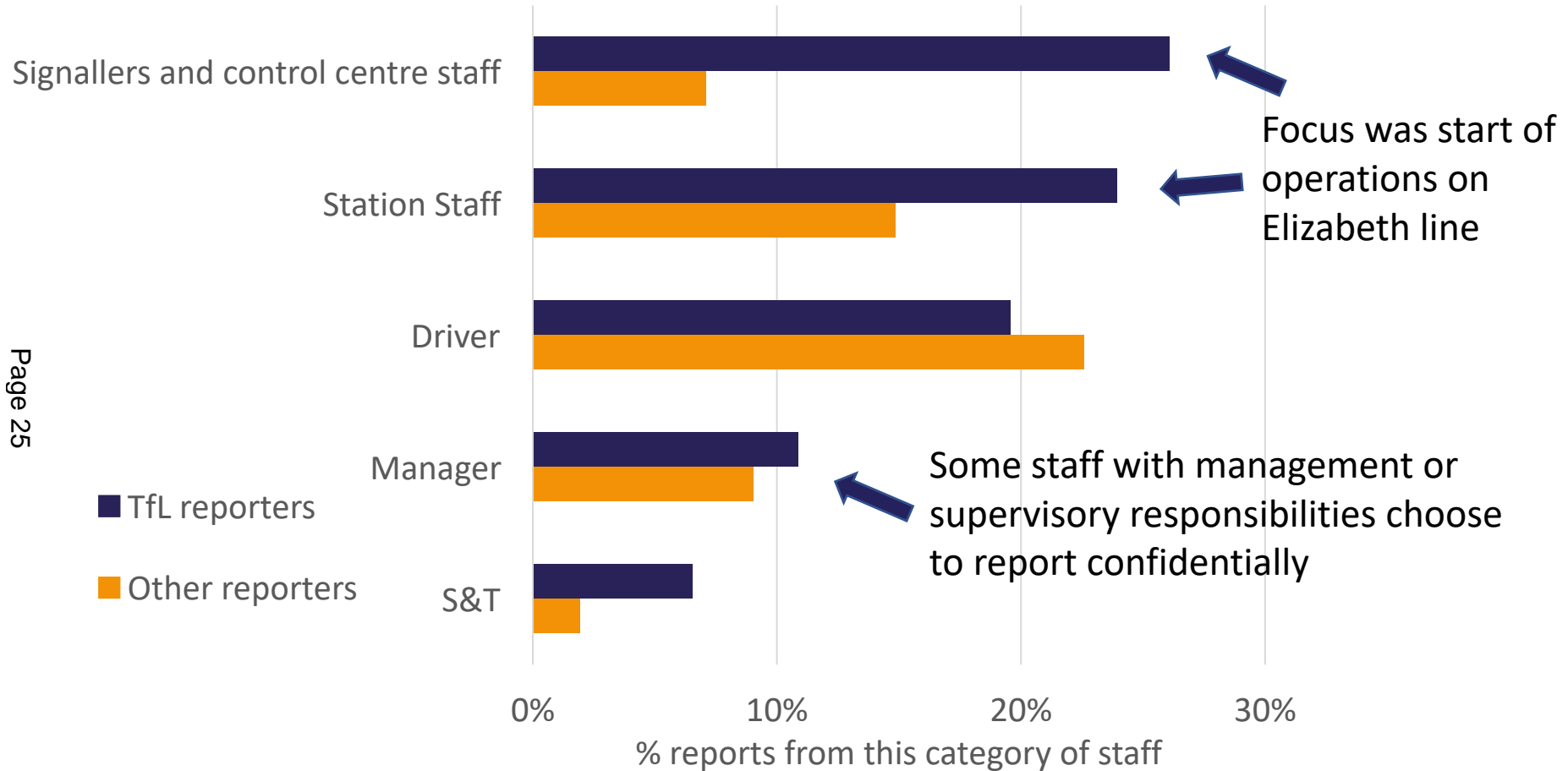
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# Which groups of staff are reporting to CIRAS?



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P8 21/22 – P10 22/23

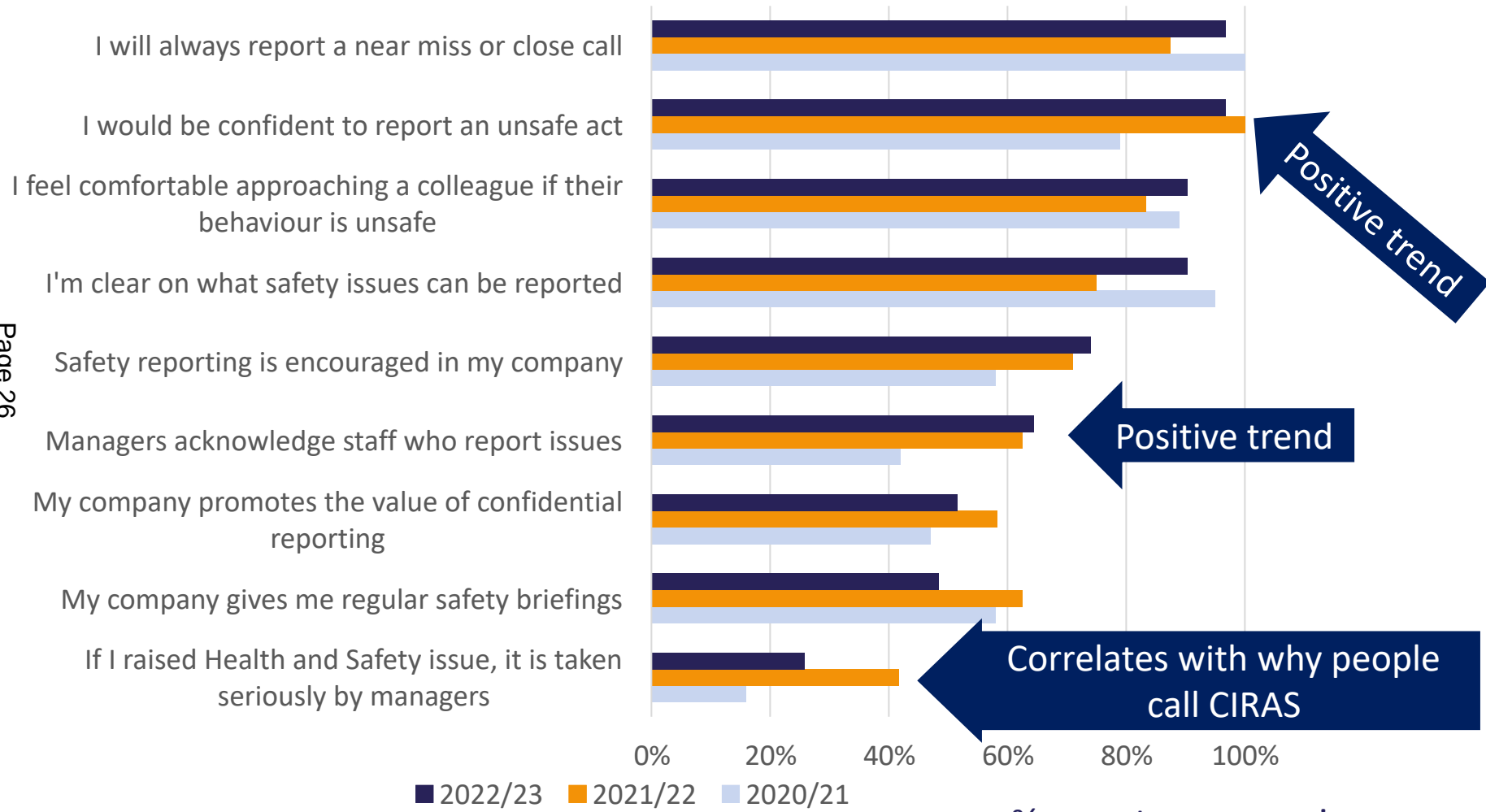
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# CIRAS reporters – changing views of TfL safety culture

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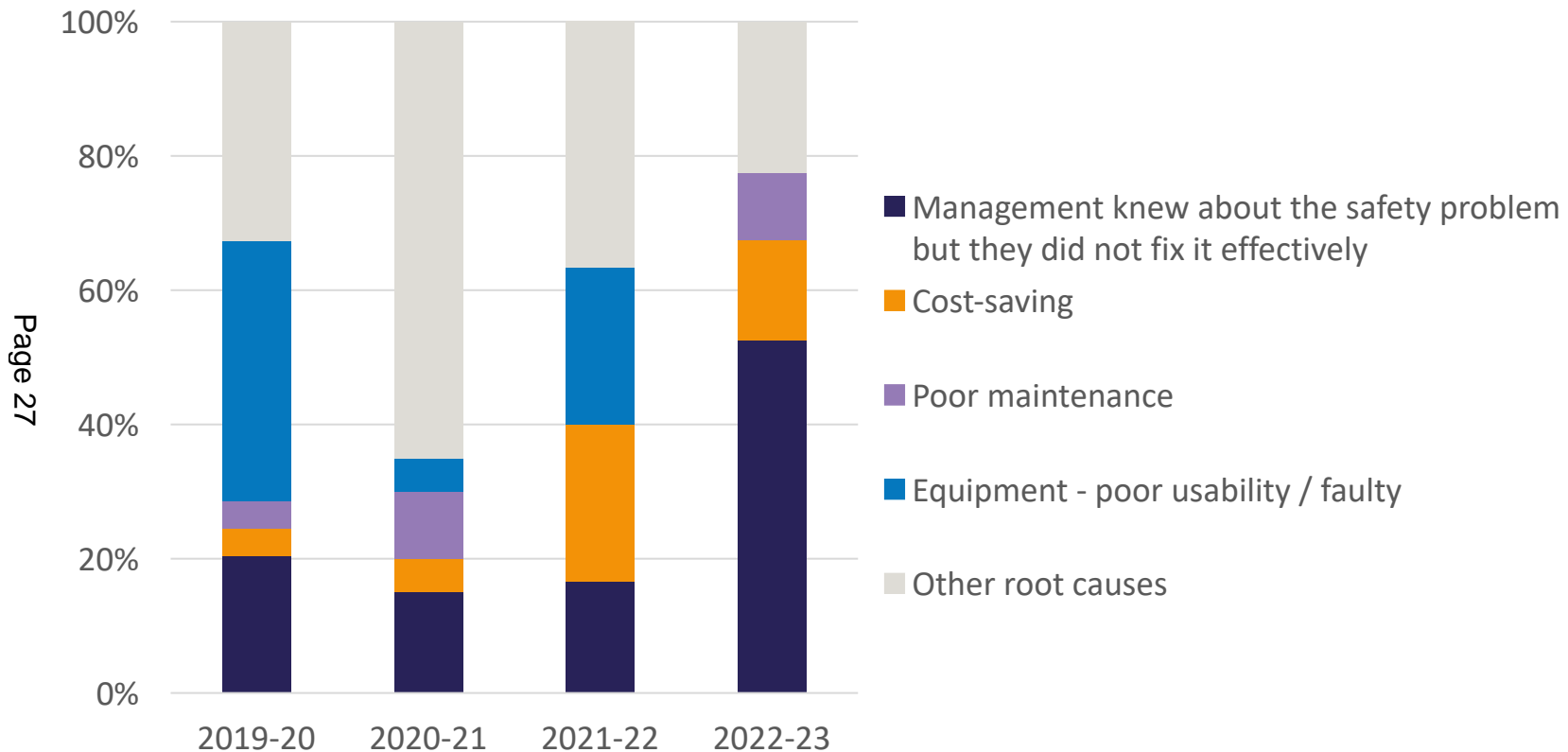
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% reporters answering yes

# Perceived root cause\* – reporter's view

## Top perceived root causes have changed over time



\*Reporter's view of root cause – TfL's investigation may conclude differently

# Contact us

---

## Reporting

**Report hotline 0800 4 101 101**

**Text 07507 285 887**

**Freepost CIRAS**

## General enquiries

0203 142 5369

[enquiries@ciras.org.uk](mailto:enquiries@ciras.org.uk)

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**Date:** 22 February 2023

**Item:** Safety, Health and Environment Quarterly Report – Quarter 3 2022/23

## This paper will be considered in public

### 1 Summary

- 1.1 This paper summarises the key information and trends reported in the Safety, Health and Environment (SHE) Quarterly Report for Quarter 3 (Q3) of the 2022/23 financial year, attached as Appendix 1.
- 1.2 Q3 covers the dates 18 September to 10 December 2022. Most data presented covers this date range, except for some road safety and work-related violence data. It is clearly highlighted when data falls outside this period.

### 2 Recommendation

- 2.1 The Panel is asked to note the report.

### 3 Key information presented in the Q3 report

#### 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

- 3.1 The report shows that our safety scorecard measures of rate of people killed or seriously injured on the roads and rate of people killed or seriously injured on or by a London bus have been met for Q3 2022/23.
- 3.2 Our aim in Q3 2022/23 was to reduce the rate to fewer than 0.33 people killed or seriously injured on the roads per million journeys. In Q3, there were 0.27 people killed or seriously injured on the roads per million journeys. While we have met the annual scorecard metric for road safety in Q3 (and previous quarters this financial year), we are not currently on track to meet our Vision Zero interim target for 2022.
- 3.3 It is disappointing that we did not meet our workforce injury targets this quarter as the numbers increased from 341 in Q2 to 371 in Q3. This quarter, the main causes of injury to our workforce are due to slips, trips and falls, trapped fingers and traffic collisions.

## **4 Safety**

### **Public Transport**

- 4.1 During Q3, total customer numbers on the public transport were 0.82 billion, a 0.10 billion increase from the end of Q2. Our customer numbers – while recovering – still have some way to go to resume to pre-pandemic levels of 0.9 billion (Q2 2019/20).
- 4.2 There were no customers killed on our public transport network Q3. Sadly, 49 customers were seriously injured. This was one less than Q2.
- 4.3 The number of customers injured per million passenger journeys was 2.31, which is better than our target of 2.58 per million journeys and marks an improvement from the customer injury rate in Q2. Of the 49 serious injuries during Q3, 55 per cent occurred on London Underground (LU) and 45 per cent happened on buses and no serious injuries occurring on any other mode during Q3. Slips, trips and falls continue to be the most common injury type, accounting for 77.5 per cent of serious injuries incurred across the network. On our bus network, 86 per cent of serious injuries were in relation to slips, trips or falls and 70 per cent of LU serious injuries.

### **Streets**

- 4.4 In Q3 2022/23, we have continued to see a return to pre-pandemic levels of road journeys. This is the fourth successive quarter which has seen travel patterns and casualties on the roads return to pre-pandemic levels. There was an increase in walking, cycling and motorised journeys when compared with Q3 2020/21 and Q3 2021/22.
- 4.5 In Q3 2022/23, 24 people were killed, which is broadly similar to Q3 2020/21 (25) but above Q3 2021/22 (17). While this number represents a tragic number of deaths on London's roads, it is lower than the 31 people who were killed on London's roads in Q3 2019/20.

- 4.6 The number of people walking who were killed in Q3 2022/23 (13) is less than that of the Q3 2019/20 pre-pandemic figure (15).
- 4.7 The number of people seriously injured on London's roads in Q3 has fluctuated over recent years as pandemic restrictions have altered travel patterns and more of our Vision Zero interventions have been completed. In Q3 2022/23, there were 837 serious injuries (compared to 833 in Q3 2021/22 and 892 in Q3 2020/21). This is noticeably lower than Q3 2019/20 (before the pandemic) when 868 people were seriously injured suggesting that notwithstanding changes since the pandemic period, we continue to see a downward trend.
- 4.8 Over the last three quarters we have seen an increase in the number of car occupants killed on the roads, when compared to before the pandemic. Provisional analysis of raw casualty data suggests that excessive speed is a key factor, with loss of control of the vehicle being recorded in several fatal incidents.

### **Workforce**

- 4.10 In our Capital Delivery teams, workforce periodic safety performance is off target but has improved compared to recent years (non-pandemic). There were 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.
- 4.11 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 Q3, an increase of one compared with Q2. 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. The four additional LTIs occurred within our LU teams. Descriptions of some of the key incidents are included in the Quarterly Report.
- 4.12 There were no LTIs recorded within TfL Engineering during Q3.

## **5 Health**

- 5.1 In Quarter 3 2022/23, Covid-19 remained the top cause of short-term absence and has significantly decreased from 44 per cent in the previous quarter to 27 per cent in Q3 2022/23. Absences related to mental health and musculoskeletal issues remained the most significant causes of long-term absences and remain the focus of our preventative measures, alongside measures to mitigate the risk of Covid-19 to our people and customers.
- 5.2 Our Occupational Health team is constantly working hard to prevent ill health but also to support those who become unwell, to return to work. 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 by the mobile unit.

## 6 Environment

- 6.1 Our electricity consumption this quarter was within two per cent of Q3 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.
- 6.2 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 emissions intensity of grid electricity.
- 6.3 In December 2022, the TfL Executive Committee participated in a training about Sustainability. The training was hosted at a local social enterprise with a briefing and workshop sessions 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.
- 6.4 The Greater London Authority (GLA) group-wide Responsible Procurement Implementation Plan, of which TfL is a signatory, was launched in September 2022 and supports the delivery of our Corporate Environment Plan through procurement. The GLA is planning to raise over £500m via green bonds to finance zero carbon projects across the GLA Group and London. TfL is planning to bid for this opportunity, and as such has been developing a pipeline of projects that could be considered for funding, which we will be submitting to the GLA. The bond is expected to be issued in the first half of 2023 and, if successful, provide funding from 2023 to 2026 and accelerate our progress to achieve net zero carbon from our operations by 2030.

### List of appendices to this report:

Appendix 1: Q3 Safety, Health and Environment Report Quarterly Report - Quarter 3 2022/23

### List of Background papers:

None

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Email: [LilliMatson@tfl.gov.uk](mailto:LilliMatson@tfl.gov.uk)



# **Safety, Health and Environment Quarterly report**

**Appendix 1**

**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 to 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, pre-pandemic 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.

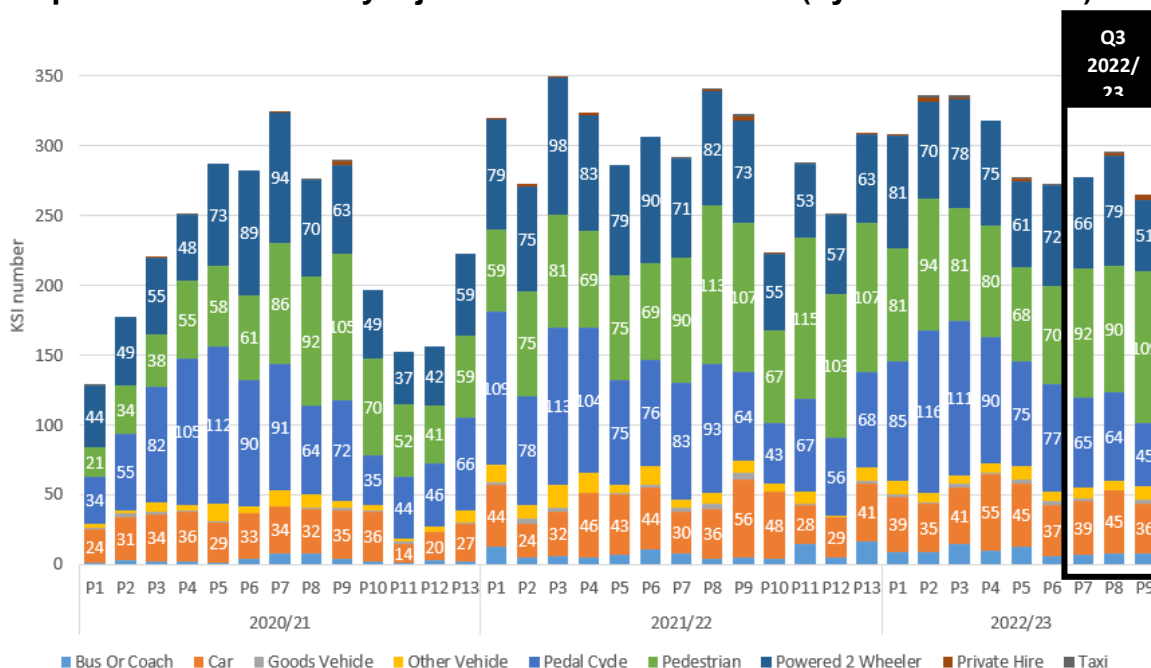
## Safety

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

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

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
<b>Total</b>	<b>31</b>	<b>25</b>	<b>17</b>	<b>24</b>

\*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.

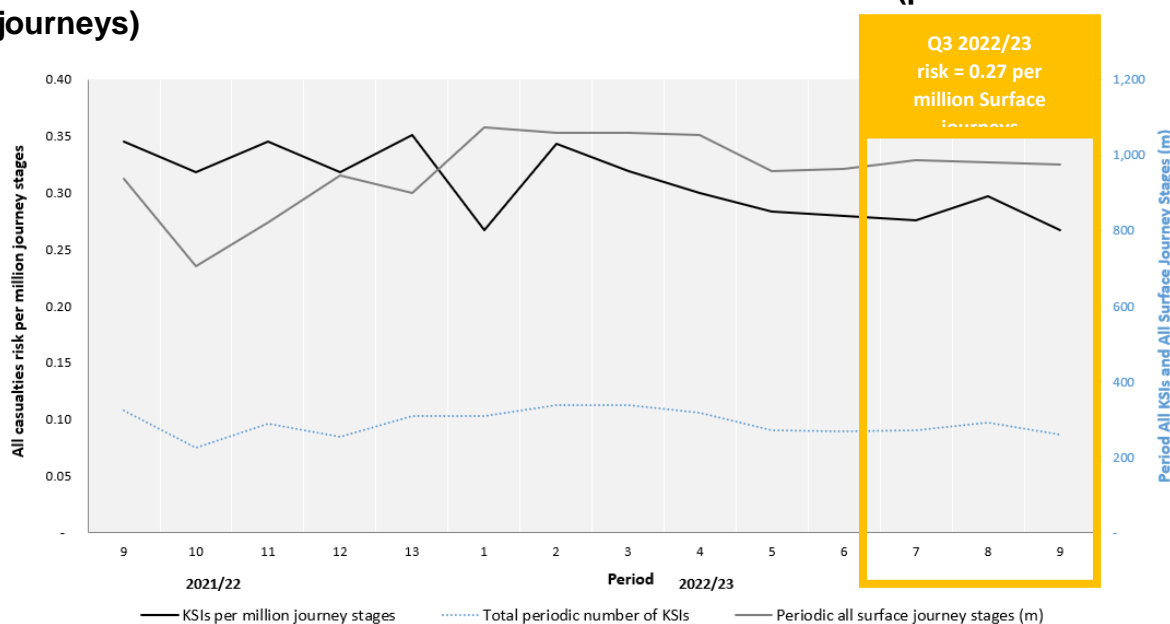
**Figure 3: Number of people seriously injured on London’s roads**

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
<b>Total</b>	<b>837</b>	<b>867</b>	<b>816</b>	<b>813</b>

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

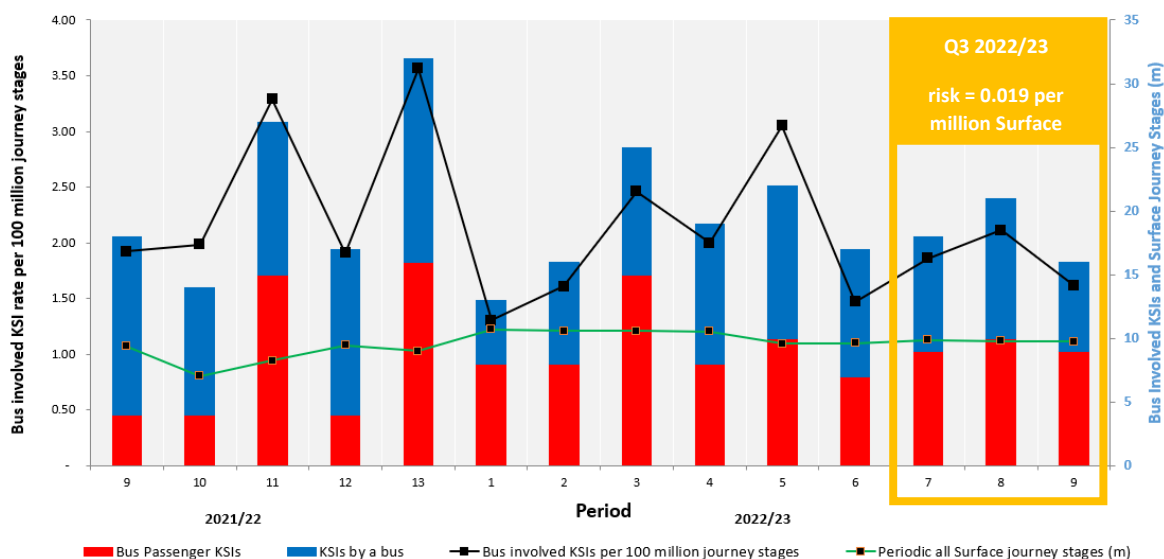
The number of people seriously injured this Quarter is similar to Quarter 3 last financial year (813 serious injuries compared to 816 in Quarter 3 2021/22) and is lower than the equivalent period in 2019/20 (pre-pandemic). The number of pedestrians and car occupants seriously injured this Quarter is 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 [Vision Zero action plan progress report](#), 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) <https://content.tfl.gov.uk/vision-zero-action-plan-progress-report-2021.pdf> 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 [TfL's website](#). In December 2022, The Department for Transport (DfT) published the findings from its [national evaluation of e-scooter 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 e-bikes 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 e-scooter 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 [our website](#).

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 pre-determined 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.

