

## Agenda

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

**Date: Wednesday 27 February 2019**

**Time: 10.00am**

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

### Members

Kay Carberry CBE (Chair)

Dr Nina Skorupska CBE (Vice-Chair)

Bronwen Handyside

Dr Mee Ling Ng OBE

Mark Phillips

Val Shawcross CBE

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

This meeting will be open to the public, 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](http://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 19 February 2019

**Agenda  
Safety, Sustainability and Human Resources Panel  
Wednesday 27 February 2019**

**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 Safety, Sustainability and Accessibility Panel held on 5 December 2018 (Pages 1 - 6)**

General Counsel

**The Panel is asked to approve the minutes of the meeting of the Panel held on 5 December 2018 and authorise the Chair to sign them.**

**4 Matters Arising and Actions List (Pages 7 - 16)**

General Counsel

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

**5 Quarterly Health, Safety and Environment Performance Report (Pages 17 - 68)**

Director of Health, Safety and Environment

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

**6 2018 Road Danger Analysis** (Pages 69 - 74)

Director of City Planning

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

**7 Bus Driver Facility Improvements** (Pages 75 - 82)

Managing Director, Surface Transport

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

**8 Update on Energy Strategy** (Pages 83 - 92)

Director of City Planning

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

**9 Human Resources Quarterly Report** (Pages 93 - 108)

Chief People Officer

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

**10 Improving Total Engagement** (Pages 109 - 122)

Chief People Officer

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

**11 Transformation Update** (Pages 123 - 126)

Transformation Director

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

**12 Update on Strategic Risk Achieving Safety Outcomes (SR1)** (Pages 127 - 130)

Director of Health, Safety and Environment

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

**13 Member suggestions for future agenda discussions** (Pages 131 - 136)

General Counsel

**The Panel is asked to note the forward programme and is invited to raise any suggestions for future discussion items for the forward programme, the Panel's induction and for informal briefings.**

**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 10 July 2019 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.**

**17 Strategic Risk Management Update - Exempt Information** (Pages 137 - 140)

## 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 5 December 2018

#### Members

Kay Carberry CBE (Chair)  
Dr Nina Skorupska CBE (Vice Chair)  
Bronwen Handyside  
Dr Mee Ling Ng OBE  
Val Shawcross CBE

#### Executive Committee

Staynton Brown	Director of Diversity and Inclusion
Nigel Holness	Interim Managing Director, London Underground
Andrew Pollins	Transformation Director
Tricia Wright	Chief People Officer

#### Present

Catherine Baker	Director, CIRAS
Martin Brown	Crossrail Director of Health and Safety
Emma Burton	HSE Senior Manger
Jill Collis	Director of Health, Safety and Environment
David Howell	Chief Executive, CIRAS
Nico Lategan	Head of Enterprise Risk
Patrice Locker	Senior Risk Manager
Claire Mann	Director of Bus Operations
Marlon Osborn	Head of Customer Service
Mike Shirbon	Head of Integrated Assurance
James Varley	Secretariat Officer

#### 60/12/18 Apologies for Absence and Chair's Announcements

No apologies for absence had been received from Members. Shirley Rodrigues was unable to attend. Howard Carter and Gareth Powell were also unable to attend.

#### 61/12/18 Declarations of Interests

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

#### 62/12/18 Minutes of the Meetings of the Safety, Sustainability and Human Resources Panel held on 27 September 2018

The minutes of the meeting were approved as a correct record and were signed by the Chair.

## **63/12/18 Matters Arising and Actions List**

Jill Collis provided an update on the staff safety campaigns, with particular reference to activities in the renewals and enhancement programmes. The drive to increase reporting levels had been successful and Members would be given a further update on how processes had been embedded and trends in reporting. **[Action: Jill Collis]**

**The Panel noted the actions list.**

## **64/12/18 Review of CIRAS Impact**

Catherine Baker and David Howell of CIRAS introduced the report and presentation, which provided an overview of the work of the independent confidential reporting line service.

Members were shown an example of the work undertaken and the result, which related to the provision of bus driver welfare facilities.

The role of CIRAS was to receive and act on incoming reports from staff. While CIRAS did not involve itself in the review of TfL's internal process, its activities could highlight issues that would be fed back into process reviews and improvements.

The highest proportion of reporting related to infrastructure, vehicles, equipment and clothing. Members were informed that a consistent approach was used to apply process to address matters.