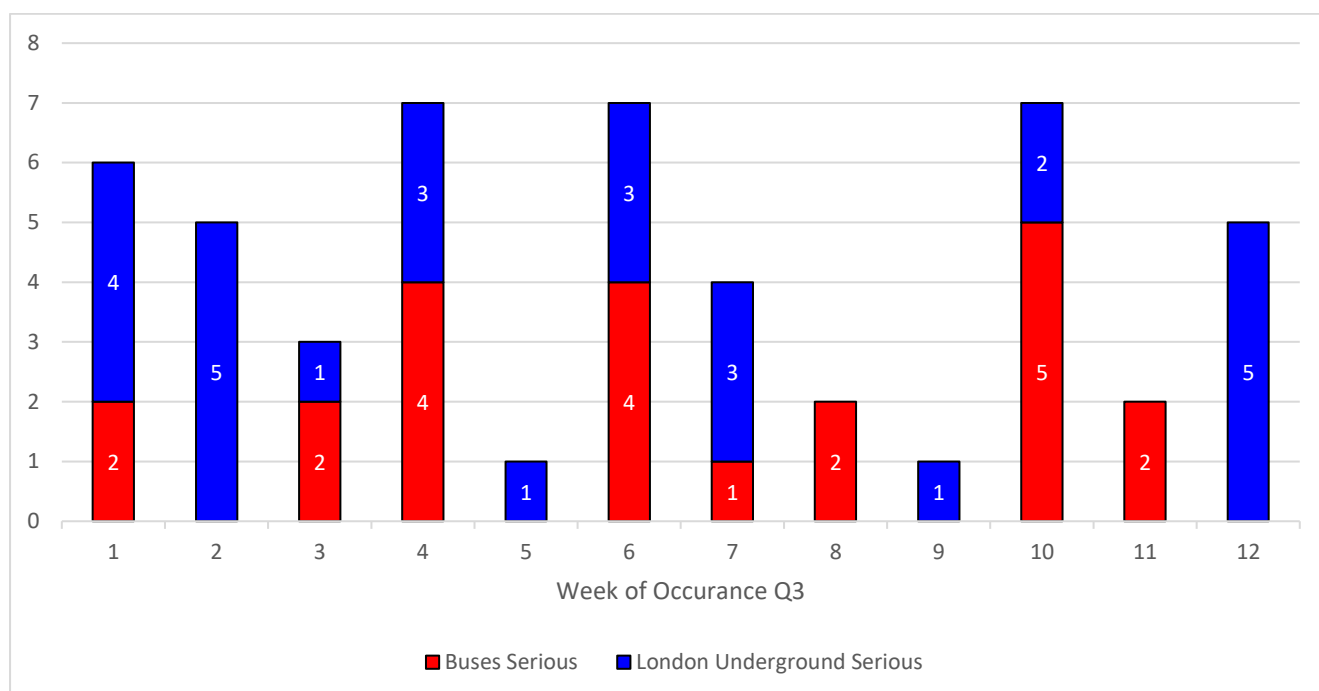
### **Waterloo station – 26 May 2020**

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**

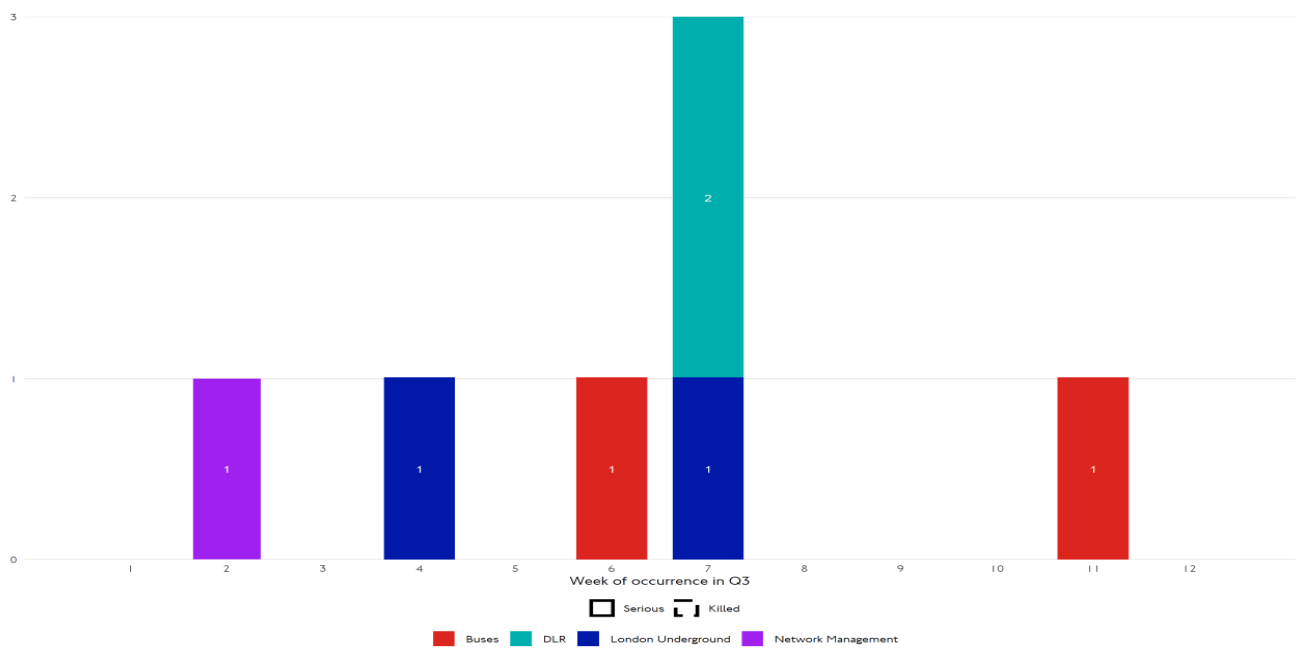
Although slips, trips and falls continue to dominate the causal and contributory factors resulting in customer injury across our network, this quarter we have seen a 15 per cent decrease from the same quarter in the last financial year. This encouraging trend consists largely of a decrease of injuries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

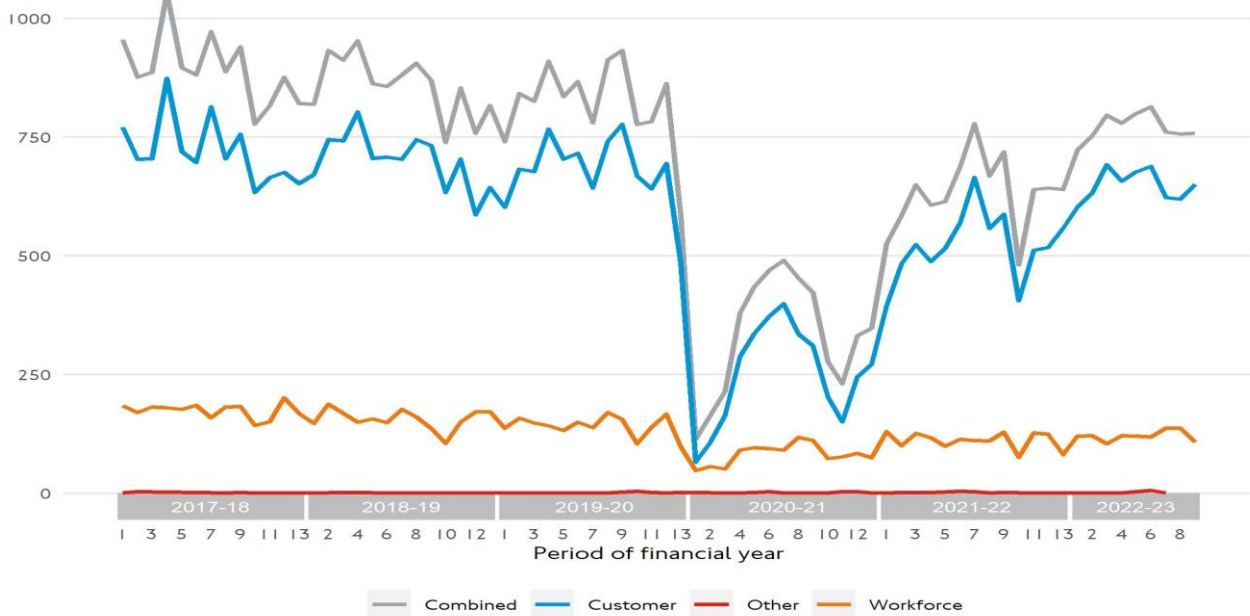
This compares to ten serious injuries sustained by people working on our public transport network in Quarter 3 2021/22. During the same Quarter last year, we saw seven members of our workforce seriously injured as a result of a slip, trip or fall. Two were seriously injured as a result of physical assaults 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.

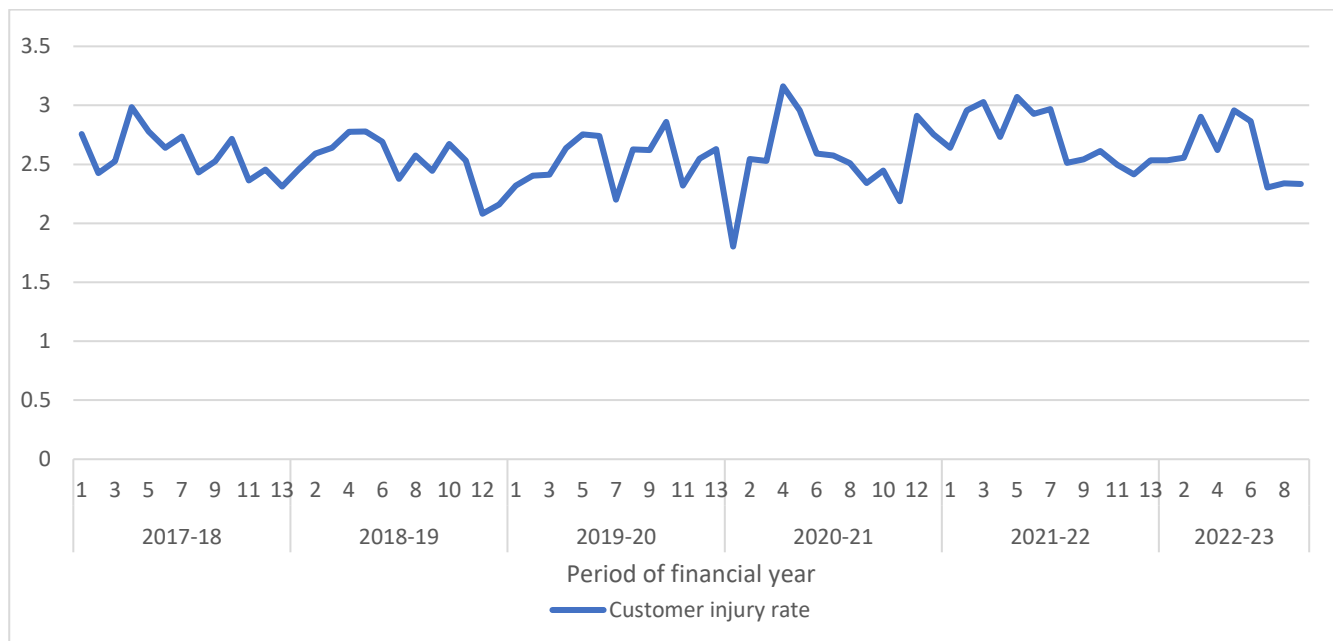
### Long term trend

#### 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:

1. **Engagement** – We are engaging with customers and staff to proactively prevent incidents linked to intoxication. Initiatives, such as [Westminster Night Stars](#), 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.

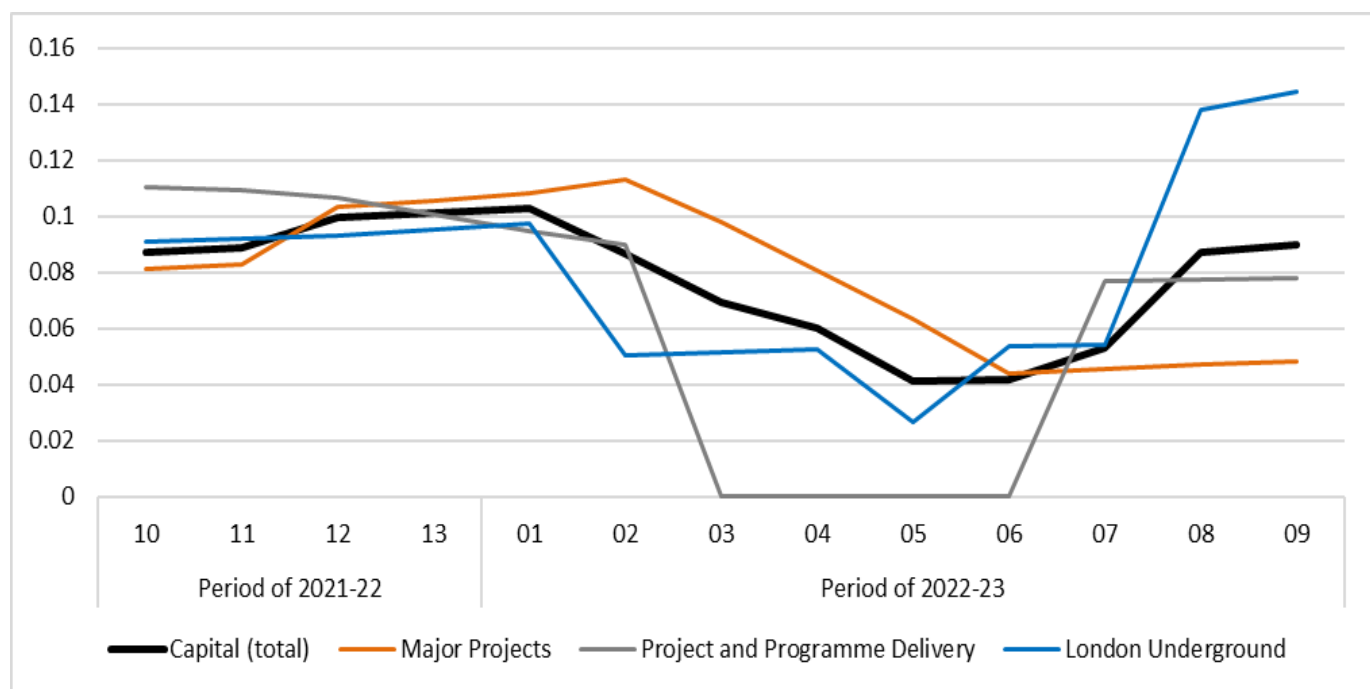
During Quarter 3, the Capital area workforce completed 1.95 million hours worked, just below the 2 million hours worked during the previous quarter. Compared with Quarter 3 of 2021/22, there have been 500,000 fewer hours worked, predominantly as a result of some of our major projects, such as Bank Station 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.

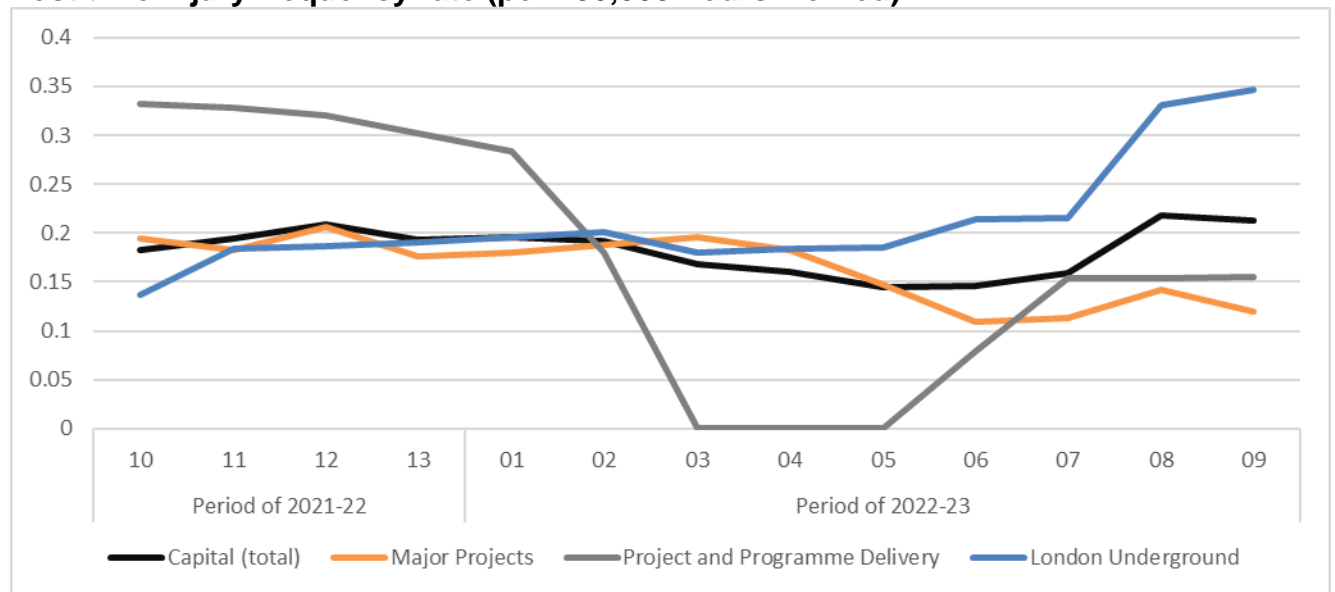
The RIDDOR reportable incident occurred when two operatives working on the Old Street Roundabout project were in the process of carrying a sheet of plywood from the compound on the roundabout to the sub-surface area in St Agnes Well. Whilst carrying the sheet, the plywood wobbled, and the Injured Person (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.

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.

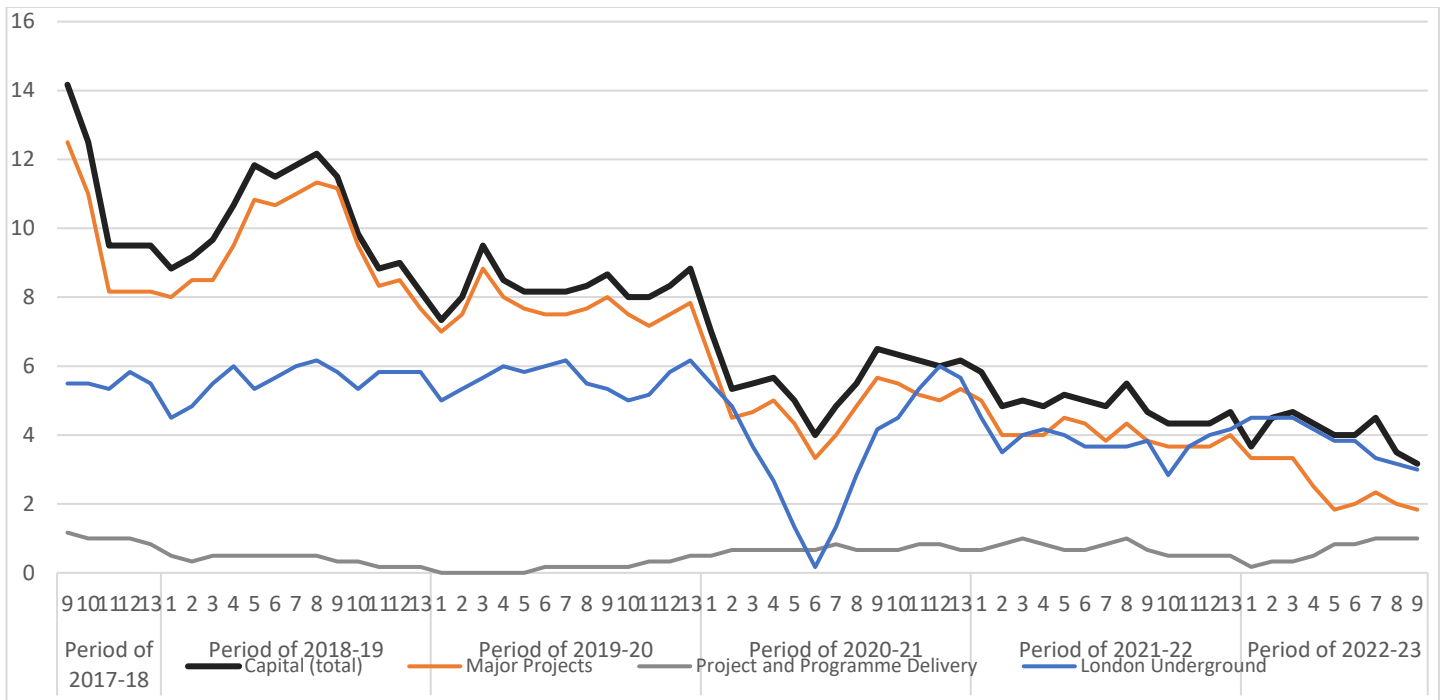
Two of these LTIs occurred in our Major Projects and Project and Programme Delivery areas, resulting in a combined LTI rate of 0.12, below the target of 0.25. An LTI at Bank Station Capacity Upgrade occurred when an operative was loading temporary wooden escalator steps onto a lorry. One of their fingers 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.

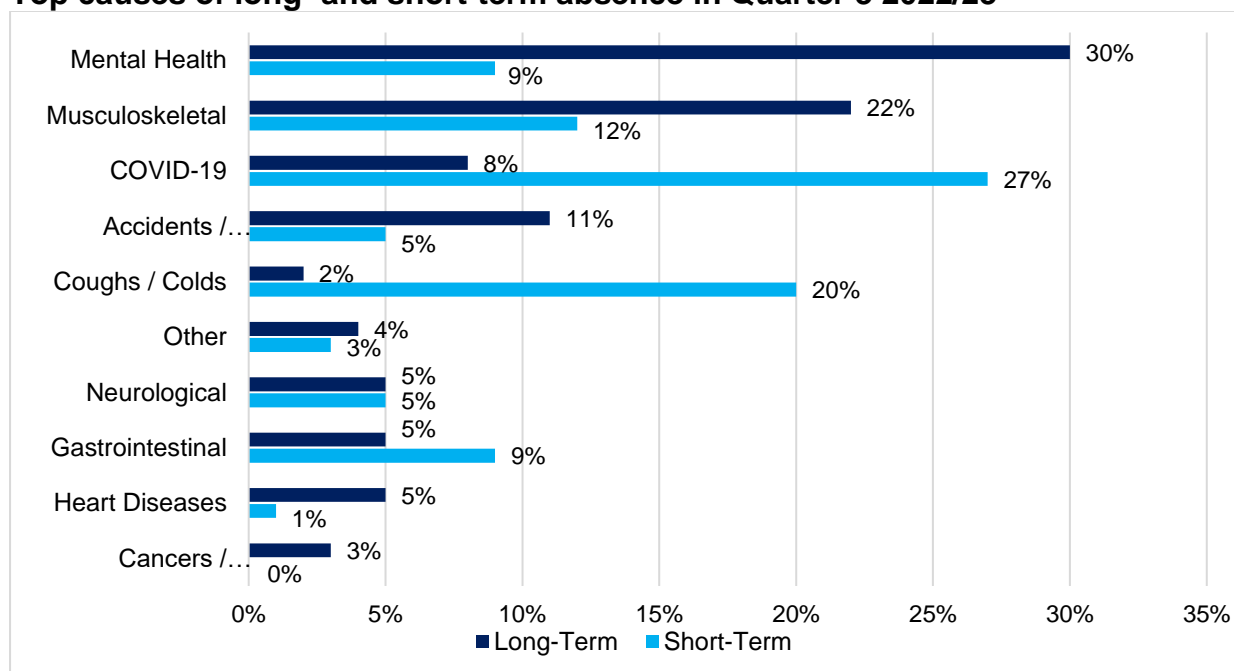
We are continuing to provide free Type IIR masks for those working in our operational areas for those who wish to wear them.

## 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 per cent 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/m <sup>2</sup> )	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)).

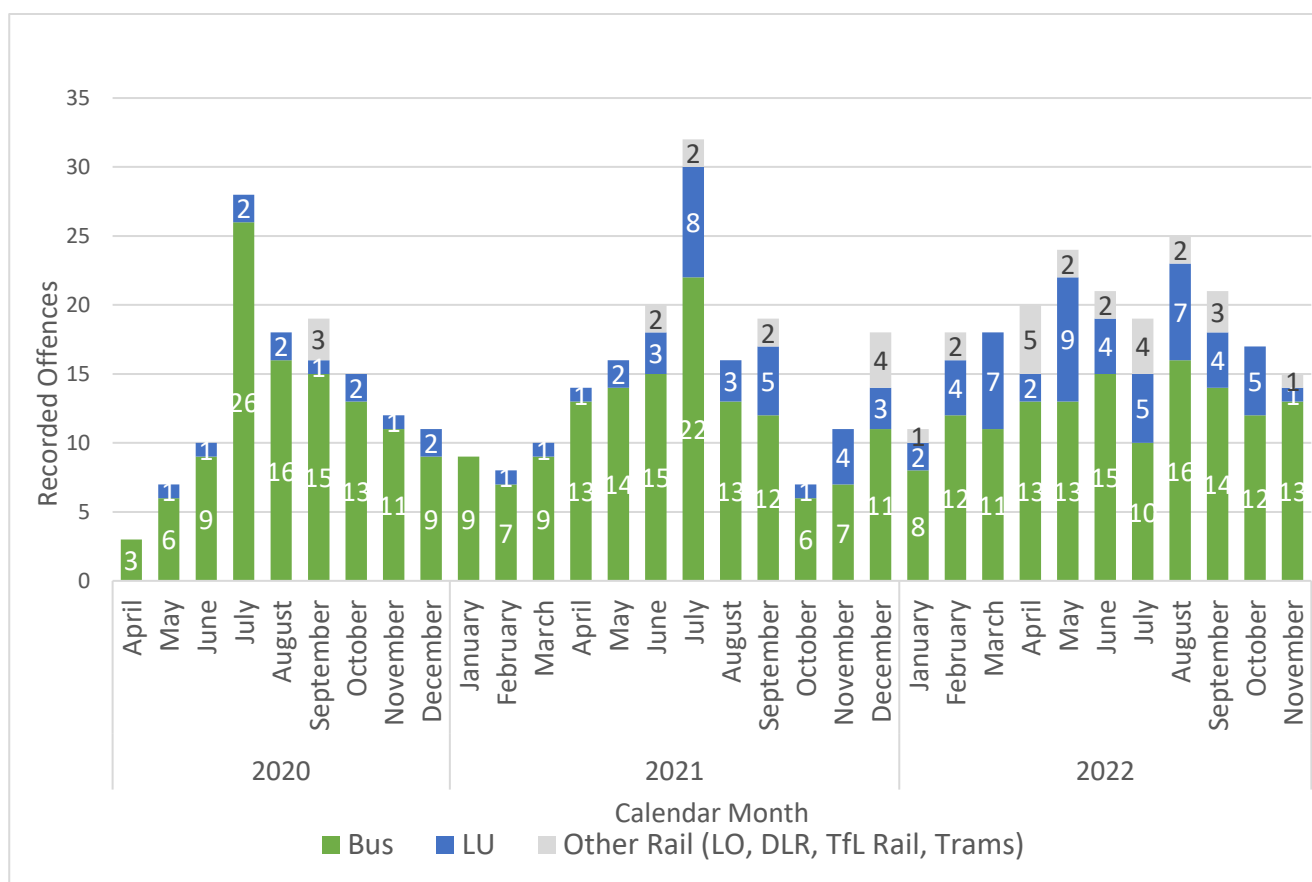
### **Triggers of WVA incidents**

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 anti-socially. A total of 672 WVA incidents were triggered in this way, which is an increase of 117 from Quarter 2.

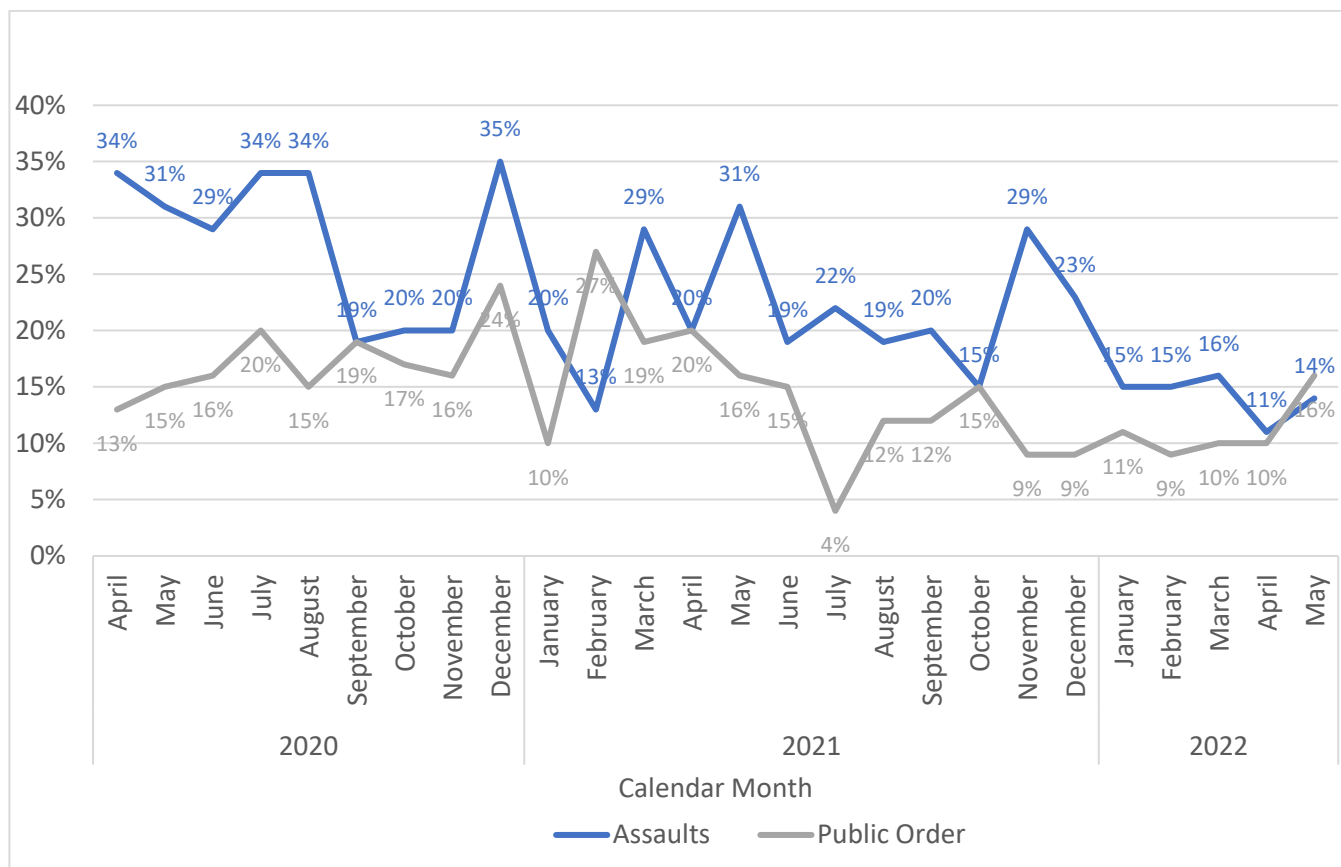
225 WVA incidents during Quarter 3 involved a customer who was believed to be intoxicated at the time of the incident. This is an increase of 49 incidents from Quarter 2, rising from 7 per cent in Quarter 2 to 10.2 per cent in Quarter 3. 21 per cent of the WVA incidents that were triggered by aggressive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

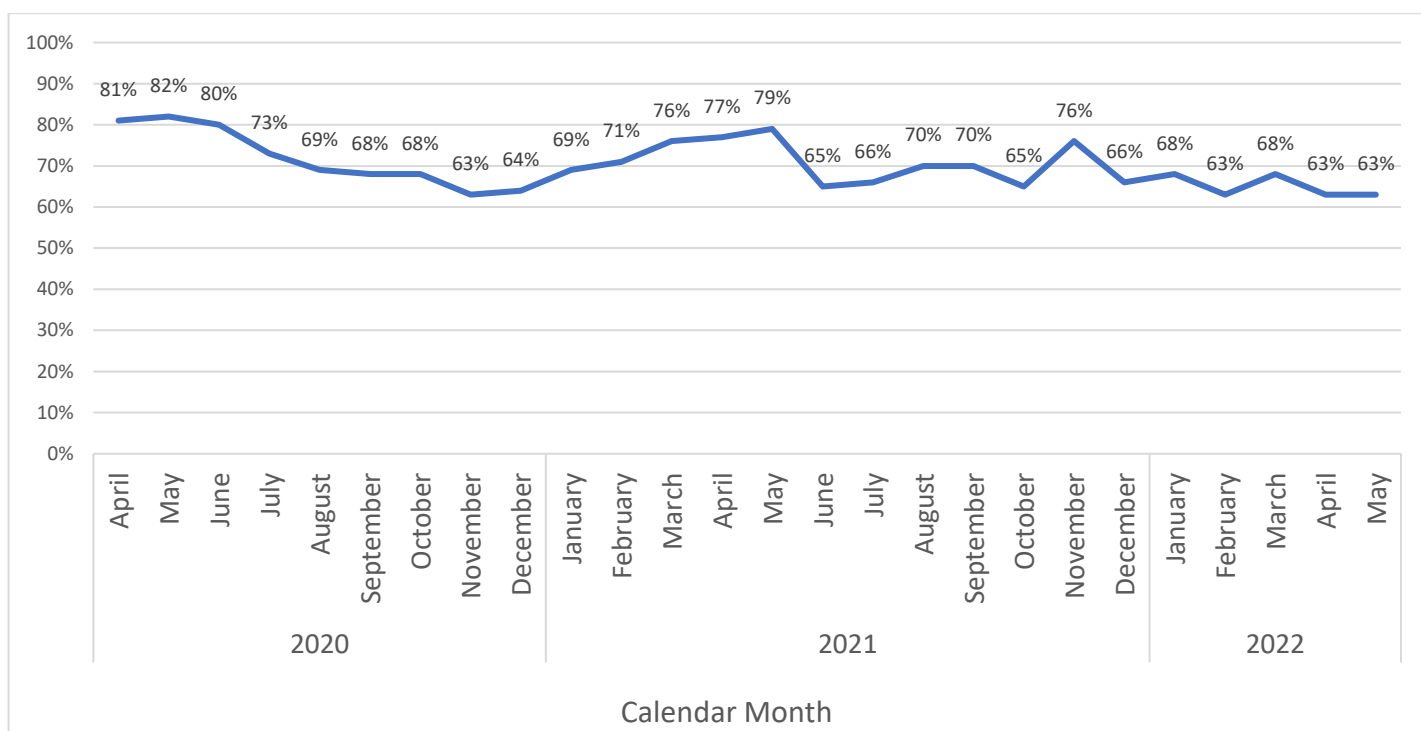
During the current period, the combined solved rate was 15 per cent for violence and public order recorded offences against our workforce; lower than the previous 12-month period (22 per cent).

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 whose vehicle 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 (NO<sub>2</sub>) 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, NO<sub>2</sub> 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 NO<sub>2</sub> 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.

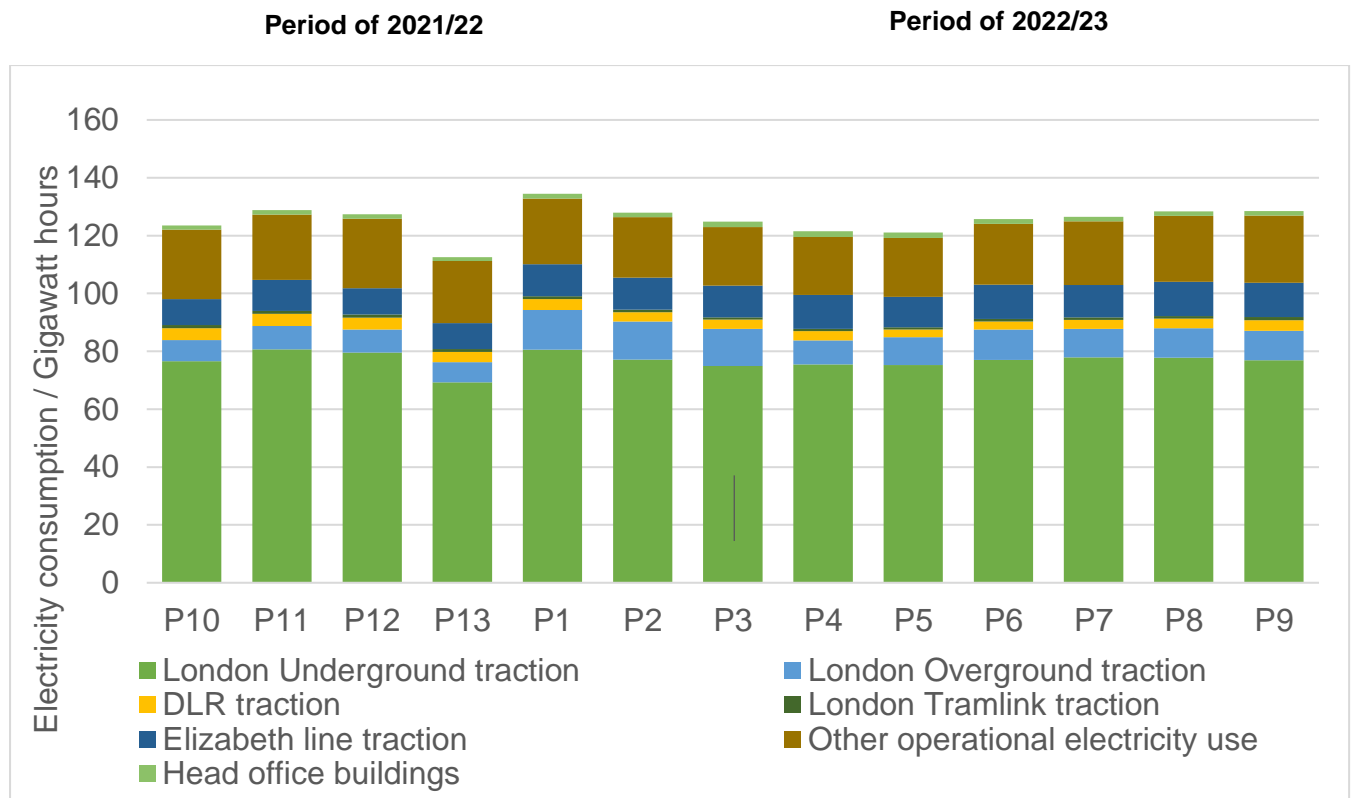
The cooling panel works by circulating cold water around pipework within a curved metal structure to chill it. It then circulates air, using an industrial-sized fan, through gaps in the panel's structure, which in turn is cooled. The panel could also have the additional benefit of halving operational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

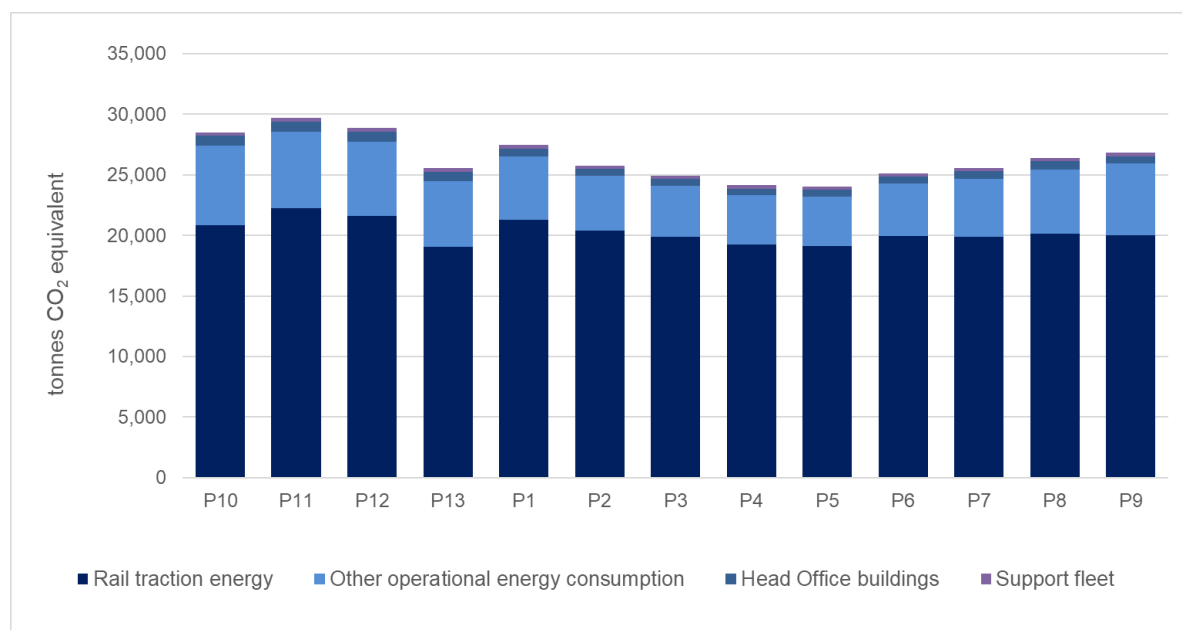
## Energy consumption and carbon emissions from our operations

### 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.

## CO<sub>2</sub> emissions (excluding buses) Quarter 3 2022/23 (tonnes CO<sub>2</sub> 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.

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Date: 22 February 2023

Item: Pan-TfL Fatigue Management Programme Update

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## This paper will be considered in public

### 1 Summary

- 1.1 In February 2022 we provided the Panel with an overview of our Fatigue Management Programme and approach to developing a pan-TfL Fatigue Management Plan.
- 1.2 The Panel noted the paper and asked that we further consider non-operational colleagues within the risk screening, ensuring effective ongoing governance of the Programme, information on performance indicators, and feedback on Bus Driver Fatigue Detection technology trials.
- 1.3 This paper provides an update on the Fatigue Programme, including these considerations. The paper also shows how our approach to fatigue risk management aligns with our overall Safety, Health and Environment (SHE) risk management plan briefed to the Panel on 16 November 2022.

### 2 Recommendation

- 2.1 The Panel is asked to note the paper.

### 3 Summary of Progress

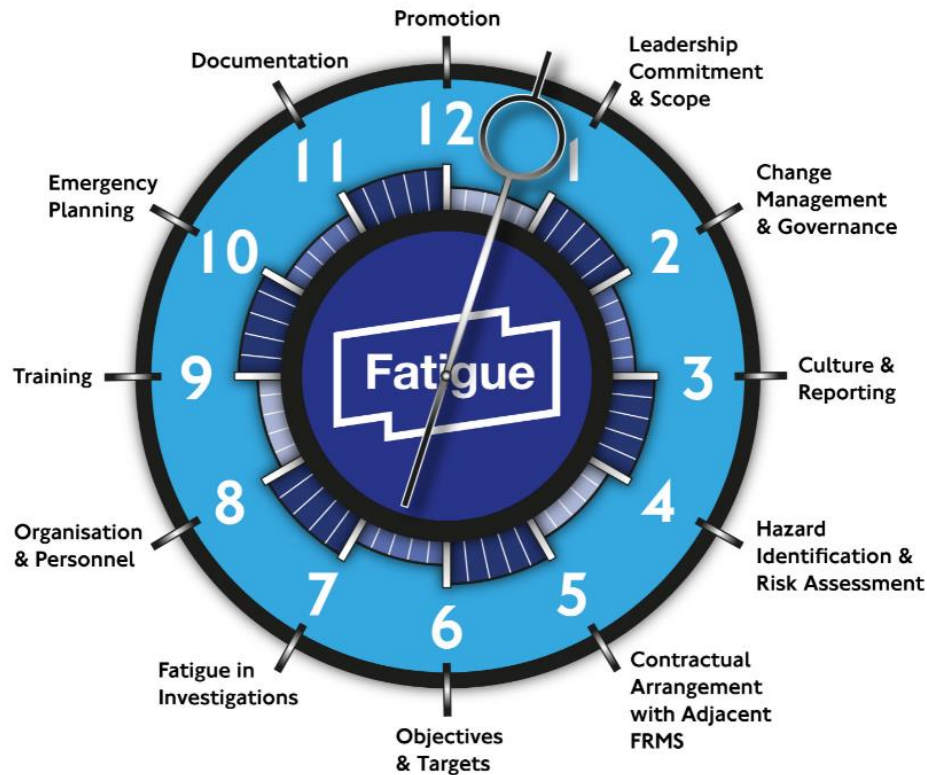
- 3.1 Fatigue is an ongoing risk across transport and wider operations. We use a range of indicators to continually review and improve confidence we are managing this risk, as detailed in Section 4. Detail on our approach to reduce this risk and our Fatigue Management Programme was provided in the **Fatigue paper** considered by the Panel in February 2022.

#### **Launch of Pan-TfL Fatigue Risk Management Plan**

- 3.2 Since our previous update, we have launched our Pan-TfL Fatigue Management Plan (FMP) in November 2022, a Vision and Value milestone, a year earlier than planned.
- 3.3 The FMP sets out 12 activity areas for managing fatigue risk, aligned with regulatory and industry best practice. Progressive requirements from minimum to best practice are set out for each activity. Business areas need to meet minimum 'must' requirements, ensuring compliance with standards, but are encouraged to work towards progressive 'should' good practice requirements, continually building maturity in risk management. The full requirements are set out in Appendix 1.

3.4 The Plan has been embedded within our refreshed SHE Management System, which is easier to access, understand and apply.

### Fatigue Management Plan: 'Clockface' of 12 fatigue activity areas and requirements



3.5 We have now completed risk screening of approximately 2,300 staff from over 15 different business areas, including colleagues from operational and non-operational roles. These business areas have been prioritised based on levels of fatigue risk, and in ensuring inclusion of a range of functions to fully test and embed our pan-TfL approach. Bespoke area action plans, addressing specific risk factors in these areas, are being developed. We are now entering a phased approach for roll out and continual review of fatigue risk screening across other business areas.

3.6 Supporting the launch of the FMP, progress continues to be made within each of the fatigue activity areas:

- (a) **Hazard Identification and Risk Assessment:** Development of 'fatigue friendly' rosters in response to business changes. Assessments on rosters as part of the reintroduction of the Night Tube and in support of Woolwich Ferry operations since it came into TfL operation have been conducted. Findings and changes are fed back to the business and their trades unions representatives.
- (b) **Training:** Refresh of training materials. We have launched four new fatigue training courses appropriately targeted to positions and proportionate to the level of risk associated with their role. Courses include:

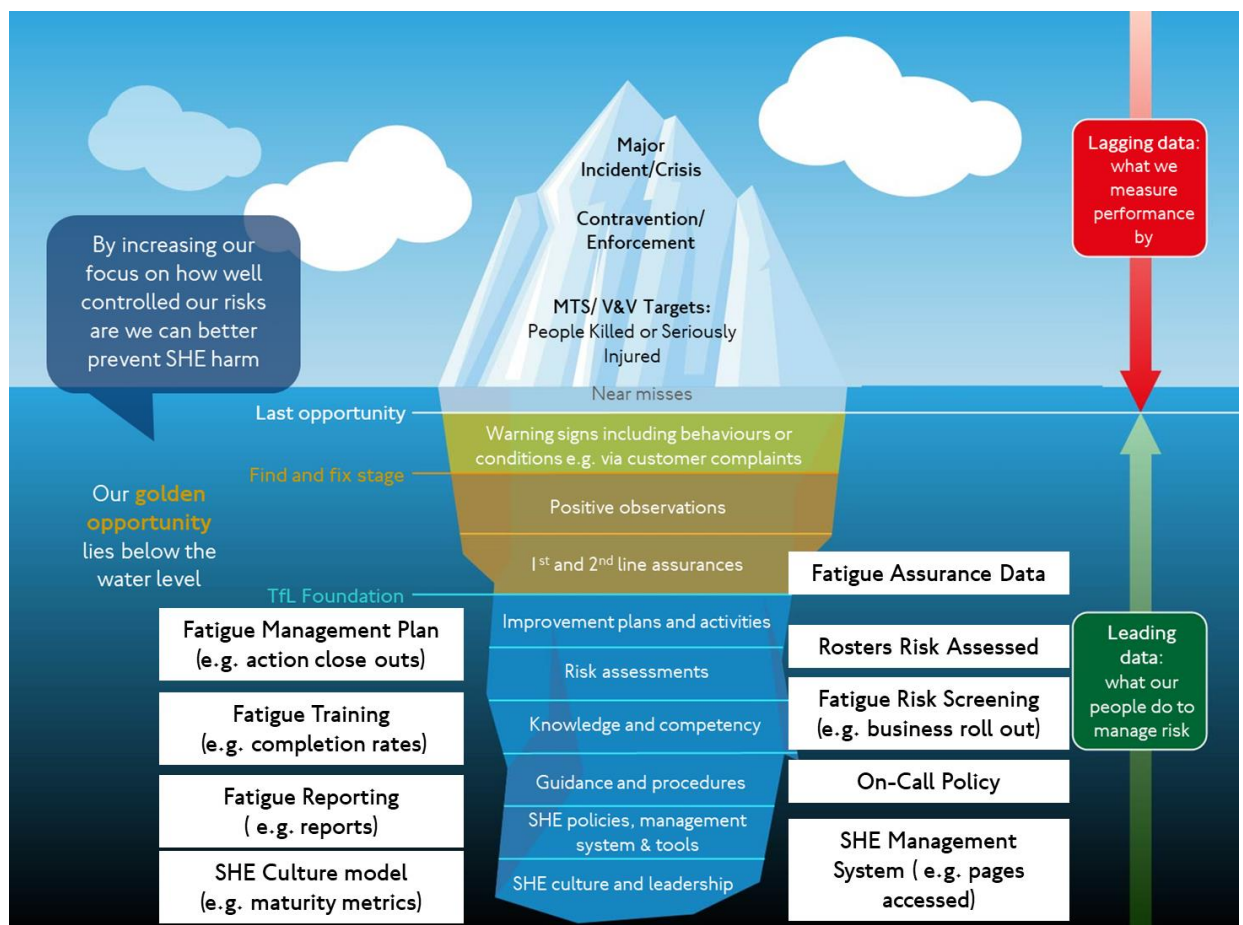
- (i) **Fatigue Awareness at TfL – Targeted** at all employees, providing an overview of and importance of managing fatigue, and how to take action.
  - (ii) **Managing Fatigue at TfL – Targeted** at managers, providing an overview of requirements for managers to enable effective management of fatigue for their teams.
  - (iii) **Fatigue and Shiftwork Awareness – Targeted** at those who work shifts, providing additional detail and guidance on how to proactively manage fatigue.
  - (iv) **Fatigue Awareness for Schedulers – Targeted** at colleagues who manage, update or otherwise interface with schedules and rosters, providing knowledge on best practice for minimising the impact of fatigue on colleagues who work shifts.
- (c) **Organisation and Personnel:** Developed the ‘Managing Fatigue at TfL’ handbook available to all staff containing advice and actions for improving fatigue, health and wellbeing. We have also developed a guide for colleagues’ family and friends to help them understand impact of shift work and how they can support their loved ones in minimising the impact of fatigue.
- (d) **Fatigue in Investigations:** Trialling a new approach where managers ask questions as part of investigations to help determine whether fatigue may be a contributory factor in incidents. Understanding fatigue helps us address risk.
- (e) **Promotion:** Our pan-TfL FMP allows us to work with business areas to share learnings from fatigue interventions. Our Bus Operator Forum is helping us understand impacts of fatigue detection technology. Feedback from drivers suggests that there have been concerns about technology being used to monitor performance or posing driving risk. A just and fair culture along with clear communication of the purpose of the technology is therefore key in implementation. Using a combination of independent research, communication and education initiatives, we are working to allay concerns.
- (f) **Culture and Reporting:** The Programme is underpinned by our commitment to create a just and fair culture where colleagues feel comfortable reporting fatigue. We continue to promote our digital fatigue reporting process, encouraging individuals to proactively report any fatigue concerns to their managers to prevent incidents. This is aligned with our HR positions to ensure the individual knows they will be supported in doing so, anyone openly and honestly reporting fatigue in advance of an incident will be treated sensitively and without criticism. Implementation has been accompanied by a series of support workshops and drop-in sessions.

## 4 Understanding Fatigue Management Performance

- 4.1 We now need to increase our efforts to understand the performance and impact of the programme. We know that a mature safety culture requires consideration of performance both in terms of what has happened through incidents, using lagging indicators, and in understanding the use and effectiveness of controls to prevent incidents or harm occurring. We actively encourage leading indicator reporting, including incidents of fatigue so we can work to address them.

- 4.2 Our new FMP and associated tools provide us with wider set of indicators to understand fatigue risk and to focus further improvements.
- 4.3 A range of leading indicators have been identified including completion of fatigue training appropriate to colleagues' roles, incident investigations where consideration of fatigue has been included and measures relating to overtime.
- 4.4 Further performance indicators and measures we can now use due to the launch of the FMP include access to the SHE Management System Fatigue pages, completion of risk screening, delivery of improvement plans and fatigue self-reports.
- 4.5 There are plans to digitise all our fatigue outputs, enabling greater transparency, visibility, and oversight of fatigue related information for performance reporting.
- 4.6 This approach aligns with our **SHE Risk Management plan**, [presented to the Panel in November 2022](#), illustrated within Insights and Prevention Framework 'Iceberg'. Our FMP strengthens activity 'below the waterline' and our indicators help tell us how well they are working and where improvements are needed before harm occurs.