The Panel discussed why CIRAS was used rather than internal reporting lines. The relatively low number of reports received and the confidential nature of the service meant it was difficult to analyse the data and understand the factors. Some staff had a fear of retribution, though CIRAS felt that this was a perception issue rather than one based on personal experience at TfL. Another significant reason for the use of CIRAS was that users felt internal channels were not effective; again this could be attributed to perception and communication with staff and higher visibility of trades union engagement would help drive improvements.

TfL required contractors to use independent reporting services but did not mandate a specific organisation to use. The arrangements for London River Services would be confirmed. **[Action: Jill Collis]**

There had been an increase in fatigue concerns and work was taking place to understand the underlying reasons. It may be partly attributable to a greater understanding and awareness of fatigue and its effects following the reports into the tram overturning at Sandilands, Croydon in November 2016.

**The Panel noted the paper.**

## **65/12/18 Quarterly Health, Safety and Environment Performance Reports**

Jill Collis introduced the report, which provided an overview of health, safety and environmental performance for London Underground, TfL Rail, Surface Transport and Crossrail services for Quarter 2 2018/19 (24 June to 15 September 2018).

Trends in the quarter had remained consistent and following the launch of the Vision Zero Action Plan and the Bus Safety Standard, it was expected that improvements in trends would be seen in 2019/20.

Work was continuing on mitigating customer injuries. A programme for escalators and stairs was underway and the platform train interface remained a high priority.

Workforce injuries had risen and actions were being taken to reverse the trend including awareness campaigns, safer work practices and improving the safety of tools and equipment.

Bus safety remained a priority. TfL and bus operator management were visiting key locations to see how safety could be improved and on-board announcements were being evaluated.

The recent incident at Croydon, which had seen a bus driver arrested following a crash, has resulted in a review of drug and alcohol testing and on-bus technology to reduce risk.

In response to a question from the Panel, work would take place to look at how technology could be used to assist vulnerable road users at junctions.

TfL was continuing to progress the recommendations of the Sandilands investigation. A lamination solution had been identified for the windows on trams and this would be implemented as soon as practicable

Safety performance on Crossrail remained consistently good, with a focus on two areas – reducing injury sustained as staff leave sites and electricity related injury. A ‘start safe – finish safe’ programme was being introduced for reducing site injuries. Clear procedures and lines of supervision existed for staff and contractors working on electrical infrastructure. Members would be invited to visit Crossrail sites to see how safety was controlled as it transitioned to an operating railway. **[Action: Martin Brown]**

TfL remained on track to meet the 90 per cent target for Euro VI compliant buses by 2020. An update would be given to the Panel on the progress of installation of electric vehicle charging points in the inner London boroughs. **[Action: Alex Williams]**

**The Panel noted the report.**

## **66/12/18 Escalators and Stairs Safety Plan**

Emma Burton and Marlon Osborn introduced the item, which set out the plans for reducing customer injuries on stairs and escalators on the London Underground network.

A list of locations with highest risk had been identified as had the main reasons for accidents. All stations were issued with asset condition reports to complete and return. This was used to inform a collaborative approach to reducing the risk of injury, with input from teams across TfL including Operations, Communications and Customer Experience.

Improvements included the introduction of new messaging on the escalators, improved signage for lifts, new coloured combs on escalators and reduced speed on escalators at certain locations.

Safety messaging was also being shared with third parties such as magazines, websites and social media, so that it could be included in the promotion of events and activities.

Management and front-line staff had also received disability awareness training and an inclusive design advisor has been appointed to improve customer experience.

**The Panel noted the paper.**

## **67/12/18 Human Resources Quarterly Report**

Tricia Wright introduced the report, which provided an overview of key Human Resources led activities and statistics from Quarter 2 2018/19 (24 June to 15 September 2018).

The annual Viewpoint staff survey was launched in October, the results would be presented to the Panel at its meeting on 27 February 2019 and in the meantime, a briefing session would be arranged to explore the key themes. **[Action: Tricia Wright]**

Workforce representativeness was 69.9 per cent, slightly below target of 70.2 per cent. Director / Band 5 representativeness was 41.6 percent against a target of 46.6 per cent.

Work was taking place to increase disclosure rates which was a key part of building up robust data.

Consideration would be given to giving facility time to trades union equality representatives to help provide input into closing pay gaps. **[Action: Tricia Wright]**

**The Panel noted the report.**

## **68/12/18 Graduate and Apprentice Update**

Staynton Brown introduced the paper, which provided an update on the programme.