### Fatigue Management Plan and Insights and Prevention Framework



## 5 Governance and Next Steps

- 5.1 The Pan-TfL Fatigue Management Steering Group maintains oversight of the programme. With the launch of our pan-TfL FMP, the group is shifting focus from development to encouraging uptake of the FMP across the business, learning and identifying further opportunities for improvement.
- 5.2 We are now working with our Audit and Assurance teams to ensure business areas are effectively applying and complying with these requirements. Findings will help us further communicate and embed the FMP.
- 5.3 Continued learning has identified need to focus on the wellbeing of our night workers. Building on the success of the Buses fatigue innovation trial, we are assessing the viability of interventions targeted at night workers. We plan to evaluate the use of an interactive walk-in installation designed to effectively communicate evidence-based sleep health information to shift workers. Led by experts from Oxford University's leading sleep research centre, a range of interactive experiences designed to embed learning and resources are provided to support better sleep health. Information is highly accessible and actionable, with strong visuals and exercises used to overcome language and literacy barriers; material is translated into six languages.
- 5.4 We also know that we need to do more to understand the impacts of different rostering patterns on individuals, an issue which affects wider industry, not just TfL. We are currently in phase two of our innovative research trial seeking to better understand the impact of different working hours on an individuals' cognitive performance which will help inform development of further fatigue friendly rostering.

### List of appendices to this report:

Appendix 1: Summary of Pan-TfL Fatigue Management Plan Requirements

### List of Background papers:

[TfL Fatigue Management Programme paper](#), 24 February 2022:

SHE Risk Management Plan: our [SHE Risk Management plan paper, 16 November 2022](#)

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## Appendix 1 – Summary of Requirements

### 1. Leadership Commitment & Scope

Requirement 1. a	To have clearly articulated and evidenced senior <b>leadership commitment</b> for fatigue risk management.		
Purpose	To show in their business area fatigue risk is acknowledged, taken seriously and is a topic which can be freely discussed.		
Demonstration	Must	Should	Could
	Provide evidence of current leadership commitment to fatigue management	Articulate their expectations. Provide an 'open door' policy.	Demonstrate positive behaviours in line with their written commitment.

Requirement 1. b	To implement a system of controls to manage the risks from fatigue at the appropriate level ( <b>scope</b> )		
Purpose	To manage the risk from fatigue to as low as reasonably practicable (ALARP)		
Demonstration	Must	Should	Could
	Develop a local FRMP	Include Continuous Improvement (CI) processes	Invite external/3 <sup>rd</sup> Line Audit/Assurance

### 2. Change Management and Governance

Requirement 2	To meet our legal and regulatory requirements for SHE Governance and Change Assurance pertaining to fatigue management.		
Purpose	To ensure all FRMP change is managed appropriately, and all fatigue management matters are governed.		
Demonstration	Must	Should	Could
	Implement any fatigue management and or changes are done in accordance with TfL SHE Governance/Change Assurance processes	Share innovations and improvements proactively within and external to TfL	Proactively integrate fatigue management activities into all existing plans (e.g. SHE, People). Have a continuously developing Change Impact Assessment.

### 3. Culture and Reporting

Requirement 3. a	To have a <b>culture</b> where fatigue can be discussed openly and without fear of recrimination.		
Purpose	To enable better understanding of the topic of fatigue and the potential risks to health, wellbeing and the safety of ourselves and others		
Demonstration	Must	Should	Could
	Develop and foster a just and fair culture in line with TfL/ <a href="#">SHE Culture</a> programmes	Measure the 'temperature' of this culture regularly (i.e. through surveys)	Benchmark against external organisations

Requirement 3. b	Afford time and space to encourage individuals to <b>report</b> fatigue concerns and to encourage individuals to <b>report</b> when they are too fatigued to work safely		
Purpose	To better understand the risks from fatigue to increase its management		
Demonstration	Must	Should	Could
	Develop a non-punitive system to allow individuals to report fatigue	Actively encourage individuals to report fatigue Share high level data within TfL	Share all data pan-TfL, including any resultant actions

### 4. Hazard Identification and Risk Assessment

Requirement 4	To <b>identify</b> the potential <b>hazard</b> from fatigue and then <b>assess</b> those <b>risks</b>		
Purpose	To allow appropriate risk assessments to take place		
Demonstration	Must	Should	Could
	Ensure fatigue is considered in risk assessments	Ensure risk assessments are reviewed regularly and actioned	Share risk assessments pan-TfL

## 5. Contractual Arrangements with adjacent FRMP

Requirement 5	To ensure contractors and suppliers are clear as to TfL's requirements around fatigue risk management		
Purpose	To ensure no unnecessary fatigue risk is imported to or exported from TfL.		
Demonstration	Must	Should	Could
	<p>Ensure requirements for fatigue management is included in all contracts where there may be a fatigue risk for the supplier.</p> <p>Ensure compliance with the requirements are checked using a risk-based assurance approach.</p>	<p>Support suppliers that are developing their fatigue risk management arrangements by sharing TfL's FRMP and knowledge and experience of fatigue risk management.</p>	<p>Engage and collaborate with suppliers on joint fatigue risk management improvement initiatives including sharing lessons learned</p>

## 6. Objectives & Targets

Requirement 6	To track performance on fatigue mitigation activity		
Purpose	To ensure targets are met and to drive continuous improvement		
Demonstration	Must	Should	Could
	<p>Track performance around the three TfL Fatigue KPIs (see guidance section)</p>	<p>Develop their own internal measures for tracking their fatigue risk management arrangements as well as the agreed TfL Fatigue KPIs</p>	<p>Benchmark against high performing contemporary organisations</p>

## 7. Investigation

Requirement 7	To consider fatigue in investigations at all levels		
Purpose	To understand how much fatigue is a causal or contributory factor in incidents and near misses		
Demonstration	Must	Should	Could
	Provide evidence that fatigue is recorded in all investigations in accordance with the KPI	Develop more detailed KPIs around individual causal and contributory factors	Consider external benchmarking

## 8. Organisation and Personnel

Requirement 8	To articulate roles and responsibilities around the management of fatigue risk		
Purpose	To ensure accountability and responsibility is appropriately held and to inform individuals as to the requirements placed upon them		
Demonstration	Must	Should	Could
	Include all levels and executive roles	Include all staff	Consider responsibilities and accountabilities of contractors and third-party suppliers

## 9. Training

Requirement 9	To train all staff appropriately relating to fatigue		
Purpose	To enable staff to comply with their individual and organisational responsibilities		
Demonstration	Must	Should	Could
	Ensure all staff receive fatigue training appropriate to their role, function and responsibilities	Be refreshed at regular intervals  Be incorporated into any additional/wider training requirements	Consider external or wider industry training on fatigue

## 10. Emergency planning

Requirement 10	To ensure the risks from fatigue are considered in the emergency planning process		
Purpose	To ensure the risks from 'on call' working are managed appropriately		
Demonstration	Must	Should	Could
	Develop a robust 'on call' procedure if required	Review each instance this procedure is required to seek continuous improvement	Share approach to local fatigue management with key stakeholders (3rd parties that share premises, security etc. or even emergency services where appropriate)

## 11. Documentation

Requirement 11	To evidence fatigue management arrangements		
Purpose	To allow for auditing and assurance activities as well as internal continuous improvement/tracking purposes		
Demonstration	Must	Should	Could
	Demonstrate compliance with this document	Report progress against this document in SPI (or equivalent)	

## 12. Promotion

Requirement 12	To promote the topic of fatigue		
Purpose	To assist in the education of staff on the topic of fatigue		
Demonstration	Must	Should	Could
	Consider fatigue in their wider safety, Health and Wellbeing communications	Include the topic of fatigue in a variety of mediums	Embed as part of local SHE/People Plan workstreams

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**Date:** 22 February 2023

**Item:** London-Wide Ultra Low Emission Zone

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### **This paper will be considered in public**

## **1 Summary**

- 1.1 Following a public consultation in the summer of 2022, on 25 November 2022, the Mayor of London confirmed that the Ultra Low Emission Zone (ULEZ) will expand across all London boroughs on 29 August 2023, ensuring five million more Londoners can breathe clearer air. Existing grace periods will be extended, and new grace periods will be created, to help disabled people adapt to the changes. There is also a £110m scrappage scheme to help eligible Londoners scrap their highest polluting vehicles.
- 1.2 The monitoring report for one year following the inner London ULEZ expansion was published 10 February 2023. It shows this scheme has had a significant impact on the number of older, more polluting vehicles seen driving in London and in reducing the levels of harmful pollution Londoners are exposed to.

## **2 Recommendation**

- 2.1 **The Panel is asked to note the paper.**

## **3 Background**

- 3.1 Previous reports have shown that the ULEZ has already been hugely successful in central and inner London, helping to reduce roadside pollution levels by 44 per cent in central London and 20 per cent in inner London.<sup>1</sup> The expansion to outer London is forecast to reduce nitrogen oxides (NO<sub>x</sub>) emissions from cars and vans in outer London by a further 10 and seven per cent respectively, and reducing PM<sub>2.5</sub> car exhaust emissions in outer London by nearly 16 per cent, and will benefit the five million outer London residents.

## **4 Overview of London wide ULEZ**

- 4.1 The primary objective of the ULEZ is to reduce harmful emissions from road transport, particularly those with the greatest potentially adverse impacts on human health. The ULEZ acts as a disincentive to driving a non-compliant

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<sup>1</sup> GLA: Expanded Ultra Low Emission Zone Six Month Report <https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/environment-publications/expanded-ultra-low-emission-zone-six-month-report>

vehicle in the zone, therefore encouraging modal switch or the use of a compliant vehicle, which in turn reduces harmful vehicle emissions.

- 4.2 The London-wide ULEZ will operate in the same way the existing ULEZ does, 24 hours a day, every day of the year except Christmas Day. The ULEZ requires that cars, motorcycles, vans and other specialist vehicles (up to and including 3.5 tonnes) and minibuses (up to and including five tonnes) meet minimum exhaust emissions standards or pay the £12.50 ULEZ charge. More than four out of five vehicles across London already meet the emission standards, and this is even higher within the existing zone. Largely it affects petrol vehicles over 16 years old, and diesel vehicles over six years old.
- 4.3 The £10 annual fee to register a vehicle for Auto Pay has been removed from 30 January 2023. Auto Pay lets drivers who register their vehicles avoid the risk of forgetting to pay the daily ULEZ charge and incurring a penalty charge. The value of ULEZ and Congestion Charge penalty charges incurred will increase from £160 to £180 (reduced by 50 per cent if paid within 14 days).

## **5 Grace period extensions**

- 5.1 Existing ULEZ temporary exemptions (or “grace periods”) have been extended by two years, meaning that these groups will have longer to prepare for the new emissions standards. Grace periods apply to both London and non-London residents and businesses:
  - (a) ‘Disabled’ and ‘disabled passenger’ tax class vehicles grace period extended from 26 October 2025 to 24 October 2027;
  - (b) Wheelchair accessible private hire vehicles (PHVs) grace period, for TfL licenced PHVs, extended from 26 October 2025 to 24 October 2027; and
  - (c) Minibuses used for community transport grace period extended from 29 October 2023 to 26 October 2025.

## **6 New grace periods**

- 6.1 Consultation feedback and further engagement with representatives of disabled Londoners has helped TfL to shape several policy modifications to specifically address areas of high concern. These modifications include new provisions for disabled Londoners who may not be covered by the criteria for the existing grace periods, improved arrangements to support those with nominated drivers, as well as measures to help those with more costly vehicles designed for wheelchair users and other expensive adaptations for disabled people. This will mean that over a quarter of a million disabled Londoners could be eligible for the new exemption periods. The new grace periods, which launched on 30 January 2023 (and also apply to the existing inner ULEZ) are:
  - (a) Disabled benefits grace period, which is aimed primarily at recipients of the “standard rate” mobility component of Personal Independence



Payment as they could not access the disabled tax class grace period. They can now register their own or their nominated driver's vehicle to benefit from the grace period, and which will be in place until 25 October 2027; and

- (b) Wheelchair Accessible Vehicles (WAV) grace period is open to wheelchair-accessible cars and vans that do not meet ULEZ emissions standards and that have been converted by mobility experts to allow a disabled person to access the vehicle as driver or passenger. To be eligible, the WAV needs to be fitted with one of a list of certain adaptations. Successful applicants will not need to pay the ULEZ charge for their vehicle until 25 October 2027.

## **7 Scrappage scheme**

- 7.1 On 25 November 2022, when the Mayor confirmed his decision to proceed with the ULEZ expansion London-wide, he also announced this would be accompanied by a brand new £110m scrappage scheme. This launched on 30 January 2023, and is supporting Londoners on lower incomes, disabled Londoners, charities, and businesses with under 10 employees, and sole traders. Successful scrappage applicants will receive a grant to scrap their cars, motorcycles, vans or minibuses which do not meet the emissions standards. For the first time they can also retrofit certain vans and minibuses that do not meet the emissions standards.
- 7.2 Eligible applicants can get up to £2,000 for scrapping a car or up to £1,000 for scrapping a motorcycle. For WAVs there is a payment of £5,000 to scrap or retrofit to the ULEZ standard. Eligible car owners can opt to receive a smaller grant accompanied by up to two free annual bus and tram passes, which would give them a higher financial package.
- 7.3 Micro businesses (with up to 10 employees), sole traders and registered charities can get between £5,000 and £7,000 to scrap or retrofit their van or minibus, £7,500 to scrap a van and replace with an electric van, or £9,500 to scrap and a minibus and replace with an electric minibus.
- 7.4 Several organisations are providing offers and promotions to support the scrappage scheme. There are exclusive promotions for successful scrappage scheme applicants as well as offers for all Londoners to take advantage of, whether they are eligible for a grant or not. Offers include things like money off hire and/or subscription services for bikes, cargo bikes, e-bikes and e-scooters. There are also discounts on car clubs with fleets which meet the ULEZ emissions standard.

## **8 One Year Report**

- 8.1 One year following the ULEZ expansion across inner London, and over a year and a half on from the enforcement of tighter Low Emission Zone 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 in reducing

the levels of harmful pollution Londoners are exposed to. A report is being drafted to report on the key findings of these schemes (Inner London Expanded Ultra Low Emission Zone – One Year Report) which was published on 10 February 2023. In summary:

- (a) the vehicles traveling in London are increasingly cleaner. The ULEZ compliance rates have continued to increase with 94.4 per cent of vehicles driving through the existing zone on an average day meeting the ULEZ standards a year following the expansion. This is an increase from just 39 per cent when the expansion was announced in 2017;
- (b) the number of older, more polluting vehicles in the zone has continued to reduce significantly. There was an almost 60 per cent reduction in non-compliant vehicles detected in the zone since the expansion came into operation, an average reduction of 74,000 polluting vehicles per day; and
- (c) the air in the zone is substantially cleaner. Cumulatively since 2019 NO<sub>x</sub> emissions from road traffic reduced by 13,500 tonnes across London compared to what they would have been without the ULEZ, a reduction of 23 per cent, and 26 per cent lower (equivalent to 5,000 tonnes) than they would have been in the zone. PM<sub>2.5</sub> emissions have reduced by 160 tonnes across London since 2019, compared to without the ULEZ, a reduction of seven per cent.

## 9 Next steps

- 9.1 Cameras are currently being installed across outer London boroughs, with signage due to be installed soon.
- 9.2 Alongside the new grace periods, the scrappage scheme went live on 30 January 2023. Uptake of scrappage will be monitored closely to ensure it is reaching its target audience. Widespread communications and marketing is ongoing to ensure all outer London residents are aware of the scheme expansion, and know how to check whether their vehicle complies with the scheme emissions standards.

### List of appendices to this report:

Appendix 1: London Wide ULEZ Map

### List of Background Papers:

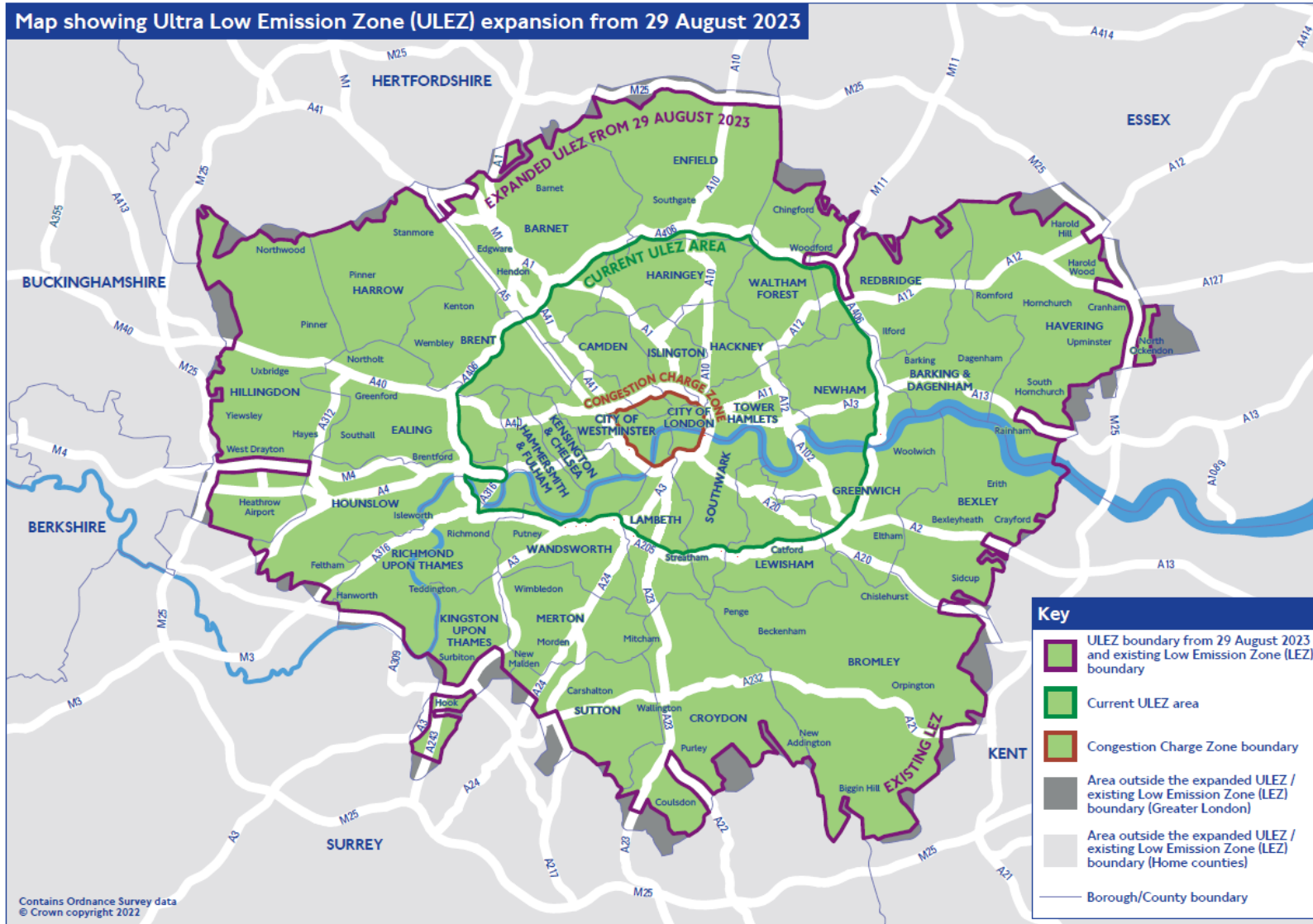
MD3060 London-wide Ultra Low Emission Zone (ULEZ) Scheme: [Link to MD3060](#)

ULEZ One Year On report: [Link to report](#)

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# Appendix 1

Map showing Ultra Low Emission Zone (ULEZ) expansion from 29 August 2023



Contains Ordnance Survey data © Crown copyright 2022



**Date:** 22 February 2023

**Item:** TfL Climate Change Adaptation Plan

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### **This paper will be considered in public**

#### **1 Summary**

- 1.1 The Corporate Environment Plan (CEP), published in 2021, set out the high-level actions the organisation is undertaking to understand, prepare and adapt for the impacts of climate change on the TfL network and estate.
- 1.2 The draft TfL Climate Change Adaptation Plan, Appendix 1, expands on the CEP, based on the actions undertaken to date and the development of our evidence base on climate impacts. The Plan sets out the actions TfL is undertaking in the short, medium and long term to prepare for the impacts of climate change and reduce the risk of climate impacts on London's transport network.

#### **2 Recommendation**

- 2.1 **The Panel is asked to note the paper.**

#### **3 Background**

- 3.1 Climate change is already affecting the UK, and extreme weather events have had a direct impact on TfL in recent months. These have included severe rainfall events in July 2021, causing flooding, disruption from high winds caused by storm events in February 2022, and extreme high temperatures in July 2022.
- 3.2 In 2022 we published TfL's most comprehensive asset climate risk assessment to date, as part of TfL's submission under the Department for the Environment, Farming and Rural Affairs Adaptation Reporting Power.

#### **4 Purpose of the Climate Change Adaptation Plan**

- 4.1 Informed by our increasing knowledge of the potential impacts of climate change on TfL's services and estate, the Climate Change Adaptation Plan sets out measures we will take across our organisation. It is intended to provide clear information to our people, customers and stakeholders on our approach to adapting to climate change and how we will work with other organisations on this issue.
- 4.2 The Climate Change Adaptation Plan is focused on six interlinked thematic areas:
  - (a) Leadership and governance;
  - (b) Organisation and people;

- (c) Risk management;
- (d) Information management;
- (e) Capital and operational delivery; and
- (f) Collaboration, communication and reporting.

## **5 Next Steps**

- 5.1 Following finalisation of the plan, the Climate Change Adaptation Plan will be published on the TfL website and shared with key stakeholders in March 2023.
- 5.2 Implementation of the actions identified in the Climate Change Adaptation Plan is underway, overseen by the Executive Committee's Sustainability Group. We will provide regular updates on the progress of the plan to the Panel and in our Safety, Health and Environment reporting.
- 5.3 Our 2023/24 Business Plan has allocated up to £2m per year of funding to direct adaptation activity. This will include acceleration of installation of Sustainable Drainage Systems across the network, identified as a key short-term action in helping to reduce flood risk across London.
- 5.4 The Level 0 Enterprise Risk 3, Environment including Climate Adaptation, was agreed by the Audit and Assurance Committee in September 2022. We will submit the full risk description and definition to the next meeting of the Panel.
- 5.5 We made our first disclosures under the Taskforce for Climate-Related Financial Disclosure (TCFD) in our 2021/22 Annual Report and Statement of Accounts. We will expand and improve our TCFD reporting as our understanding of our climate risks and mitigation actions improves.

### **List of appendices to this report:**

Appendix 1: Draft TfL Climate Change Adaptation Plan

### **List of Background Papers:**

TfL Adaptation Reporting Power (third round) submission:

<https://tfl.gov.uk/cdn/static/cms/documents/adaptation-reporting-power-3.docx>

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# Climate Change Adaptation Plan 2023 Draft



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# Foreword

Climate change is both a current and future threat to us all. It has already caused irreversible damage to our planet and way of life, and is one of the biggest challenges of our generation

As London’s integrated transport authority, we lead the development and implementation of the Mayor’s Transport Strategy, which sets the strategic direction for transport across the capital.

Our challenge is to adapt our systems to reduce the impacts of climate change, and ensure that we are resilient in the face of more extreme and frequent weather events across London.

In recent years we have experienced flooding, storms and heatwaves across the capital, causing safety incidents, widespread disruption and delays to our network, as well as financial challenges.

We now aim to accelerate our adaptation efforts by creating a comprehensive and holistic plan of action, and we are asking all parts of our business to think about ways to contribute to reducing our climate risks. Together and over time, this will enable our network to be better adapted, and more resilient, to climate change.

But we cannot do it alone. Managing our interconnected systems to build a resilient transport network will require engagement and collaboration with numerous agencies and authorities across London, both within and beyond the transport sector.

This plan highlights what we are already doing to adapt to climate change, and is our invitation to the many organisations that we work with to come together to improve our collaboration in the fight against its impacts.

Our vision is for us to keep London moving as reliably, safely and sustainably as possible given the severe risks that climate change poses to our staff, customers and operations. We can only do this by working together across our entire organisation and beyond to embed climate risk management into everything that we do. This adaptation plan is an important part of our ongoing efforts to accelerate action.


Adapting to climate change is not only about managing risk. It also comes with great opportunity to create a more attractive, nature-rich, liveable city, with strong community and new partnerships. Working together will help us to build a more sustainable transport network for all Londoners – both now and in the future.

**Lilli Matson**  
Chief Safety, Health  
and Environment Officer



‘We are asking all parts of our business to think about ways to contribute to reducing our climate risks’



A photograph of a flooded city street. In the foreground, a dark blue BMW car with license plate WT16 UXR is driving through deep water, splashing. Behind it, a black car and a white van with a red and yellow hazard pattern are also in the water. On the left, a pedestrian walkway with a blue railing and ornate street lamps is visible. In the background, there are tall buildings and trees. A signpost indicates 'Ring road and other routes' and 'Wapping (A1205)'. Traffic signs for a 20 mph limit and a blue square sign are also visible.

# Tackling the impacts of climate change on London's transport network



# Introduction

The impacts of climate change will intensify for years to come, even with reduced greenhouse gas emissions, so we need to adapt

Our role in addressing the challenges of climate change has never been clearer. We are committed to delivering a safer and more sustainable future for the communities we serve. Climate change is happening now, and we need to take urgent action.

This strategy builds on TfL's Corporate Environment Plan (2021) and aims to inform our stakeholders about how we will adapt to climate change through a coordinated and comprehensive plan.

Our vision is for a well-adapted and climate-resilient transport network that is safe, reliable and sustainable for our customers and colleagues, as well as having no negative impacts on our neighbours and wider stakeholders.

In addition to lost revenue, extreme weather events affect our network, causing increased safety issues and increased costs through our emergency response to get our operation back up and running, as well as repairing damaged assets.

Ongoing projects include working with the Environment Agency on the Thames Estuary 2100 Plan to protect our transport network from tidal flooding, now and in the future. We are also conducting research, such as the London Comprehensive Review of Flood Risk, to understand our risks and take action to protect our network.

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## £8m

was lost in revenue due to 5 million fewer passengers on the London Underground during the 2022 heatwave

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## Climate change is already affecting us:

- In July and August 2022, temperatures in the UK reached over 40 degrees Celsius for the first time on record. For TfL, this caused widespread disruption, with some services being cancelled, temporary speed restrictions, asset failures and trackside fires, causing delays and cancellations across the network
- On 12 and 25 July 2021, two severe rainfall events caused significant flooding across London, resulting in the full or partial closure of 30 stations across the whole TfL network. The closures and delays to the London Underground network caused by the 12 July flood event alone resulted in approximately 197,128 lost customer hours, equating to a financial loss of almost £2m
- In February 2022, the UK experienced three named storms (Dudley, Eunice and Franklin) within a one-week period. These storms resulted in widespread disruption for us, with trees and debris blown onto our networks and high winds causing communication issues
- In the UK sea levels have risen 16.5cm since 1990 and will rise by a further 50cm-100cm in the Thames Estuary by 2100. Flood plains in London are currently home to 1.42 million people, as well as £321bn-worth of homes. Our transport network operates throughout London's flood plains and we rely on protection from the Thames Barrier and other tidal and river flooding defences





The impacts of climate change affect public health as well as causing significant financial costs.

More than  
**20,000**

people died across western Europe in the summer 2022 heatwave

More than  
**200**

people died across Europe in the July 2021 floods, which caused \$46bn-worth of damage

**3 people**

died in August 2020 when heavy rain contributed to an embankment failure and debris on the track near Carmont in Scotland, causing a train to derail

**1.42 million**

people currently live on London's flood plains

**£2m**

of income was lost due to flooding on the London Underground in July 2021

The TfL Adaptation Plan identifies the key actions and improvement areas that will:

- Help our transport network to be better adapted and more resilient to climate change
- Support our work to reach net zero
- Improve air quality
- Maintain our safety record
- Support city greening, enhance Londoners' health and wellbeing and provide areas for wildlife



# Planning for our future climate

Predicting the exact climate conditions we will experience in the future is a challenging task

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We are using Met Office emissions scenarios to inform our adaptation planning. Regardless of the forecast scenario used, Met Office projections are that we will experience hotter, drier summers and warmer, wetter winters, with more frequent and more intense severe weather events.

Due to the national importance of our infrastructure, we are using a medium-high emissions scenario (RCP6.5 90th percentile) that is consistent with a 2-3 degrees Celsius increase in average global temperatures as a base to assess risk.

We will stress-test long lifespan projects and assets using a high emissions scenario (RCP8.5 90th percentile) that is consistent with a 4-5 degree Celsius increase.

**What does a changing climate mean for TfL?**

We have completed our most comprehensive climate risk assessment to date, which identified the risks to people and assets in 2022, 2050 and 2080.

The results from the climate risk assessment have given us a baseline for our adaptation plan. The results showed that all asset categories are, or will be, at risk from climate change by 2050.

The graphs on page 8 show that, in the absence of adaptation measures, TfL's climate risk will increase over time.

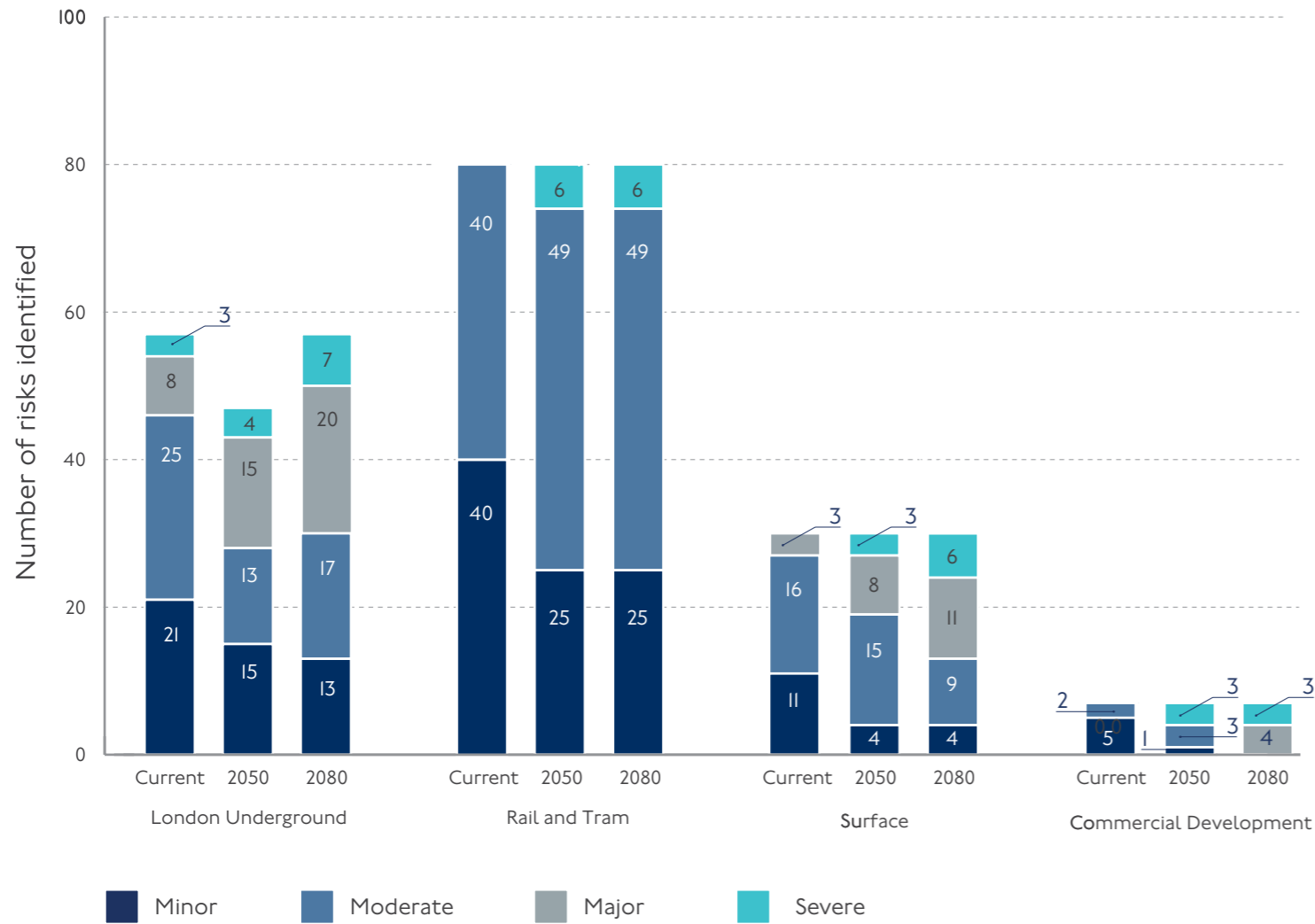
We identified 333 climate risks within the assessment. Precipitation, including both too much and too little rain, is the climate hazard with the greatest number of identified risks. Temperatures, both high and low, are the climate hazards with the next greatest number of identified risks.

Some of our most at-risk assets are:

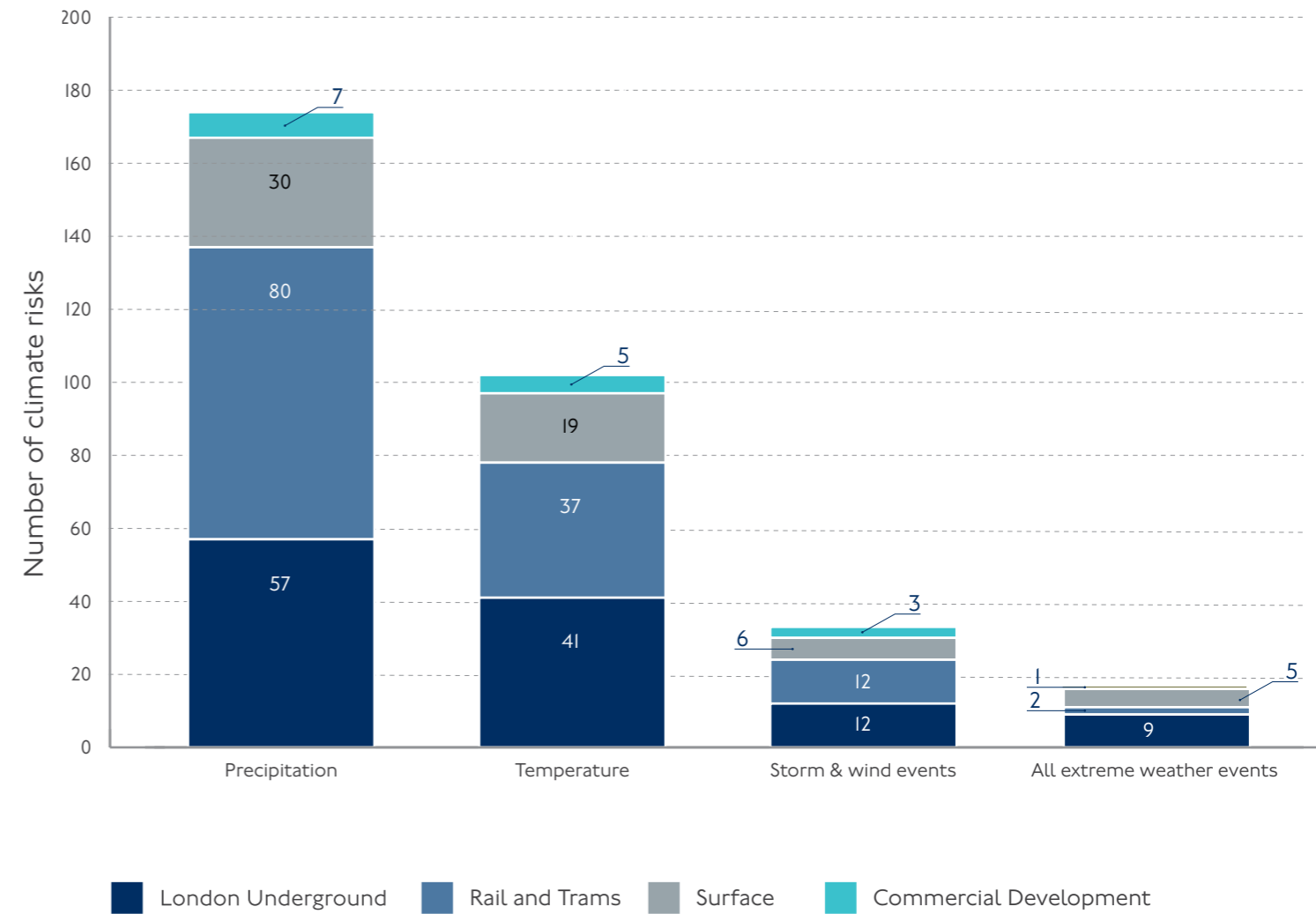
- Bridges and viaducts
- Drainage – track, civil infrastructure, buildings and highways
- Rolling stock
- Signalling systems

We are already completing work with asset strategy and engineering teams to identify actions that will reduce the risk from climate hazards for these assets.

The change in severity of climate risks over time across different areas of the business in the absence of adaptation measures



The number of climate risks identified for different areas of the business



There are five risks to people scored as major or above today. The majority (four out of five) are linked to extreme high temperatures. This increases to 11 risks in the 2050s and 13 in the 2080s.

Understanding the risks to our assets and people has provided the baseline for our adaptation plan.



# Our role

## At TfL, we lead the development and implementation of the Mayor's Transport Strategy

The Mayor's Transport Strategy sets the strategic direction for transport across London and is closely linked with other mayoral strategies, such as the London Environment Strategy and London Plan.

Our transport network is integral to London and is woven throughout the city. It also connects with other transport networks, such as borough roads and Network Rail infrastructure.

We take a leading role, but we cannot tackle climate change in isolation. We are collaborating with major stakeholders across London to develop adaptation measures.

This includes urgent actions that need to be taken now, as well as longer-term planning. We see adaptation as a vital activity that we need to do to protect London as a whole.

Adaptation can also have additional benefits. For example, creating and enhancing green infrastructure to reduce flood risk and provide shade and shelter increases the attractiveness of neighbourhoods, can improve air quality, supports biodiversity and contributes to the mental health of Londoners.

Our aim is for 80 per cent of trips to be via walking, cycling or public transport by 2041. Over time, the number of Londoners using our network will increase as the population grows and as more people walk, cycle or use public transport.

To help meet this demand and our air quality and carbon reduction goals, it is vital that our transport networks are a safe and reliable alternative to private cars by being resilient and adapted to climate change.

### Mayor's Transport Strategy

**MTS Policy 9:** The Mayor, through TfL and the boroughs, and working with stakeholders, will seek to ensure that London's transport is resilient to the impacts of severe weather and climate change, so that services can respond effectively to extreme weather events, while continuing to operate safely, reliably and with a good level of passenger comfort

**80%**

of trips should be via walking, cycling or public transport by 2041





# What is climate change adaptation?

## Adapting to climate change will make our network and services more reliable, attractive and safe

Adaptation is ‘the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities’<sup>1</sup>

Through our adaptation journey, we will make our network more resilient to future climate conditions. For example, we will embed climate change modelling into design specifications for assets, meaning they will be capable of operating with climate challenges and stressors.

Adaptation and resilience are both important to managing climate change.

Adaptation decision-making is complex and our role in tackling climate change will be iterative. We will monitor and adapt our approach as:

- The field of adaptation knowledge matures
- We expand our evidence base
- We make progress with the work that needs to be done

Our approach is to embed adaptation across TfL: updating existing processes and standards to include climate risk and adaptation, as well as upskilling our colleagues on their responsibilities.

We are also prioritising data collection to improve our understanding of climate risks and their implications for our business and for Londoners.

Adaptation is vital, but we also currently rely on resilience to keep our services running after extreme weather events. Using our adverse weather plans and emergency procedures, we have been successful in restoring our network’s capability quickly after extreme weather events.

We will continue to focus on building our resilience through our emergency response teams, while working on longer-term adaptation measures. However, as severe weather becomes more frequent over time due to climate change, the cost and time spent on resilience will increase.



### TfL approaches to resilience and adaptation

Item	Approach	Benefits	Examples for TfL
<b>Resilience</b>	Using weather forecasts, industry best practice and previous experience to prepare for extreme weather events, dealing with climate impacts as they are happening	<ul style="list-style-type: none"> <li>• Inform operational teams of extreme weather, allowing time to enact adverse weather plans</li> <li>• Rapid recovery after extreme weather events</li> <li>• Improve customer and staff safety</li> </ul>	<ul style="list-style-type: none"> <li>• Reliable and timely weather forecasting and warning systems</li> <li>• Emergency response teams to address weather-related impacts</li> <li>• Timely communication to the public and staff</li> <li>• Sufficient supplies, materials and resources to respond to the effects of extreme events</li> <li>• Pumps to remove floodwater</li> </ul>
<b>Adaptation</b>	Preparing, planning and investing for future climate impacts using long-term weather projections and scenarios	<ul style="list-style-type: none"> <li>• Better design and planning for assets, as climate risks are included in standards and processes, resulting in: <ul style="list-style-type: none"> <li>◊ A safer and more reliable network during and after extreme weather events</li> <li>◊ Fewer catastrophic costs caused by extreme weather</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Climate projections data that the rail sector can effectively use to manage risk</li> <li>• Reviewing standards and specifications to incorporate appropriate requirements</li> <li>• Embedding adaptation measures, such as green infrastructure and flood barriers, into renewal and enhancement projects and programmes</li> <li>• Asset and business strategies incorporating adaptation requirements</li> </ul>

\* <sup>1</sup> IPCC (2021) Sixth Assessment Report Annex VII: Glossary





# Providing a service for all

Keeping our staff and customers safe while providing sustainable, reliable and attractive services is our priority

All Londoners should have access to safe, reliable and sustainable public transport. We understand that different groups prefer certain modes over others, and so it is important we provide a good service on all our transport modes.

### Safety and reliability

Safety is our key priority. Climate change makes it more challenging to operate our infrastructure and services safely. We will not compromise on safety, which means during extreme weather events we may not be able to run maximum service levels, or we may even have to close some services, roads and stations.

As well as extreme weather events, climate change means that we will experience increased levels of asset degradation over time. These will require additional investment to avoid or reduce safety and reliability issues.

During severe weather events we aim to operate services when it is safe to do. If service levels need to change, informing customers as far in advance as possible is vital to ensuring safety for our customers and staff.

### A joined-up approach

Disruption on our network can have knock-on effects for other transport providers within and beyond London, and vice versa.

Our operations do not exist in isolation. For example, many of our services operate on others' networks, including London Overground services on Network Rail infrastructure, and buses on borough roads. In addition, other operators run services on our assets.

Damage to these networks can have impacts on our services, such as overcrowding on buses and congestion on the road network. We are also reliant on infrastructure beyond the transport sector, such as water supply, power and communications.

We recognise that we cannot operate a resilient transport network by ourselves. Managing our interconnected systems in the face of climate change will require engagement, support and collaboration with a wide range of organisations.

We are already making good progress on this collaboration effort through, for example, the national Infrastructure Operators Adaptation Forum, the pan-London Surface Water Flooding Strategic Group and the London-focused Transport Adaptation Steering Group.

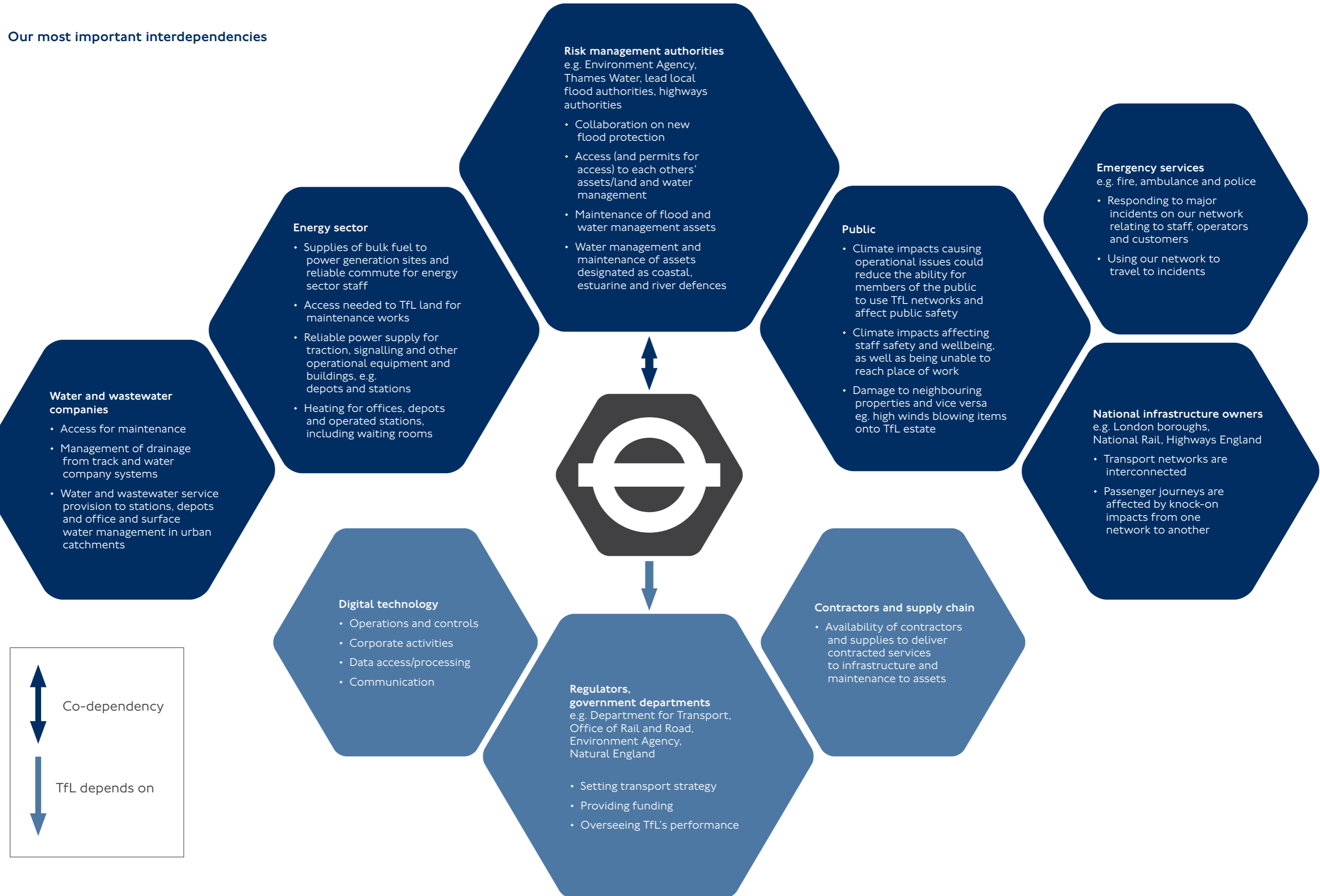
**Managing our interconnected systems requires collaboration with other organisations**

Adverse weather can cause disruption across the network




Our most important interdependencies

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Adapting to changing  
climate conditions  
and providing safe,  
reliable services  
across London



# Our action plan

Our environmental sustainability is inextricably linked to our financial and social sustainability

Our vision is for a well-adapted and climate-resilient transport network that is safe and reliable for our customers and colleagues, as well as having no negative impacts on our neighbours and wider stakeholders.

A key step to achieving this is to better understand the key risks from climate change on our assets, business, people and operations.

Addressing the actions within the adaptation plan will be an iterative process, as we gather more data and expertise, and we will continually review our approach to ensure that we are making the best decisions.



## Our action plan is focused on six interlinked thematic areas:

- Leadership and governance
- Organisation and people
- Risk management
- Information management
- Capital and operational delivery
- Collaboration, communication and reporting

## The plan has three interlinked aims:

- To deliver an efficient and reliable transport network that provides an attractive alternative to car use, while playing our part in adapting London to climate impacts
- To reduce the financial impact of climate change and make the most of any financial opportunities arising from climate change and/or climate change adaptation
- To protect our staff, contractors, and customers

## What we are already doing

We are committed to adapting our network to climate change.

We have:

- Completed our most comprehensive and detailed climate risk assessment to date, identifying the key risks to people and assets
- Set requirements to consider climate change in new transport policies and projects, including all papers to our Programme and Investment Committee
- Established a wide-ranging research programme to understand climate risks, which we use to inform our adaptation activity
- Collaborated with a wide range of internal and external stakeholders to share knowledge and push for change
- Increased funding for sustainable drainage systems (SuDS) in four major schemes on our network
- Trained over 450 colleagues (as of January 2023) on carbon literacy, which includes an introduction to climate change adaptation

# Leadership and governance

Effective climate risk management requires TfL to have a clear direction, strong leadership and good control mechanisms in place. To do this, we will fully integrate climate risk and adaptation into our governance, build adaptation into day-to-day activity and create a culture where all teams understand and take ownership of their contribution to protecting TfL from climate risks.

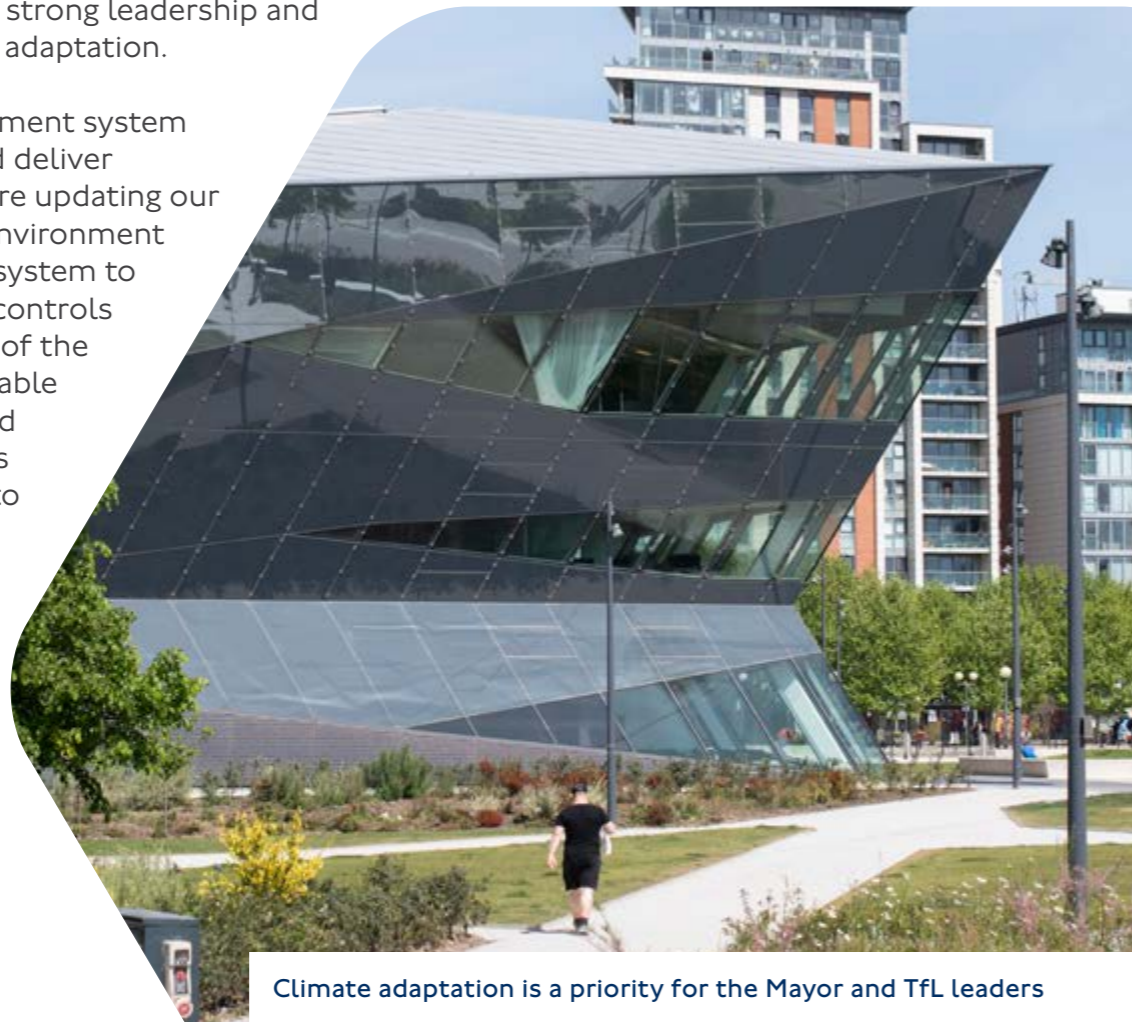
Working collaboratively across teams is crucial to ensure that we avoid duplication and fill any gaps. We currently manage climate risk and adaptation through our Executive Committee Sustainability Group. This group provides strong leadership and a clear direction for adaptation.