A key part of the programme was to increase the diversity of candidates and the quality of the schemes.

**The Panel noted the report.**



## **69/12/18 Maximising Potential and Succession Planning**

Staynton Brown introduced the report which set out the talent management framework and its application to succession planning.

The purpose of the work was to mobilise talent across the organisation, assess talent distribution, make it representative and provide a greater diversity in candidates.

Members suggested that greater cross-functional recruitment was needed to increase skills and knowledge and better signposting of career paths would assist with this. In addition, the potential for short term exchanges with suppliers would also be investigated to further enhance development opportunities.

**The Panel noted the report.**

## **70/12/18 Transformation Update**

Andrew Pollins introduced the update on the programme.

The latest phase of the programme involved Public Transport Service Programming (Surface Transport), Transplant (London Underground), Track (London Underground) and Professional Services (Human Resources), involving a total of 692 roles.

A new Business Services function had been created, which would deal with transactional processes in Human Resources and Finance. Three hundred staff had been moved into the new function. A progress report, including organograms and information on smart working, would be provided to a future meeting. **[Action: Andrew Pollins]**

**The Panel noted the report.**

## **71/12/18 Strategic Risk Management Update**

Nico Lategan and Patrice Locker introduced the paper, and related supplemental information on Part 2 of the agenda which updated the Panel on the new Enterprise Risk Management Framework (ERMF).

The EMRF was a consistent way of assessing risk within the organisation and a template had been developed to capture information relating to risk.

Five risks areas had been allocated to the Safety, Sustainability and Human Resources Panel:

- SR1 – Achieving safety outcomes;
- SR2 – Talent attraction and retention;
- SR10 – Catastrophic event;
- SR14 – TfL's environmental impact;
- SR15 – Resilience to climate change and extreme weather.

The Panel considered how it would like risks reported to meetings and what information it required to support its review of those risks. It was agreed that level of detail contained in

the templates was appropriate for the Panel. Members requested reports on the review of Strategic Risks 1 and 10 and also information on any changes to the other strategic risks.

**The Panel noted the paper.**

### **72/12/18 Member Suggestions for Future Agenda Items**

The Chair introduced the item. The Panel requested the outcome of the Loughborough University work on fatigue be added to the forward plan. **[Action: Jill Collis]**

It was also requested that a paper of the London Overground ticket office closure programme be presented to a meeting of the Customer Service and Operational Performance Panel. **[Action: Gareth Powell]**

**The Panel noted the forward plan.**

### **73/12/18 Any Other Business the Chair Considers Urgent**

There was no urgent business.

### **74/12/18 Date of Next Meeting**

The next scheduled meeting of the Panel would be held on Wednesday 27 February 2019 at 10.00am.

### **75/12/18 Exclusion of the Press and Public**

The Panel agreed to exclude the press and public from the meeting, in accordance with paragraph 3 of Schedule 12A to the Local Government Act 1972 (as amended), when it considered the exempt information in relation to the item on: Strategic Risk Management Update

### **76/12/18 Close of Meeting**

The meeting closed at 1.00pm.

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

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

**Date:** 27 February 2019

**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

Appendix 2: Staff Safety Campaigns

Appendix 3: Update on the installation of EV charging points in the inner London boroughs

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

Minutes of previous meetings of the Panel

Contact Officer: Howard Carter, General Counsel  
Number: 020 3054 7832  
Email: [HowardCarter@tfl.gov.uk](mailto:HowardCarter@tfl.gov.uk)

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## Safety, Sustainability and Human Resources Panel Actions List (reported to the meeting on 27 February 2019)

### Actions from the meeting held on 5 December 2018

Minute No.	Description	Action By	Target Date	Status/note
63/12/18	<b>Matters Arising and Actions List</b> Members would be given a further update on staff safety campaigns and how processes had been embedded and trends in reporting.	Jill Collis	27 February 2019	Completed - See Appendix 2
64/12/18	<b>Review of CIRAS Impact</b> Confirm arrangements for the independent reporting line for London River Services (LRS).	Jill Collis	27 February 2019	LRS does not currently have an independent reporting system. It is exploring the system used by the London Port Authority.
65/12/18 (1)	<b>Quarterly Health, Safety and Environment Performance Reports – Crossrail</b> Members to be invited to visit Crossrail sites to see how safety was controlled as it transitioned to an operating railway.	Martin Brown	Ongoing	Dates to be confirmed.
65/12/18 (2)	<b>Quarterly Health, Safety and Environment Performance Reports – EV charging</b> Provide an update on the installation of EV charging points in the inner London boroughs.	Alex Williams	27 February 2019	Completed. See Appendix 3
67/12/18 (1)	<b>Human Resources Quarterly Report – Viewpoint</b> Provide a briefing session on the Viewpoint Survey.	Tricia Wright	27 February 2019	Completed. A briefing session with Panel members was held on 24 January 2019 to explore key themes to come out of the 2018 Viewpoint survey. Feedback from this session has fed into the Improving Total Engagement