We use our management system to mitigate risks and deliver opportunities. We are updating our safety, health and environment (SHE) management system to include adaptation controls in all relevant parts of the system. This will enable teams to understand their responsibilities and commitments to managing climate risk.

Asset management is a core component in adaptation. Through our strategic asset management, we will continue to focus on improving

our understanding of current and future climate risks to our people, network, assets and components.

Adaptation work will require investment. We will build long-term investment plans that consider adaptation as important as (and closely linked with) safety and reliability. We will continue to seek third-party funding opportunities for adaptation and will set up specific budgets that will fund adaptation measures. We are also working with our insurers to strengthen our understanding of, and protection against, climate change.



Climate adaptation is a priority for the Mayor and TfL leaders

## Short term (by the end of 2023)

- Through the Executive Committee Sustainability Group, review adaptation roles and responsibilities for all business areas, gaining ownership from senior leaders
- Clearly define how adaptation should be integrated into business planning and tracked
- Work with insurers to better understand our climate risks
- Update the SHE management system to include climate risk and adaptation more comprehensively
- Create a budget specifically for adaptation measures, e.g. SuDS installation

## Medium term (by the end of 2026)

- Integrate adaptation into business planning and create a programme to continually review processes
- Update all TfL-wide management systems to better include climate risk and adaptation and link to the SHE management system
- Work with insurers to improve our access to insurance products that will best protect us from the financial impacts of climate change
- Build a framework to capture all external funding opportunities for adaptation measures, and have success completing adaptation schemes using funding

## Long term (by the end of 2030)

- Develop quantitative data that will enable decision-making for investment in adaptation

## Outcomes

### As a result of these actions, we will:

- Have clear leadership and oversight on climate change adaptation and investment decision-making
- Have consistent and joined-up processes for managing climate risks across TfL
- Understand our risks and liabilities from climate change and have the most suitable insurance products, to protect our business



# Organisation and people

We need our colleagues to have the right skills and knowledge for adaptation. Alongside this, colleagues need to understand the importance and criticality of urgent action.

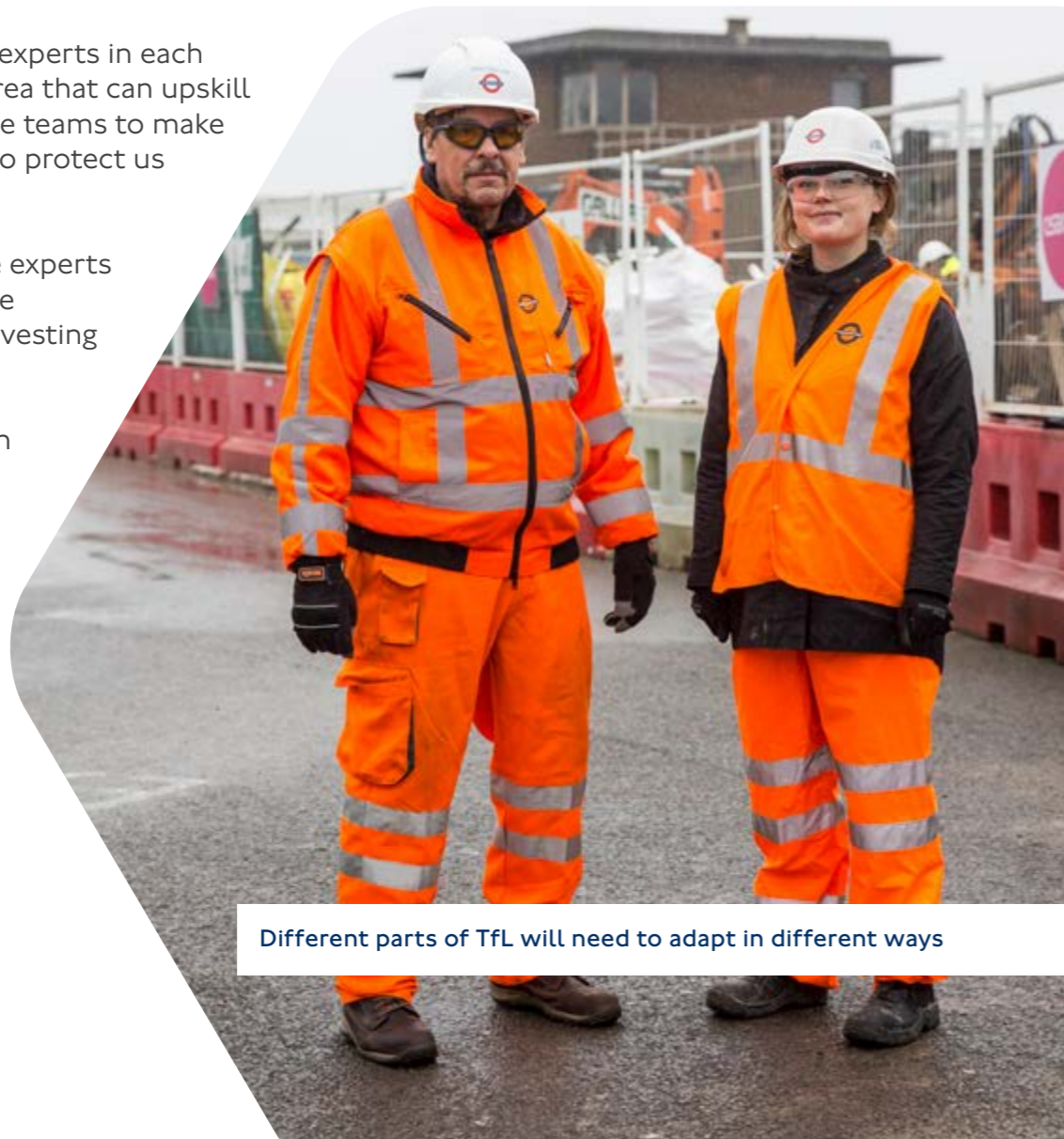
By understanding the knowledge and skill requirements for each business area, we will provide comprehensive and specific adaptation training for colleagues in departments that require it. We will also provide training materials so that all colleagues have a baseline knowledge of climate risks and adaptation.

Our plan is to have experts in each relevant business area that can upskill colleagues and guide teams to make the best decisions to protect us from climate risk.

We also want those experts to be able to explore opportunities for investing in adaptation, such as installing green infrastructure which will improve the attractiveness of our city, as well as having benefits for residents and biodiversity.

We will look at the staff and financial resources needed to do this.

There is a limited number of transport sector professionals with adaptation knowledge. We will work with our key stakeholders within the transport sector and beyond to address this issue, with a view to ensuring future professionals have specific adaptation training. For example, the skills shortage has been identified as a key area of work as part of the rail industry's whole-industry strategic plan.



Different parts of TfL will need to adapt in different ways

## Short term (by the end of 2023)

Implement an internal communications and education programme to inform colleagues of how climate change is affecting us and our approach to reducing risks

Develop a pan-TfL adaptation forum to encourage knowledge-sharing and the development of solutions across departments

Review and formalise the pan-TfL adaptation working group, which works to embed climate-change adaptation into TfL's processes and decision-making

Identify business areas that require resource for focused adaptation work

## Medium term (by the end of 2026)

Develop and deliver targeted, comprehensive and specific adaptation training for teams that require it

Develop and make available online and/or in person training to educate colleagues on baseline understanding of climate change and adaptation

Engage with the development of the rail sector's adaptation maturity matrix and assess its potential for use in TfL

Fill roles in departments that require resource for focused adaptation work

## Outcomes

### As a result of these actions, we will:

Ensure our people have the skills and knowledge to deliver adaptation throughout TfL

Ensure we have the right resources in the right places to integrate adaptation into our work

Have an established communications channel, whereby any colleague interested in climate updates can access information



# Risk management

All risks in TfL, including climate risks, are managed using the enterprise risk management (ERM) framework. This provides a consistent approach and holistic view of risks across the organisation. Adaptation is assessed at an enterprise, strategic and tactical level. We have updated the ERM to include specific actions needed to control climate risk.

Risk modelling is another tool we can use. This involves quantifying the probability of a risk event occurring, and its potential severity. It provides much more detailed information about specific risks at specific locations and areas.

Two challenges for us are:

- Identifying and gathering the right data, such as asset exposure, vulnerability, and condition
- Using the models to make meaningful decisions by incorporating them into existing processes

As well as using data from our information systems, we will explore how we can use third-party weather forecast data from MetDesk and information from our internal weather stations.

The weather stations strategically placed on our network for resilience purposes give us specific insight into the performance of our assets under different weather stressors. We will look at how this and MetDesk data could be combined with our asset data for risk modelling purposes.



A climate-resilient network is safe and reliable for everyone

## Short term (by the end of 2023)

Develop the ERM to fully include climate risk and adaptation measures

Outline our approach for risk modelling, identifying actions that are required and data gaps that need to be filled

## Medium term (by the end of 2026)

Include climate change in the risk profiles for our assets

Identify and develop risk models that will be most informative in helping reduce climate risks

Agree a process with external stakeholders on how we will share data and work together to create pan-London risk models

Investigate how we can use weather stations and other third-party data to inform research and risk models

## Long term (by the end of 2030)

Obtain and continually improve the data we require for risk modelling, for example through amending existing asset condition reporting and performance reporting systems.

## Outcomes

### As a result of these impacts, we will:

Have an integrated approach to managing our climate risks across TfL

Ensure we understand our current and future risks in detail through in-depth quantified risk modelling

Improve performance against risks



# Information management

Developing a comprehensive and accurate evidence base is fundamental for making decisions on climate change adaptation. We currently gather information through our research programme and our internal systems to better understand the impacts of extreme weather on our people, assets and services.

We plan to improve the information collected in our systems, to enable us to use reliable and relevant quantitative data to inform our decision-making.

We launched our strategic adaptation research programme in 2018 and we are currently working with universities and organisations to improve our knowledge of climate risks and opportunities on our network. Over time, as our baseline understanding improves, the research programme will evolve so the insight we gain can increasingly be used to drive specific action.

We will combine our evidence base with Met Office climate projections to understand how these impacts are likely to increase in magnitude and frequency with climate change. We will use this information to identify and target cost-effective adaptation measures.

Gathering rapid, accurate, reliable, comprehensive and centralised data through our information systems will help us with business planning and making investment decisions.

Across TfL we currently use multiple systems to store information. In order to make the most informed decisions for adaptation, it is vital that we link systems across our organisation, so that we can access information in a centralised way.

We have two key distinct information systems that we need for adaptation purposes:

- Performance reporting system information is required to gather data on weather-related closures and delays. We can use information such as staff time, repair costs and service disruptions to better understand the financial costs of extreme weather events
- Asset management system information is required to inform adaptation investment decisions. For example, by linking asset condition data to weather data, we can better understand degradation rates and vulnerabilities that need addressing

We will improve our data to enable us to improve performance monitoring. Data will be used to set appropriate adaptation-related measures and objectives to monitor performance for relevant departments. Our long-term aim is to monitor climate change adaptation through the TfL scorecard.





### Adaptation pathways

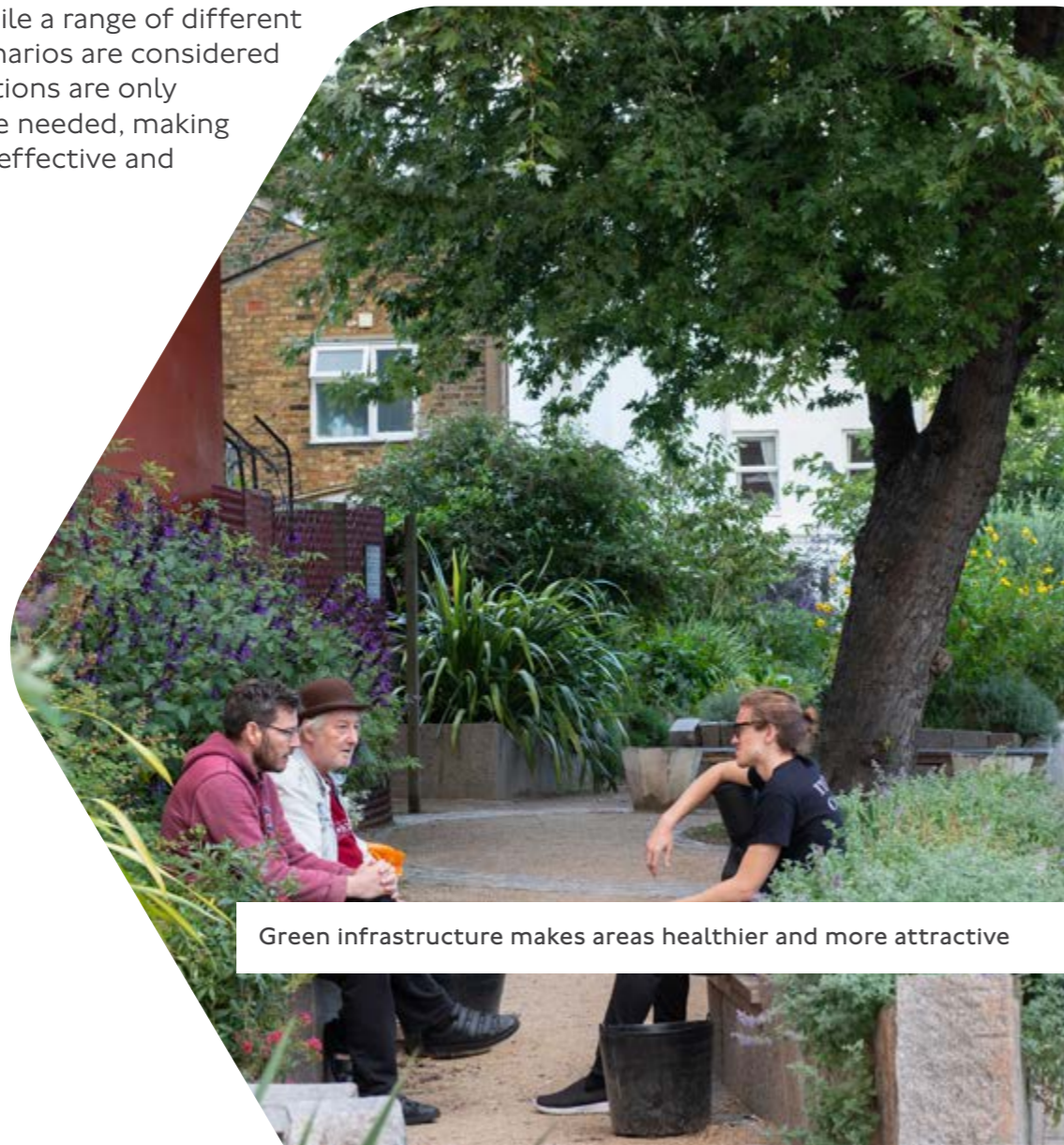
Adaptation pathways are a way of developing a long-term climate adaptation plan for a place, often looking towards the end of the century (2100) or beyond. They set out a range of actions that can be taken to better anticipate and respond to climate change.

These actions are linked to specific thresholds or 'tipping points', where a change to our understanding of the impacts of climate change, the local environment or other socio-economic conditions triggers particular actions.

This means that while a range of different climate change scenarios are considered and planned for, actions are only taken when they are needed, making this approach cost-effective and resource-efficient.

Adaptation pathway plans need to be regularly monitored and evaluated so that they can remain agile to managing future risks over time.

The first step for us is to develop an adaptation pathways methodology which will result in pathways that are specific enough for implementation to be practicable, while also being broad enough for use across TfL. The development of this methodology will take into account the availability of TfL's current and likely future data to set thresholds.



Green infrastructure makes areas healthier and more attractive

## Short term (by the end of 2023)

Understand gaps in our evidence base and use the strategic adaptation research programme to identify and prioritise the most effective areas for further research

Develop a process to ensure that we embed the use of research findings to make the most cost-effective business decisions

## Medium term (by the end of 2026)

Review information gathered in TfL's performance reporting systems to determine if it is sufficient for adaptation decision-making. Determine the potential for amending systems cost-effectively to support adaptation if required

Review the opportunity to link information systems for improved understanding, such as performance reporting systems with operational weather forecasting tools

Launch a pilot project to explore the feasibility of identifying weather (and consequently climate change) as a contributing factor in asset degradation

Integrate weather information data into asset-condition reporting where possible

Set operational targets to monitor adaptation progress

Develop a methodology for effective adaptation pathways

Improve data to allow us to make evidence-based investment decisions on climate risk

## Long term (by the end of 2030)

Develop a quantitative data-driven approach to include an adaptation-related metric in the TfL Scorecard

Develop and implement adaptation pathways

## Outcomes

### As a result of these actions, we will:

Have a sound evidence base to make planning and investment decisions

Understand climate risks across the network and be able to use information to improve performance



# Capital and operational delivery

Adaptation must be considered early in, and throughout, the project development process. This is because many of our assets have long lifespans that will need to be resilient to future weather.

We are focusing on this by:

- Using our climate risk assessment to provide detail on the type and location of projects that need to prioritise considerations of climate risk and adaptation
- Setting out which climate projection scenarios are appropriate to inform the design of the project
- Updating our standards to make sustainable drainage systems (SuDS) the default in projects

We are transitioning our procurement processes to a new system and have worked to include environmental considerations into the whole procurement lifecycle. As part of this we will provide the appropriate Met Office climate scenarios to help our suppliers design assets fit for future climate challenges.

We will also work with our suppliers to understand their risks in relation to climate change, to help protect our supply of critical assets.

Green infrastructure (GI) includes parks, green spaces, gardens, woodlands, rivers and wetlands, as well as urban greening features such as rain gardens, street trees and green roofs.

GI is a crucial climate-change adaptation measure. For example, trees help provide shade and cooling during hot weather and vegetation reduces the amount and speed of surface water run-off before it reaches our over-burdened drainage systems. As part of our projects, we are actively seeking new locations on our network for planting trees and installing other forms of green infrastructure.

The Mayor's Transport Strategy includes a target to deliver 50,000 square metres of catchment draining into highways SuDS features every year. TfL owns and manages London's strategic road network, which represents approximately five per cent of London's roads by length. We have now committed to delivering 5,000 square metres as part of this target.

Given the scale of the climate crisis and the need to install SuDS across the whole city, SuDS should be considered as a default design feature for any project that involves excavation or structural changes to a roof.

Through our project management system (Pathway), TfL designers will be required to fully justify any instances where SuDS have not been included.

We have robust resilience processes in place to provide a consistent and structured approach to the management of extreme weather events. This involves using forecasting tools, risk assessment and adverse weather plans.

**5,000 square metres of catchment draining into highways SuDS to be added every year**

Sustainable drainage systems are essential to climate adaptation





Coordinated by our control centre, we work collaboratively with a range of stakeholders across TfL, to manage risks, update operational procedures, inform customers of changes during periods of weather disruption, and repair damage quickly after extreme weather has passed, to provide the best service possible to customers.

We use our resilience processes to provide a consistent and structured approach to the management of extreme weather impacts. This involves using twice-daily weather reports and forecasts up to five days in advance of weather incidents that could affect our transport network.

Our resilience is organised through our Network Management Control Centre, which communicates with operational departments to complete risk assessments and weather plans, as well as highlighting risks and identifying mitigations.



We aim to repair damage quickly after extreme weather events

## Short term (by the end of 2023)

- Develop high-level principles for trackside green infrastructure management in collaboration with the Rail Safety and Standards Board (RSSB) and other rail sector stakeholders
- Deliver 5,000 square metres of SuDS each year
- Ensure SuDS are a default component of project design
- Ensure all TfL capital investment projects seeking financial authority demonstrate consideration of climate change and adaptation measures
- Input flood mapping into options selection

## Outcomes

### As a result of these actions, we will:

- Have a more resilient infrastructure, with adaptation measures installed as part of project design
- Increased installation of SuDS, reducing the risk of flooding across London
- Increase safety for our customers and our people

## Medium term (by end of 2026)

Ensure adaptation is fully embedded across our project management processes, including:

- Ensuring climate risk and climate projection scenarios are included across procurement processes
- Ensuring climate projection scenarios and adaptation are included in contract clauses and works information

Review options for the development of a non-highways SuDS target

Actively engage in the pan-London initiative to complete the monitoring phase of the London strategic SuDS pilot study to demonstrate the benefits of highways-based SuDS

Actively engage in the pan-London initiative to expand the London strategic SuDS pilot study's hydraulic modelling to show optimal locations for SuDS across the city

# Collaboration, communication and reporting

Climate hazards do not respect organisational boundaries and our networks do not operate in isolation from each other, third parties' infrastructure, or the public. Consequently we need to actively engage with a wide range of stakeholders. Collaboration is an ongoing process, as new knowledge and initiatives are being continually developed.

We communicate with customers in advance of extreme weather, where sufficient notice of the event exists. During the weather event, live channels, such as TfL Go, are used to keep customers informed about specific impacts on journeys. As forecasts and technology improve, we will explore whether we can provide more detailed information further in advance of, and during, weather events.

From 2023, it will be a mandatory requirement for TfL to report on Taskforce for Financial-related Climate Disclosures (TCFD). This will showcase our financial risks and opportunities in relation to physical

climate hazards. We provided a high-level voluntary overview of TCFD in our 2021/22 annual report. We will also continue to provide submissions under Defra's Adaptation Reporting Power, collaborating with transport sector stakeholders to ensure a consistent approach to reporting.



## Short term (by the end of 2023)

Improve our customer communications before, during and after severe weather events

Expand TfL's collaboration work with external stakeholders, including contributing to the third National Adaptation Programme

Collaborate with key stakeholders regarding surface-water flood risk, through the pan-London Surface Water Strategic Forum and the development of a pan-London vision and strategy for surface-water flood risk management

Collaborate across industry, with the Government, regulators and other stakeholder and infrastructure operators to develop joint plans and understand and manage interdependencies

Develop a framework to provide detailed climate-related reporting following the TCFD framework

Develop processes to gather data and information as part of mandatory climate change reporting

Develop a page on the TfL website on TfL's climate risks and the work that we are doing on climate change adaptation

## Medium term (by the end of 2026)

Work with the Transport Research and Innovation Board and key transport sector stakeholders to develop a transport sector adaptation design playbook

## Outcomes

**As a result of these actions, we will:**

Strengthen partnerships with stakeholders and implement joint actions to manage climate impacts

Communicate our progress on adapting to climate change to our customers and stakeholders



# Delivering the plan

## The transition to a climate-adapted London has implications for every aspect of society

We are committed to building a well-adapted transport network that is resilient to climate change. The way forward requires a coordinated effort across TfL, as well as working with external stakeholders.

We also require both public funding and private finance to improve our understanding of climate change and to invest in adaptation measures.

Transparency on our adaptation journey is vital to us. You can access TfL's adaptation

reporting power submission and TCFD disclosure through our website. We will also launch a page on our website where you can access our latest information on climate change and adaptation.

We have a clear direction for our adaptation work. Through TfL's Executive Committee Sustainability Group, the actions within our Adaptation Plan will be monitored and we will regularly report progress to the TfL Safety, Sustainability and Human Resources Panel and the TfL Board.

### TfL is a regular and contributing member of several key knowledge-sharing groups:

- The Pan-London Surface Water Flooding Strategic Group and associated Officers Group, as well as the Severe Weather and Natural Hazards Working Group
- The Rail Safety and Standards Board, Sustainable Rail Strategy Executive Committee and Leadership Group and Climate Change Adaptation Working Group
- The Transport Infrastructure Efficiency Strategy
- The Infrastructure Operators Adaptation Forum
- The London Climate Change Partnership Steering Group, which also provides the secretariat for the Transport Adaptation Steering Group
- The UITP Sustainable Development Committee
- The Community of Metros and International Suburban Rail Benchmarking Group, facilitated by Imperial College London's Transport Strategy Centre
- The London Technical Advisers Group and its sub-groups for Drainage Engineers, Highway Engineers, London Bridge Engineers and Lighting Engineers
- The Construction Industry Research and Information Association



Adapting to climate change creates a greener environment enjoyed by all



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## About us

Part of the Greater London Authority family led by Mayor of London Sadiq Khan, we are the integrated transport authority responsible for delivering the Mayor's aims for transport. We have a key role in shaping what life is like in London, helping to realise the Mayor's vision for a 'City for All Londoners' and helping to create a safer, fairer, greener, healthier and more prosperous city. The Mayor's Transport Strategy sets a target for 80 per cent of all journeys to be made by walking, cycling or using public transport by 2041. To make this a reality, we prioritise sustainability, health and the quality of people's experience in everything we do.

We run most of London's public transport services, including the London Underground, London Buses, the DLR, London Overground, Elizabeth line, London Trams, London River Services, London Dial-a-Ride, Victoria Coach Station, Santander Cycles and the IFS Cloud Cable Car. The experience, reliability and accessibility of these services is fundamental to Londoners' quality of life.

We manage the city's red route strategic roads and, through collaboration with the London boroughs, we are helping to shape the character of all London's streets. These are the places where Londoners travel, work, shop and socialise. Making them places for people to walk, cycle and spend time will reduce car dependency, improve air quality, revitalise town centres, boost businesses and connect communities. As part of this, our expanded Ultra Low Emission Zone and fleets of increasingly environmentally friendly and zero-emission buses are helping to tackle London's toxic air.

During the pandemic, we took a huge range of measures to ensure people were safe while travelling. This included extensive cleaning regimes across the public transport network and working with London's boroughs to introduce the Streetspace for London programme, which provided wider pavements and cycle lanes for people to walk and cycle safely and maintain social distancing. London's recovery is vital to the UK's recovery as life returns to normal. We want to ensure London avoids a car-led recovery and we continue to reassure people the capital and our transport network is safe and ready for them.

We have constructed many of London's most significant infrastructure projects in recent years, using transport to unlock much needed economic growth. This includes major projects like the extension of the Northern line to Battersea Power Station and Nine Elms in south London, as well as our work at Barking Riverside and the Bank station upgrade.

Working with the Government, we opened the Elizabeth line in time for Queen Elizabeth II's Jubilee. This transformational new railway adds 10 per cent to central London's rail capacity and supports the delivery of high-density, mixed-use developments, which are planned around active and sustainable travel to ensure London's growth is good growth. We also use our own land to provide thousands of new affordable homes and our own supply chain creates tens of thousands of jobs and apprenticeships across the country.

We are committed to being an employer that is fully representative of the community we serve, where everyone can realise their potential. Our aim is to be a fully inclusive employer, valuing and celebrating the diversity of our workforce to improve services for all Londoners.

We are constantly working to improve the city for everyone. This means using information, data and technology to make services intuitive and easy to use and doing all we can to make streets and transport services accessible to all. We reinvest every penny of our income to continually improve transport networks for the people who use them every day. None of this would be possible without the support of boroughs, communities and other partners who we work with to improve our services. By working together, we can create a better city as London's recovery from the pandemic continues.

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**Safety, Sustainability and Human Resources Panel**



**Date: 22 February 2023**

**Item: Human Resources Quarterly Report**

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**This paper will be considered in public**

## **1 Summary**

- 1.1 The Quarterly Report is a standing item on the agenda for this Panel. It provides an update on key activities across the Chief People Office for the period November 2022 to January 2023.

## **2 Recommendation**

- 2.1 **The Panel is asked to note the report.**

### **List of appendices to this report:**

Appendix 1: HR Quarterly Report

### **List of Background Papers:**

None

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# HR Quarterly Report November 2022 to January 2023

22 February 2023



# HR Quarterly Report

## November 2022 – January 2022

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### **Introduction**

This updated Human Resources (HR) Quarterly Report provides an overview of work taking place to make Transport for London (TfL) a great place to work, for everyone.

The new format will provide an update on our longer-term approach to people activity, and how we will ensure that TfL is able to attract and retain talent, while also improving the wellbeing of our colleagues. This will help us control our colleague Enterprise Risk, which will also be discussed as a separate item on the agenda for this meeting of the Panel.

The new format of this report will provide an update on:

1. Our emerging Colleague Strategy
  - a. Creating a culture of inclusion;
  - b. Supporting everyone to achieve their work ambitions; and
  - c. An attractive and fair employee offer; and
2. Our TfL Programme

# Our emerging Colleague Strategy

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Our emerging Colleague Strategy will set out our goals between now and 2030, recognising where we are now and what we will do to make this a great place to work for everyone.

Our Colleague Strategy will be broken down into three key commitments which we will make to our colleagues:

- **Creating a culture of inclusion across our organisation;**
- **An attractive and fair employee offer; and**
- **Supporting everyone to achieve their work ambitions.**

Updates contained within the HR Quarterly Report will align with these three commitments, demonstrating how we are working towards making this a great place to work for everyone.

A further update on our emerging Colleague Strategy is provided as a separate item on the agenda for this meeting of the Panel.

## Creating a culture of Inclusion

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### Action on Inclusion

While diversity has always been an important focus at TfL, we are moving towards a more inclusion focused approach to positively impact our organisation for our colleagues and customers. We are focused on creating an equitable, high-performing workplace where people from all backgrounds can get the support they need to thrive and grow.

In response to this challenge, we have developed our Action on Inclusion strategy which sets out steps we will take to make TfL a genuinely inclusive employer. Action on Inclusion will also set out how we will make our network more inclusive for our customers. This strategy will be published and shared with our colleagues in March 2023.

The document comprises of three key themes:

1. Representing our city – How we will ensure our organisation truly reflects the diversity of London;
2. An inclusive starting point – Practical steps to improving equity, diversity and inclusion (D&I) in the workplace; and

3. Skills and opportunities – How we will develop everyone to be their best at work, ensuring TfL is a great place to work.

We are currently establishing what key measures of success will look like so we can track progress and monitor the impact of Action on Inclusion. We will report back to the Panel on key deliverables and progress made.

### **Appointment of our new Director of Diversity & Inclusion**

Patricia Obinna will be our new Interim Director of Diversity and Inclusion (D&I), accepting the role on a secondment basis.

Patricia has worked for TfL for 18 years, most recently as the Head of Employment Law, where she has provided expert guidance to the organisation, including our D&I team.

Patricia will work closely with our Leadership and D&I teams and our colleagues, to implement a number of key actions, including launching Action on Inclusion. She is keen to ensure that there is a clear action plan in place to drive a more inclusive culture to 2030, and that we identify and put in place measures to address some of the issues that have been raised by our colleagues, including in the recent Viewpoint annual staff survey and subsequent listening sessions.

### **Our Pay Gap Action Plans**

We are due to publish our annual Gender, Ethnicity and Disability Pay Gap Reports in

March 2023. Alongside these we will publish our Pay Gap Action Plan, which will outline key activities planned up to 2025 and aim to reduce our pay gaps.

Our Pay Gap Action Plan is currently undergoing final review and sign off and is scheduled for discussion at the next meeting of the Panel.

## **Supporting everyone to achieve their work ambitions**

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### **Our People Leaders**

At the last meeting of the Panel, we introduced our People Leaders framework, which has established a shared understanding of what it means to be a people leader at TfL.

We know that having good calibre leaders is essential for the challenges we face in growing our organisation, retaining our talented employees, and building our brand and employee value proposition.

We have now launched and shared this framework with our colleagues. Rather than this being a stand-alone initiative, it is an articulation of what our leaders should be and what colleagues can expect from their leaders. We are currently developing a set of metrics where we can measure improvements in our leadership skills across

the organisation. It is our intention to share these on a regular basis.

### **Strategic Workforce Planning**

We are continuing to develop a strategic workforce planning tool, which will enable leaders to take a longer-term view of resourcing and development requirements within their areas.

This tool will give leaders access to key measures such as turnover, retention, how long it takes to recruit for a role, the number of leavers, the retirement profile for their area and readiness ratings for career progression.

The objective is to give data to leaders, enabling them to identify potential skills shortages and retention issues in advance, allowing them to take action where required.

### **Succession Planning**

We have developed a methodology which is being rolled out to local leadership teams to understand our Critical and Hard to fill roles. We are targeting the skills required now, and in the future, to support our business strategy. This work is allowing us to build succession pipelines and career pathways. We aim to have identified these roles with each leadership team by the end of the financial year.

Early stages of roll-out have identified roles (skills) in Tech and Data, Engineering, Safety, Health and Environment, Project Management Office and Communications. This work feeds into our Graduate and

Apprentice demand and a recent success has been the re-introduction of the Cyber Security apprenticeship as a result of this work and is anticipated to continue to help support the reduction of non-permanent labour using this talent pipeline to fill vacancies.

We will provide an update on our succession planning and strategic workforce planning at the meeting of the Remuneration Committee on 2 March 2023.

### **Update on our Graduate and Apprentice schemes.**

On 16 January 2023, we welcomed our third and final cohort of apprentices for the 2022/23 intake. A further 19 apprentices joined Level 3 apprenticeship schemes, including Transport Planning, Trams Engineering, Project Controls, Dial-a-Ride and Tech and Data.

For 2022/23, in total we welcomed:

- 127 Apprentices;
- 51 Graduates;
- 11 Year in Industry placements; and
- 5 Stuart Ross Interns.

The diversity breakdown for our Graduate and Apprentice schemes are provided below:

<b>Graduates</b>	<b>Women</b>	<b>BAME</b>
2018/19	18%	27%
2019/20	22%	53%
2020/21	25%	30%
2021/22	32%	45%
2022/23	29%	54%

<b>Apprentices</b>	<b>Women</b>	<b>BAME</b>
2018/19	20%	35%
2019/20	37%	36%
2020/21	40%	34%
2021/22	33%	38%
2022/23	29%	46%

## An attractive and fair employee offer

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### Our Approach to Reward

Our aim is to deliver a fairer and more transparent pay management proposition for our people that balances our need to ensure affordability with meeting the competitive challenges that our business faces in attraction and retention.

We are beginning to address employee perception of pay unfairness by identifying short-, medium- and longer-term changes to how we approach pay management. This will look at revising our pay frameworks to better align with market rates for key skills, along with in role salary progression to retain knowledge and experience.

### Financial Wellbeing

There was an action at the previous Panel to identify if we hold information on whether

our colleagues are in receipt of in work benefits. While we do not hold nor have access to this information, we do provide a suite of other employee benefits which aim to promote the financial wellbeing of our colleagues.

The cost of living has become a topic on many people's minds. In support of our employee's financial wellbeing there are a number of products and services that TfL offer:

#### Savings:

Our mydiscounts site offers our colleagues savings on everyday purchases including groceries, eating out, leisure activities and clothing. Colleagues can order reloadable cards and instant vouchers giving instant savings via the SmartSpending App our colleagues can use on their smartphone.

#### Finance:

TfL have partnered with two Credit Unions. These are financial services companies that run on a co-operative membership model. They are considered an ethical alternative to traditional high street banking offering preferential interest rates for both savings and lending.

TfL also offer our colleagues an emergency interest free loan facility giving targeted support should their life circumstances change suddenly.

#### Advice and Support:



Guides and tools on financial wellbeing are available to our colleagues on our mydiscounts page. Providing expert advice on topics such as fraud awareness, savings advice and tips for paying off credit card debts. Our Employee Assistance Programme is a confidential helpline available to our colleagues 24/7 which can also provide support with financial matters including managing debt and budgeting.

## Our TfL Programme

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### Our TfL Programme

The Our TfL Programme (OTP) concluded the initial Feasibility phase in November 2022 and has now entered Design and Delivery. The five core sub-programmes are working through the possible quick wins which will be delivered in the early part of 2023 and concurrently are developing their plans for the remainder of the programme which are expected to be baselined in early 2023.

The programme has engaged with TfL and London Underground Company Council on several occasions, providing them an overview of the programme's objectives, structure and feasibility outcomes. The programme will continue to engage with TfL Company Council on a regular basis through the duration of the programme, with sub-programmes engaging at a local level as appropriate.

An OTP Design Authority has been established to provide robust governance to the programme, in line with the change portfolio governance across TfL. This forum will ensure there is adequate scrutiny of emerging designs across the sub-programmes, designs are not assessed in isolation from one another and that they collectively contribute to the programme's dual mandate. The first forum took place on 16 February and will be held on a periodic basis.

### Update on the core sub-programmes:

#### 1 Customer and Strategy

Our ambition is to set the direction and support delivery for our customers, colleagues and city. This sub-programme of work will improve the way we set the direction for the organisation, helping us decide where to invest and to focus on effective, efficient and continuous delivery.

#### 2 Capital

Our planned sub-programme will ensure that Capital's operating model is optimised to invest, build and maintain our infrastructure. This will be achieved by being agile and efficient, and ensuring that green considerations are factored into investment and delivery governance.

#### 3 Operations

Following the creation of TfL Operations in 2022, bringing together all of the operating

modes across TfL into one business unit for the first time, OTP Operations has the dual mandate to achieve an operations function that acts as one, and to achieve financial sustainability.

#### **4 Support Services**

This sub-programme is to ensure the services which support our operations, such as Finance, People and General Counsel functions, are set up to provide an expert and consistent service to our colleagues across TfL, making their jobs easier. This will be achieved through consistent business partnering, specialist advice and getting the basics right. This will also align with our Enterprise Resource Planning programme which will modernise our business critical systems and ways of working.

A stand-alone update on OTP will be tabled at the next meeting of the Board on 29 March 2023.

**Date:** 22 February 2023

**Item:** Safety, Health and Environment Assurance Report

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### This paper will be considered in public

## 1 Summary

- 1.1 The purpose of this report is to give the Panel an overview of the effectiveness of the risk controls for Enterprise Risk 1 (ER1) – ‘Inability to deliver safety objectives and obligations’, Enterprise Risk 3 (ER3) – ‘Environment including climate adaptation’ based on second line of defence audit work by the Quality, Safety and Security Assurance (QSSA) team and third line of defence work by the Internal Audit team. Information is also provided on Enterprise Risk 6 (ER6) – ‘Deterioration of operational performance’ and Enterprise Risk 4 (ER4) – ‘Significant security incident’, as they correlate to ER1.
- 1.2 Reporting has been aligned with the revised Enterprise Risks that were implemented from Quarter 3 of 2022/23 (18 September to 10 December 2022) (Q3), previous audits have been retrospectively aligned to the new risks.
- 1.3 Appendix 1 provides a list of audits undertaken in Q3. Audit reports issued are given a conclusion of ‘well controlled, adequately controlled, requires improvement or poorly controlled’. Individual findings within audit reports are rated as high, medium or low priority.
- 1.4 Performance data is provided on progress against the audit plan, audit ratings, rating trends by Enterprise Risk and business unit and progress against actions, with comparisons provided across the last two years.

## 2 Recommendation

- 2.1 **The Panel is asked to note the paper.**

## 3 Annual Quality, Safety and Security Assurance Audit Plan

- 3.1 The annual QSSA audit plan contains a series of second line of defence audits that address ER1, ER3, ER4 and ER6.
- 3.2 The 2022/23 annual audit plan was finalised in March 2022 in consultation with Safety, Health and Environment (SHE), Operations, Maintenance, Engineering Directorates and Security teams to identify where assurance is required or where there are performance or compliance concerns. Each audit has an identified sponsor within TfL to whom assurance is provided, typically a management system or risk owner or an assurance function. The audit plan is reviewed every six months for greater flexibility and an agile approach to changing business demands. Audit planning is currently underway with risk owners and key stakeholders for 2023/24.

## 4 Work of Note this Quarter

- 4.1 ER1, along with all Level 0 Enterprise Risks, has been revised and presented to the TfL Executive Committee, TfL Board and the Audit and Assurance Committee in Quarter 1 of 2022/23 (1 April to 25 June 2022). The overall risk assessment ratings for ER1 remain the same. The environmental elements of ER1 are now captured in ER3 'Environment including climate adaptation' as part of the review of all revised Level 0 risks.
- 4.2 As of Q3, all audits have been mapped to the applicable Level 0 risk from the list of revised Enterprise Risks (see Appendix 3). The previous Level 0 Enterprise Risk 12 'Asset condition unable to support TfL outcomes' has become a Level 1 risk and these audits reassigned to the Level 0 Enterprise Risk 6 'Deterioration of operational performance'.
- 4.3 Internal Audit have one audit in progress on the reporting and procurement of a digital monitoring and assurance system. There were no ER1 Internal Audit reports issued in Q3.
- 4.4 A total of 20 second line QSSA audits were delivered in Q3, 56 per cent of the annual plan for 2022/23 has been delivered and is on track for the target of 85 per cent for year-end (see Appendix 1 for the full detail of audits completed in Quarter 2 of 2022/23 (26 June to 17 September 2022 (Q2))).
- 4.5 Three audits were concluded as 'poorly controlled' in Q3, all of which have agreed and tracked action plans in place:
- (a) London Underground (LU) Environmental Risk Assessment: It could not be assured that risk assessments had been completed to identify relevant environmental risks, the associated controls and applicable regulations. Non-compliance with the SHE Management System requirements was identified relating to the management of TfL's environmental risks.
  - (b) Buses and Trams Environmental Risk Assessment: In Buses, it could not be assured that risk assessments had been completed to identify relevant environmental risks, the associated controls and applicable regulations. Trams had a suitable and sufficient 'Aspects and Impacts Register' in place.
  - (c) Trams On Track Plant and Machines: A number of non-conformances in relation to the requirements set out in the Trams on track plant acceptance and testing procedures were identified. Document control issues were identified along with the interpretation and implementation of the standards.
- 4.6 Three audits were concluded as 'requires improvement', all of which have agreed and tracked action plans in place:
- (a) TfL management of new protective security risks from initiatives: There is a robust and proven project management methodology in the TfL Pathway Project Management System. However, several of the project management requirements products relating to security were found to be out of date and the security content of Pathway is not mandated or a 'core' product (this is currently under review). This increases the risk that security risks may not be accurately identified and therefore controlled.

- (b) LU Maintenance Asbestos Management: Full compliance with the proactive requirements of the TfL Standard and LU Procedures have not been achieved in relation to competence and monitoring. There were limited issues regarding asbestos surveys and information management. There were no issues regarding the reactive support role undertaken by the Hazardous Materials team for maintenance and minor works. A programme of agreed actions is in progress and are all in date.
  - (c) Managing Access to Tram Infrastructure: The combination of documents and systems meant it was not always possible to assure that staff hold the required competence for the activity in advance. A risk assessment and method statement could not be located for a Works Request Form, and overdue inspections and incident investigations were highlighted. These gaps increase the risk that management system controls are not effective.
- 4.7 Seven audits were concluded as 'Adequately Controlled' or 'Well Controlled', with seven Integrated system audits which are not rated (as they cover multiple subjects and risks).
- 4.8 The breakdown of the audits completed in Q3 by risk is as follows:
- (a) 12 audits were completed against ER1: seven Integrated Systems Audits of LU (not rated) and five topic audits;
  - (b) three audits were completed against ER3;
  - (c) three audits were completed against ER4; and
  - (d) two audits were completed against ER6.
- 4.9 As detailed in paragraph 4.5 above, two audits were undertaken on environmental risk assessment at the request of the SHE Directorate – one sampling Buses and Trams and the other LU Fleet and Track Maintenance teams – were concluded as 'poorly controlled'. As a result, we are liaising with SHE and the Asset Performance team to ensure the additional SHE support needed to assist operational teams with the implementation of the environmental risk assessment requirements is provided.
- 4.10 Audit planning for the 2023/24 programme has begun using the SHE Management System structure and strategic risks to inform the sessions. The use of the management system structure is to ensure all areas of risk controls are considered and any gaps in recent assurance identified.

## **5 Cancelled and Deferred Work**

- 5.1 Five audits were cancelled or deferred in Q3:
- (a) LU Migration of AMIS (Asset Management Information System) from Ellipse to Maximo: This was cancelled in favour of a track welding audit that was considered a higher priority in consultation with the Engineering Assurance team. The migration of AMIS will be assured via an internal management review.

- (b) Updating of LU Track Training Materials: Initial planning revealed the absence of a procedure or requirements to conduct an audit against, making audit an unsuitable option. The audit sponsor was content for an internal review to be conducted.
- (c) Cyber security – Patching and Vulnerability Management: This audit has been deferred to the 2023/24 programme in agreement with the Cyber Security team to align with improvement work packages which are to be tested by the audit.
- (d) TfL Ransomware Risk Management: This audit has been deferred to the 2023/24 programme in agreement with the Cyber Security team to align with improvement work packages which are to be tested by the audit.
- (e) Payment Card Industry Data Security Standard Compliance Audit – Revenue Inspection Devices: This audit has been deferred to the 2023/24 programme. The objective of the audit was to provide assurance at key stages in the project. The audit has been deferred to align with revised project timescales.

## **6 Performance and Trends**

- 6.1 There were no identifiable trends when comparing the profile of audits carried out or audit conclusions across the relevant Chief Officer teams. There is a slight increase in the number of Chief Operating Officer ‘adequately controlled’ conclusions and a reduction in ‘requires improvement’ between 2021/22 and 2022/23 (13 conclusions of ‘requires improvement’ and 17 conclusions of ‘adequately controlled’ in 2021/22 compared with 11 conclusions of ‘requires improvement’ and 24 conclusions of ‘adequately controlled’ in 2022/23). This is not considered to be a significant change in risk given the different annual audit plans.
- 6.2 Comparing audit conclusions against the associated Enterprise Risks over 2021/22 and 2022/23, the distribution of conclusions by risk is broadly consistent, indicating there has been no significant change in risk profile identified by our audits. Environmental audits were previously recorded as against ER1, these audits have since been reallocated to the new ER3.
- 6.3 There was a marginal increase in the number of audits completed in the last four quarters compared with the previous year (see detail in Appendix 2), which is linked to successful recruitment campaigns and the resumption of normal audit activity in 2022/23 following previous social distancing restrictions.
- 6.4 There had been an increase in actions closed on time in Q3 with 35-40 per cent of actions closed on time. There has been a small increase in the number of actions granted extensions in the most recent period in accordance with our procedure, although the average percentage of actions extended remains constant across Q2 and Q3 at 18 per cent. We continue to have increased focus on closing actions in collaboration with the management teams and Chief Officers which has been effective in reducing the number of overdue actions, particularly the significantly overdue actions over 100 days.

- 6.5 There are currently 27 QSSA overdue actions in total which has decreased from a peak of 45 during Q2. There have been a number of significantly overdue actions that have been closed in the last two quarters with support from the management teams and Chief Officers, which has reduced the number of actions 100 or more days overdue from 28 to nine. Actionees receive routine reminders from the Audit team and overdue actions are escalated to the applicable management teams to try and resolve. Chief Officers also receive reports that include overdue actions within their teams which the Director of Risk and Assurance discusses with them in quarterly meetings. Further reporting on them is also provided to the Executive Committee and the Audit and Assurance Committee.

**List of appendices to this report:**

Appendix 1: QSSA Audits Completed in Q3 against ER1, ER3, ER4 and ER6

Appendix 2: QSSA Audit Data

Appendix 3: Revised TfL Enterprise Risks

**List of Background Papers:**

None

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## Appendix 1 – Quality, Safety and Security Assurance Audits Completed in Quarter 3 of 2022/23

### ER1 Inability to deliver safety objectives and obligations

Directorate	Ref.	Audit Title	Objective	Conclusion	Summary of Findings
<b>Network Management &amp; Resilience</b>	22 739	Street Safety Management of the Works for London Contract	To assess if safety duties are being appropriately discharged through the Works for London highways contract.	Well Controlled	The comprehensive nature of the contract (inspection, identification, and defect remediation) enabled the contractor to manage the risks efficiently and effectively. Records and data management were found to be efficient and compliant with the contract requirements. The operatives undertaking and recording safety inspection work were monitored and supported by the contractor.
<b>Rail &amp; Sponsored Services</b>	22 762	Trams Rolling Stock Depot SHE Compliance	To seek assurance that key Safety, Health and Environment (SHE) risks are controlled in accordance with legislation and management system requirements.	Well Controlled	The trams rolling stock depot was found to be managing and controlling key SHE risks/activities in accordance with the legislation and management system requirements.
<b>Asset Performance Delivery</b>	22 753	Supplier Audit - Cleshar Protection Services	To provide assurance that Cleshar are providing competent protection staff in accordance with contractual, Quality, Environmental, Safety and Health (QUENSH) and London Underground (LU) standards requirements.	Adequately Controlled	Cleshar was found to be managing and providing competent protection staff/support activities in accordance with the contract QUENSH conditions and LU standards. One issue was raised regarding internet access to TfL Standards and Rule Books.
<b>Asset Performance Delivery</b>	22 718	LU Maintenance Asbestos Management	To assess compliance in LU Asset Performance and Facilities with the Control of Asbestos Regulations 2012 through TfL's internal standards.	Requires Improvement	Full compliance with the proactive requirements of the TfL standard and LU procedures have not been achieved in relation to competency and monitoring. There were limited issues regarding asbestos surveys and information management and no issues regarding the reactive support role undertaken by the Hazardous Materials team for maintenance and minor works.
<b>Engineering and Asset Strategy</b>	22 766	Trams On Track Plant and Machines	To provide assurance that the approval and use of on track plant and machines is effectively controlled through compliant processes so that safety is not compromised.	Poorly Controlled	A number of non-conformances in relation to the requirements set out in the Trams On Track Plant acceptance and testing procedures were identified. Document control issues were identified along with the interpretation and implementation of the standards.

### Integrated Systems Audits

Directorate	Ref.	Audit Title	Objective	Conclusion	Summary of Findings
<b>Customer Operations - LU</b>	22 712	Morden Traincrew Integrated Systems Audit	To provide assurance that key requirements contained in the management system are being met.	Not Rated	59 per cent conformance, 22 Green, two Amber, 13 Red (compliant, minor non-compliance, major non-compliance).
<b>Asset Performance Delivery</b>	22 716	Stratford Fleet Depot Integrated Systems Audit	To provide assurance that key requirements contained in the management system are being met.	Not Rated	82.5 per cent conformance, 52 Green, one Amber, 10 Red (compliant, minor non-compliance, major non-compliance).
<b>Customer Operations - LU</b>	22 780	Marble Arch Area Integrated Systems Audit	To provide assurance that key requirements contained in the management system are being met.	Not Rated	54 per cent conformance, 30 Green, four Amber, 22 Red (compliant, minor non-compliance, major non-compliance).
<b>Customer Operations - LU</b>	22 779	Circle and Hammersmith Service Control Integrated Systems Audit	To provide assurance that key requirements contained in the management system are being met.	Not Rated	63 per cent conformance, 22 Green, zero Amber, 13 Red (compliant, minor non-compliance, major non-compliance).
<b>Customer Operations - LU</b>	22 778	Edgware Road Traincrew Depot Integrated Systems Audit	To provide assurance that key requirements contained in the management system are being met	Not Rated	58 per cent conformance, 19 Green, one Amber, 13 Red (compliant, minor non-compliance, major non-compliance).
<b>Customer Operations - LU</b>	22 776	Tower Hill Integrated Systems Audit	To provide assurance that key requirements contained in the management system are being met.	Not Rated	70 per cent conformance 40 Green, two Amber, 15 Red (compliant, minor non-compliance, major non-compliance).
<b>Customer Operations - LU</b>	22 777	Battersea Area Integrated Systems Audit	To provide assurance that key requirements contained in the management system are being met.	Not Rated	75 per cent conformance, 43 Green, one Amber, 13 Red (compliant, minor non-compliance, major non-compliance).

## ER3 Environment including climate adaptation

Directorate	Ref.	Audit Title	Objective	Conclusion	Summary of Findings
<b>Asset Performance Delivery</b>	22 770	Greenwich Power Station Greenhouse Gas Monitoring	To assess effectiveness of Greenwich Generating Station's arrangements for data monitoring and reporting of CO2 emissions for the UK Emissions Trading Scheme.	Well Controlled	There is no cause for concern, the data monitoring and reporting of CO2 emissions was well managed. The installation Annual Emissions Monitoring report was verified by Lucideon CICS Limited on 2 March 2022, this is in-line with the requirement of report submission on or before 31 March each year.
<b>Chief Operating Officer</b>	22 738	LU Environmental Risk Assessment	To provide assurance that management systems requirements for identifying and managing TfL's impacts on the environment are complied with.	Poorly Controlled	It could not be assured that risk assessments had been completed to identify relevant environmental risks, the associated controls and applicable regulations. A non-compliance with the SHE Management System requirements was identified relating to the management of TfL's environmental risks.
<b>Chief Operating Officer</b>	22 754	Buses and Trams Environment Risk Assessment	To provide assurance that management systems requirements for identifying and managing TfL's impacts on the environment are complied with.	Poorly Controlled	In Buses, it could not be assured that risk assessments had been completed to identify relevant environmental risks, the associated controls and applicable regulations. Trams had a suitable and sufficient 'Aspects and Impacts Register' in place.

## ER4 Significant security incident

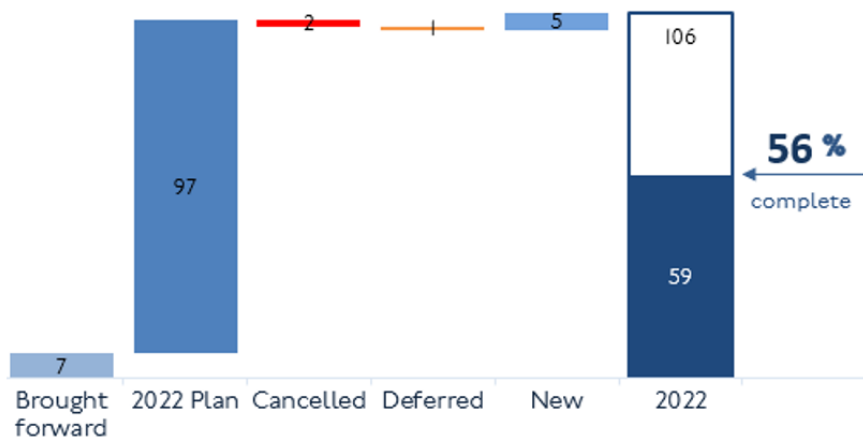
Directorate	Ref.	Audit Title	Objective	Conclusion	Summary of Findings
<b>Network Management &amp; Resilience</b>	22 750	PCI DSS Compliance Audit: London Road User Charging and Traffic Enforcement Notification Processing	To seek assurance that the London Road User Charging and Traffic Enforcement Notification processing is operating in compliance with the Payment Card Industry Data Security Standards (PCI DSS) and additionally TfL's contractual obligations to its Acquiring Banks.	Adequately Controlled	The London Road User Charging and Traffic Enforcement Notification Processing was found to be compliance to the PCI DSS.
<b>Chief Operating Officer</b>	22 759	PCI DSS Compliance Audit: Section 50 (Road Space	To seek assurance that the Section 50 Licencing Unit is operating in compliance with PCI DSSv.3.2.1 and additionally TfL's contractual obligations to its Acquiring Banks.	Adequately Controlled	The Section 50 Licencing Unit was found to be operating in a compliant manner with the PCI DSS.

Directorate	Ref.	Audit Title	Objective	Conclusion	Summary of Findings
		Management - RSM)			
Pan TfL	21 776	TfL management of new protective security risks from initiatives	To seek assurance that protective security considerations are identified and appropriately controlled through the TfL Pathway Project Management System, to achieve compliance with legislative requirements.	Requires Improvement	There is a robust and proven project management methodology in Pathway. However, several of the project management products related to security requirements were found to be out of date and the security content of Pathway is not mandated or a 'core' product. This increases the risk that security risks may not be accurately identified and controlled.

### ER6 Deterioration of operational performance

Directorate	Ref.	Audit Title	Objective	Conclusion	Summary of Findings
Rail & Sponsored Services	22 726	London Overground Track Asset Management	To provide assurance that key aspects of the management system for track assets are effective and complied with.	Adequately Controlled	London Overground was ensuring that track assets were managed effectively in co-ordination with Cleshar and Construction (Design and Management) legal duties discharged, actions have been raised to strengthen assurance and record keeping.
Rail & Sponsored Services	22 729	Managing Access to Tram Infrastructure	To seek assurance that the appropriate controls are in place to safely manage access to the tramway.	Requires Improvement	The combination of documents and systems means it is not always possible to assure that staff hold the required competence for the activity in advance. A risk assessment and method statement could not be located for a Works Request Form, and overdue inspections and incident investigations were highlighted. These gaps increase the risk that management system controls are not effective.

Audit Progress against year plan 2022/23

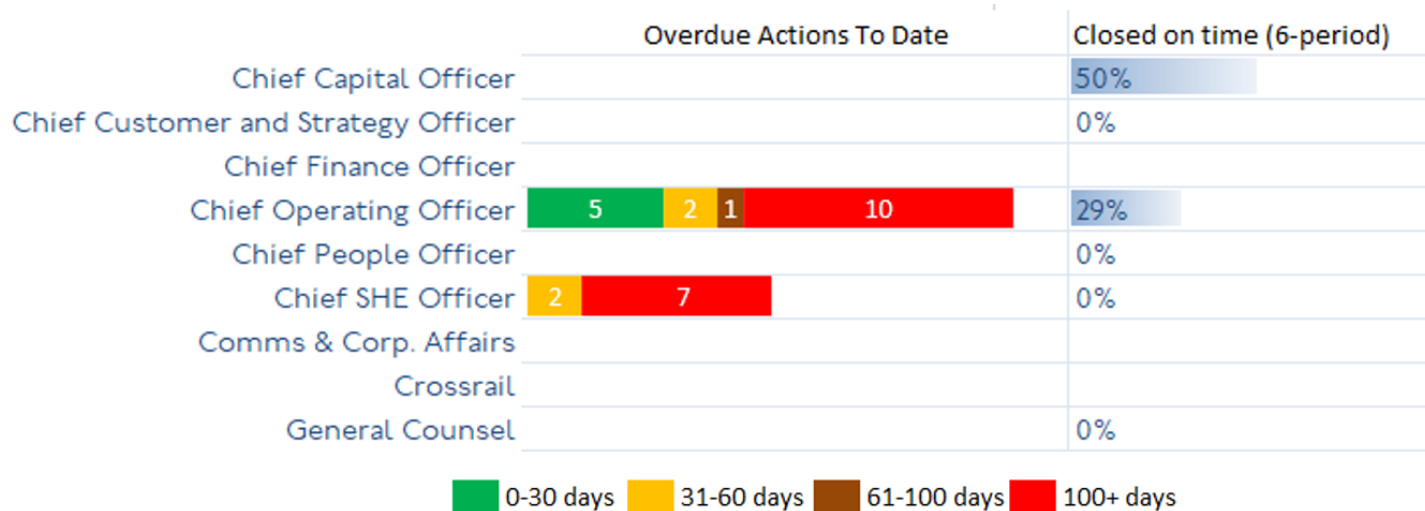


Open Audit Actions - Overall Tfl Performance (6-Period trend)

Measure	No.	%	6-period rolling trend
No. Actions Closed on time	25	35%	
No. Actions Extended	21	18%	

**27** Overdue  
Out Of  
**91** Open

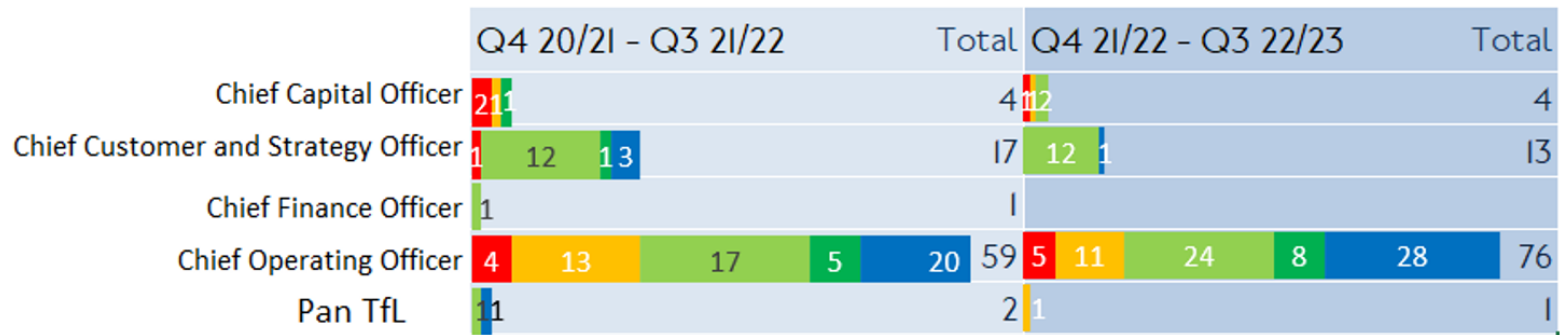
Action Management - Overdue Action by Directorate by Overdue Days



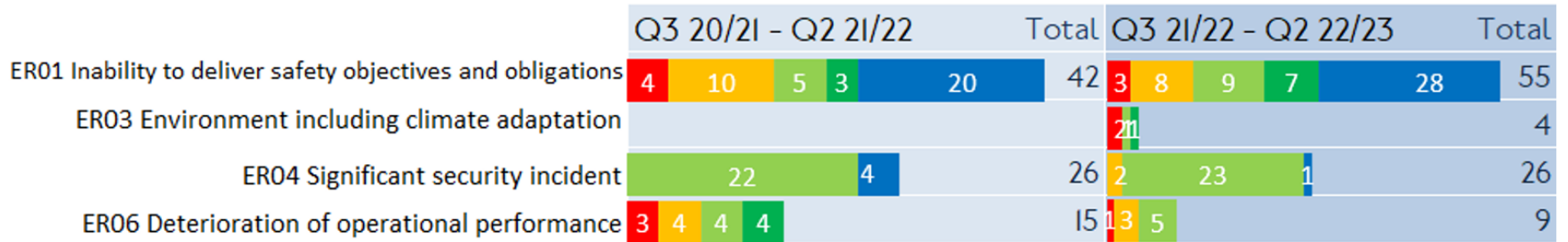
Action data status at 13/01/2023



**Audit Conclusion Trends by Chief Officer Team (over 4 quarters)**



**Audit Conclusion Trends by Enterprise Risk (over 4 quarters)**



### **Appendix 3: Revised Level 0 Enterprise Risks**

The 10 new Enterprise Risks are as follows:

1. Inability to deliver safety objectives and obligations (ER1)
2. Attraction, retention, wellbeing and health of our employees (ER2)
3. Environment including climate adaptation (ER3)
4. Significant security incident (ER4)
5. Procurement including supply chain (ER5)
6. Deterioration of operational performance (ER6)
7. Financial resilience (ER7)
8. Delivery of TfL key investment programmes and projects (ER8)
9. Changes in customer demand (ER9)
10. Governance and controls suitability (ER10)

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**Date: 22 February 2023**

**Item: Enterprise Risk Update – Attraction, Retention, and Wellbeing of Our Employees (ER2)**

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## **This paper will be considered in public**

### **1 Summary**

- 1.1 This paper provides an overview of enterprise risk 02 (ER02) “Attraction, retention, and wellbeing of our employees”. This risk recognises that if we do not continue to attract and retain colleagues with the skills and expertise we need, or prioritise wellbeing, we will not be able to deliver effectively for London in the future.
- 1.2 In line with the enterprise risk schedule, ER02 is reviewed annually. The risk plan and status were endorsed by the Executive Committee Strategy, Safety and Business meeting on 9 February 2023.
- 1.3 A full risk update report, included as an appendix to this paper, provides further commentary on the actions we are taking to mitigate against the drivers of risk identified.
- 1.4 A paper is included on Part 2 of the agenda, which contains exempt supplemental information. The information is exempt by virtue of paragraph 3 of Schedule 12A of the Local Government Act 1972 in that it contains information relating to the financial affairs of TfL. Any discussion of that exempt information must take place after the press and public have been excluded from this meeting.

### **2 Recommendations**

- 2.1 **The Panel is asked to note the paper.**

#### **ER02 – Background**

- 2.2 We cannot deliver for London without attracting and retaining the talent we need to deliver our business plan.
- 2.3 Although our overall rate of employee turnover remains low, over the last 12 months we have continued to experience increased levels of turnover, primarily due to internal movement between directorates. This has heightened the likelihood of this risk materialising as movement out of a directorate can impact on delivery while a replacement is recruited.
- 2.4 Although the diverse nature of the organisation means our overall turnover will include areas with very low levels of employee exit, the areas of the business where we are experiencing higher turnover contain roles with critical and/or

scarce skill sets, therefore the impact on delivery of employee turnover can be significant.

- 2.5 The most recent results of our employee engagement survey showed a decrease in our 'total engagement' score. This included a decrease in the number of employees who feel a strong sense of commitment to our organisation. The survey responses also showed a decline in colleagues having confidence that there is a clear vision for the future of the organisation, a decline in satisfaction with employee benefits, and a decline in the number of colleagues who feel their pay is fair. These are all potential drivers of increased employee turnover.

#### **4. ER02 – Mitigation and Control**

- 4.1 Our continuing ability to attract and retain employees is impacted by several internal and external factors, some of which are not fully in our control. The primary drivers of this risk are detailed in slide 2 of the accompanying report. Therefore, there is no single "event" that will cause the risk to materialise, nor is there a way of eliminating the risk entirely.
- 4.2 Our approach to managing this risk continues to be focused on alignment between our management of risk and our core delivery. We deliver a range of policies and processes, permanently in place, that help the organisation control our attraction and retention risk. These include our approach to reward management, our approach to talent management and career development and the support we provide for our people leaders. Details of our core activity is described in more detail in slide 3 of the accompanying report.
- 4.3 The emerging TfL Colleague strategy sets out our high-level ambitions and articulates how we will deliver our purpose through our people. In conjunction with the strategy, a refreshed colleague plan of activity has been developed outlining a programme of work prioritising how we attract and retain colleagues and enhance the employee experience of working here. The priority projects are detailed on slide 4 of the accompanying report.

#### **5. Risk Status**

- 5.1 The overall assessment of ER02 remains at **"Requires Improvement"**.
- 5.2 The initiatives described in the accompanying report will mitigate and control risk over the medium term. We do not propose to alter the status of this risk before these programmes can demonstrate effectiveness in controlling risk.
- 5.3 Effective management of the risk is, and will continue to be, an ongoing focus for the organisation and is led by programmes of work by the Human Resources, Safety, Health and Environment, and local management teams.

#### **List of appendices to this report:**

Appendix 1: Presentation to TfL Executive Committee February 2023

A paper containing exempt supplemental information and is included on Part 2 of the agenda.

**List of Background Papers:**

None

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## CONTEXT AND OBJECTIVES

The Enterprise Risk identified in the colleague space is “*Attraction, retention and wellbeing of our employees*”. This risk recognises that if we do not continue to attract and retain employees with the skills and expertise we need and / or we have wellbeing challenges, we will not be able to deliver effectively for London in the future.

## SUMMARY

An annual review of the risk is submitted to Exco and the Safety, Sustainability, and Human Resources Panel. The risk has also been reviewed by Colleague ExCo and their feedback has been incorporated into this paper.

## ACTION

The TfL risk management framework requires us to identify

- The causes or drivers of the risk
- What controls we have in place to reduce the likelihood of the risk occurring or mitigate its impact
- What planned actions we will take to reduce the likelihood of the risk occurring or mitigate its impact

All Enterprise risks carry a risk status of ‘Well Controlled’, ‘Adequately Controlled’, ‘Requires Improvement’ or ‘Poorly Controlled’

The proposed status of ER02 is ‘*Requires Improvement*’ This status is driven by the nature of the risk and the fact that many of the planned interventions to mitigate and control this risk will impact over the medium term.

Title: ‘Attraction, Retention and Wellbeing of our Employees’ (ER02)

Date of meeting:  
22 February 2023

Paper owner: Fiona Brunskill



# Context and Background

We cannot deliver for London without attracting and retaining the talent we need to deliver our business plan. This has been heightened by the pandemic, financial constraints and a buoyant employment market.

Over the last 12 months we continue to experience increased levels of employee turnover for critical and specialist skill sets.

A number of initiatives will mitigate and control risk over the medium term. We would not propose to alter the status of this risk before these programmes can demonstrate effectiveness in controlling risk.

**Risk: ER02: Attraction, Retention and Wellbeing of our employees**

Risk owner: Fiona Brunskill  
 Responsible managers: Stephen Field, Laura Davies, Karen Wallbridge, Sue Taylor, Lilli Matson  
 Risk Status – Requires Improvement

## Historical Context

TfL has historically experienced a low level of employee turnover, driven by the relative stability of public sector employment, competitive levels of pay and benefits

We are beginning to see a higher rate of employee turnover, which is becoming pronounced in areas of the business carrying specialist and critical skills

## Current Context

Inflation and rising living costs is driving up salary expectations

A buoyant employment market Although we have experienced higher turnover this does not apply to all roles, some job families have higher rates of turnover and others with lower rates.

Our levels of pay are falling behind market in some areas

We have experienced a reduction in employee our engagement and wellbeing at work index measures

### Drivers of Risk

Our ability to attract and retain is impacted by several external (in orange) and internal (in blue) factors, some of which are not fully in our control (orange). These are shown below.

- Dynamic Employment Market
- Cost of living
- Pay (levels of pay against the market & internal pay inequity)
- Organisational uncertainty
- Age profile of workforce
- Our employment offer becomes less attractive
- Lack of progression and inability to provide career pathways
- Lack of investment in training
- Our skills profile becomes misaligned to our skills requirement
- Ineffective leadership and people management
- Policy, systems and processes impacting agility around resourcing
- Lack of management information
- Inefficient, bureaucratic and energy consuming processes
- Impact of ill health on delivery and other colleagues

# Actively controlling our risk

We continue to drive strong alignment between management of risk and our core delivery. We deliver a range of policies and processes, permanently in place, that help the organisation control our attraction and retention risk.

## 2022 Viewpoint – Highest negative scores

1. I have confidence there is a clear vision for the organisation (41% negative)
2. I believe action will be taken on the results of this survey (37%)
3. Considering the work I do, I believe my pay is fair (34%)
4. I feel involved in decisions affecting my work (32%)
5. Senior Managers are open and honest in their communications with me (30%)



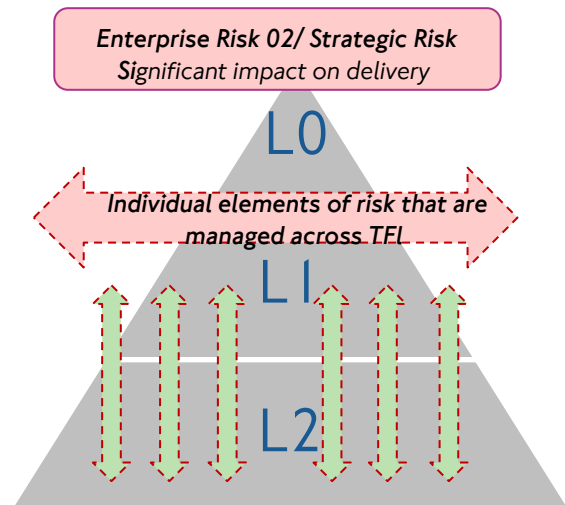
## Our core delivery needs to be focused on achieving a number of strategic outcomes

1. Bringing our Vision and Values to life
2. Making TfL a great place to work for everyone
3. Attracting and retaining the skills we need to deliver now and in future
4. Responding to employee feedback on what it feels like to work here (see 2022 Viewpoint detail in sidebar)

We manage our risk using the Level 0, 1 and 2 structure

- Level 0 – Enterprise / Strategic
- Level 1 - Individual Pan TfL risk drivers
- Level 2 – Local risk drivers

This allows mitigation and improvement activity to be cascaded across individual people plans.



## How activities are used to control risk

*These are at various stages of implementation*

### Controls - Activity currently or shortly to be in place that actively mitigate our key drivers of risk

- Reward Management
- Our People Leaders Programme
- Change Programmes – ERP and OtP
- Identification of Critical Roles and Succession Planning
- Strategic Resourcing Group
- Action On Inclusion
- Talent Management:
  - Recruitment, Onboarding and Induction
  - Graduate and Apprentice Schemes
  - Learning and development offer
  - Senior Leadership Programme
- Wellbeing Interventions incl. our Occupational Health Offering
- Exit Process (Interviews and Survey)
- Employee Engagement Survey
- Trade Union Engagement / Pay Settlements

# Managing ER02 Priority Actions

The actions identified are all planned delivery over the next 18 months.

These are key deliverable from our colleague roadmap that are focused on mitigation of our people risk, prioritising how we attract and retain staff and enhances the employee experience of working here.

Action	Detail	Expected Delivery
<b>Approach to Change</b>	Ensuring that we place our colleagues at the heart of our approach to change activity is an important mitigation to retention risk. While change can be unsettling, our approach to change has evolved to ensure that we take a pro-active approach to how we communicate and manage the change process. Making sure we are open and honest throughout is key to our people feeling involved and that they have a stake in the process.	Ongoing
<b>Establishing a Strategic Resourcing Group</b>	The Strategic Resourcing Group is a cross functional working group intended to enhance our medium and longer term approach to resourcing. Initial priorities of the group will to the reduction of internal competition, the recruitment of hard to fill and critical roles, harnessing 'Green' skills for the future and counsel on our hire-to-retire process reviews. The terms of reference for this group are included as an appendix.	February 2023
<b>Our People Leaders</b>	Establishing a shared understanding of what it means to be a people leader we aim to improve relationships, drive up levels of engagement, ensure that people feel supported in their careers and ultimately reduce the number of people choosing to leave voluntarily.	February 2023 (March 2024 BAU)
<b>Enhanced Leaver Analytics</b>	Currently, we do not possess robust, centrally held information about why people choose to leave. The new leavers survey will provide this and help us shape our future employment offer. A more consistent approach to exit interviews will allow local leadership teams to shape their people plans to address any trends in leaving reason.	February 2023 (survey) September 2023 (end to end process)
<b>Succession Planning</b>	We are currently working to identify critical roles across the organisation. This will enable us to establish robust succession plans for these roles that are future focused, diverse, inclusive, and transparent, is an important mitigation to our ability to respond to the loss key individuals and the risks heightened by an aging workforce.	October 2023
<b>Employee Value Proposition (Phase 1)</b>	This will be an important tool for recruitment and for articulating what people can expect from a career with us. At a time when we may be restricted in offering salaries at the top of the market, having a clear employee offer is vital to being able to continue to attract and retain people with the skills and talent we need.	September 2023 (phase 1)
<b>Employee Engagement Survey</b>	The opportunity to refresh our employee survey allows us to frame questions on areas that we know can heighten risk of voluntary exit if not well managed. Feedback from our employees allows us to better shape our future employee offer.	Ongoing (new survey 2024)
<b>Reward Strategy</b>	We are beginning to address employee perception of pay unfairness by delivering short-, medium- and longer-term changes to how we approach pay management. This includes revising our pay frameworks to better align to market rates for key skills, and to introduce in role salary progression.	April 2024

**Date:** 22 February 2023

**Item:** Members' Suggestions for Future Agenda Discussions

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### **This paper will be considered in public**

## **1 Summary**

- 1.1 This paper presents a proposed forward plan for the Panel in 2023/24 and explains how this is put together. Members are invited to suggest additional future discussion items.
- 1.2 The forward plan for the financial year 2023/24 has been reviewed to ensure that we are providing the Panel with the right opportunity to provide advice and strategic challenge on key Safety, Health and Environment (SHE) and People topics.
- 1.3 It is proposed to treat the Panel's meetings as an annual cycle, over the course of which we will bring all of the key topics of greatest relevance to achieving our SHE and People outcomes.
- 1.4 This paper sets out our proposals for:
  - (a) the topics and their proposed schedule that we recommend that the Panel focus on in 2023/24.
  - (b) the relationship between the papers and the continuing quarterly reports from the Chief SHE Officer and Chief People Officer; and
  - (c) proposals for ensuring that the agenda and meeting remain manageable.

## **2 Recommendation**

- 2.1 **The Panel is asked to agree the proposed approach to future papers and the forward plan.**

## **3 Forward Plan Development**

- 3.1 The Board and its Committees and Panels have forward plans. The content of the plans arise from a number of sources:
  - (a) Standing items for each meeting: Minutes; Matters Arising and Actions List; and any regular quarterly reports. For this Panel these are the Health, Safety and Environment Quarterly Report and the Human Resources Quarterly Report.
  - (b) Regular items which are for review and approval or noting such as the Health, Safety and Environment Annual Report.



- (c) Items requested by Members: The Deputy Chair of TfL and the Chair of this Panel will regularly review the forward plan and may suggest items. Other items will arise out of actions from previous meetings (including meetings of the Board or other Committees and Panels) and any issues suggested under this agenda item.
- 3.2 Over recent years, the Panel has covered a wide range of topics within its overall remit of:
- (a) the safety of our customers and our workforce (including those building, operating and maintaining transport services delivered under the roundel, whether directly employed or otherwise);
  - (b) the health and wellbeing of our workforce (as defined above);
  - (c) the environmental performance of TfL;
  - (d) the effectiveness of policies to drive safety and environmental outcomes across London more widely including those of the Mayor's Transport Strategy and Vision Zero Action Plan; and
  - (e) strategic human resources issues including diversity and inclusion.
- 3.3 To ensure a continued focus on the most important subjects within the Panel's remit, we have reviewed the forward plan and propose an annual cycle of topics, alongside the standing quarterly reports from the Chief SHE Officer and the Chief People Officer. The key topics and their provisional proposed timing are summarised in Table 1 below. Progress and outcomes from each topic would then be reported via the quarterly reports, which will require changes to their current presentation and content. The quarterly reports will also provide updates on topics from the previous forward plan that are not included in the new schedule, as set out in Table 2 below.
- 3.4 Meetings will therefore consist of a standing agenda, including the Quarterly SHE Report and Quarterly HR Report, and a series of 'deep dives' into key strategic topics. In order to ensure that the Panel has the right inputs for its meetings and that the agenda and discussion is manageable, it is proposed that we should aim to ensure that in general topic papers or slide-packs should be a maximum of four pages in length with appendices kept to a minimum.
- 3.5 The Panel is asked to agree the proposed approach, to review these topics, identify any critical strategic themes that are missing and agree the forward plan.

**Table 1: Proposed Annual Programme of Topics**

	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
<b>Safety</b>	Ending Violence Against Women and Girls  Road Risk – Bus safety strategy  SHE Assurance Report	Workplace Violence and Aggression  Road Risk – speed	Enterprise Risk 1: Safety  Programme to strengthen SHE Culture  Vision Zero Road Risk Annual update	Road Risk – Infrastructure  Capital Safety Strategy
<b>Environment</b>	Enterprise Risk 3: Environment	Decarbonisation  Operations progress with Corporate Environment Plan	Green Infrastructure and Biodiversity  Capital progress with CEP	Ultra Low Emission Zone update  Adaptation Update
<b>People</b>	Our TfL Programme (OTP) Programme  Colleague Strategy (to be confirmed)	Action on Inclusion (update)  Update on Our People Leaders	Approach to reward  Approach to Talent	Enterprise Risk 2: People
<b>Health and Wellbeing</b>		Occupational health research		Wellbeing strategy
<b>Other</b>	Responsible Procurement			

**Table 2: Items to be incorporated into one or more future quarterly reports**

Accident investigation outcomes
Safety at Junctions
Bus Driver Facilities
CIRAS reporting update
Rail Accident Investigation Branch update

**List of appendices to this report:**

Appendix 1: Safety, Sustainability and Human Resources Panel Plan.

**List of Background Papers:**

None

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