Minute No.	Description	Action By	Target Date	Status/note
				update paper on the agenda for this meeting.
<b>67/12/18 (2)</b>	<b>Human Resources Quarterly Report</b> Look at providing facility time to trades union (TU) equality representatives to assist with input into closing pay gaps.	Tricia Wright	27 February 2019	There are no proposals to provide dedicated facility time for equality representatives specifically to close the pay gaps as they already have the opportunity to input via existing machinery. TfL has also recently established a dedicated Diversity & Inclusion Forum, which provides an opportunity for TU representatives to input into proposals to close our gender and ethnicity pay gaps.
<b>70/12/18</b>	<b>Transformation Update – Business Services</b> A progress report, including organograms and information on smart working, would be provided to a future meeting.	Andrew Pollins	Ongoing	To be included in future Transformation Update papers.
<b>72/12/18</b>	<b>Member Suggestions for Future Agenda Items – Fatigue</b> The outcome of the Loughborough University work on fatigue to be added to the forward plan.	Jill Collis	10 July 2019	Added to Forward Plan.
<b>72/12/18</b>	<b>Member Suggestions for Future Agenda Items – Overground Ticket Offices</b> The London Overground ticket office closure programme be presented to a meeting of the Customer Service and Operational Performance Panel.	Gareth Powell	13 February 2019	Completed. Discussed at the CSOP Panel meeting held on 13 February 2019.

**Outstanding actions from previous meetings.**

<b>Minute No.</b>	<b>Description</b>	<b>Action By</b>	<b>Target Date</b>	<b>Status/note</b>
<b>32/06/18</b>	<b>Improving Cyclist Safety in London</b> Provide a note on modal shift in cycling.	Lilli Matson	-	In progress.

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## **Update of LU Renewal and enhancements staff safety campaigns**

This update addresses a request by the Panel at its meeting on 5 December 2018 for a further update on staff safety campaigns and how processes had been embedded and trends in reporting (Minute reference 63/12/18).

The first thing undertaken was to measure the number of incident reports being raised. This was around 15 to 20 a week to start with. Each one was read and used to prompt the safety conversations in the leadership meetings. Near miss reports also promoted safety conversations in team meetings. This resulted in a slight but variable increase in reporting.

The team were asked what would help to improve near miss reporting. Key factors arising from this were not having time to go on site to encourage reporting and identifying issues, together with issues with the reporting system itself. As a result cards were introduced so near misses could be raised in the moment, by anyone and posted into a box, where a nominated member of the team would then input them to the reporting system. To address the time issue it was built into objectives to undertake a site visit each period where the aim was to look for near misses. This went into the teams objectives at the start of the year to help them fully understand their roles and responsibilities. This was partnered with a lot of story telling, praise on yammer for good reporting, and continuing to speak to the team about what was stopping them go on site and helping them (joint visits, other teams sites).

This resulted in a big and relatively sustained increase of 70, 80, 90 reports per week (against our self imposed target of 100). Reporting had increased as did a decline in injuries. We were including everything (office, site, incidents that didn't require first aid).

This was followed by categorisation of the reported incidents such that a focus could be given on the issues. The first campaign related to Safe Systems of Work (SSOW) Ensuring they were adequate and being followed and empowering people to stop work if they were not and changing them. Issues around this were the most frequent near miss reported.

In September we launched a presentation which is being rolled out to all in Renewals and Enhancements, including suppliers around why near miss reporting works. Based on the Swiss cheese model it has helped energise those who were already believers and help the penny drop for the doubters.

In addition to this we have really capitalised on the energy and commitment of those who really believe zero harm is possible by keeping them up to date, awarding / praising their leadership.

We do have a good practice category in the reporting and are promoting reports of good practice.

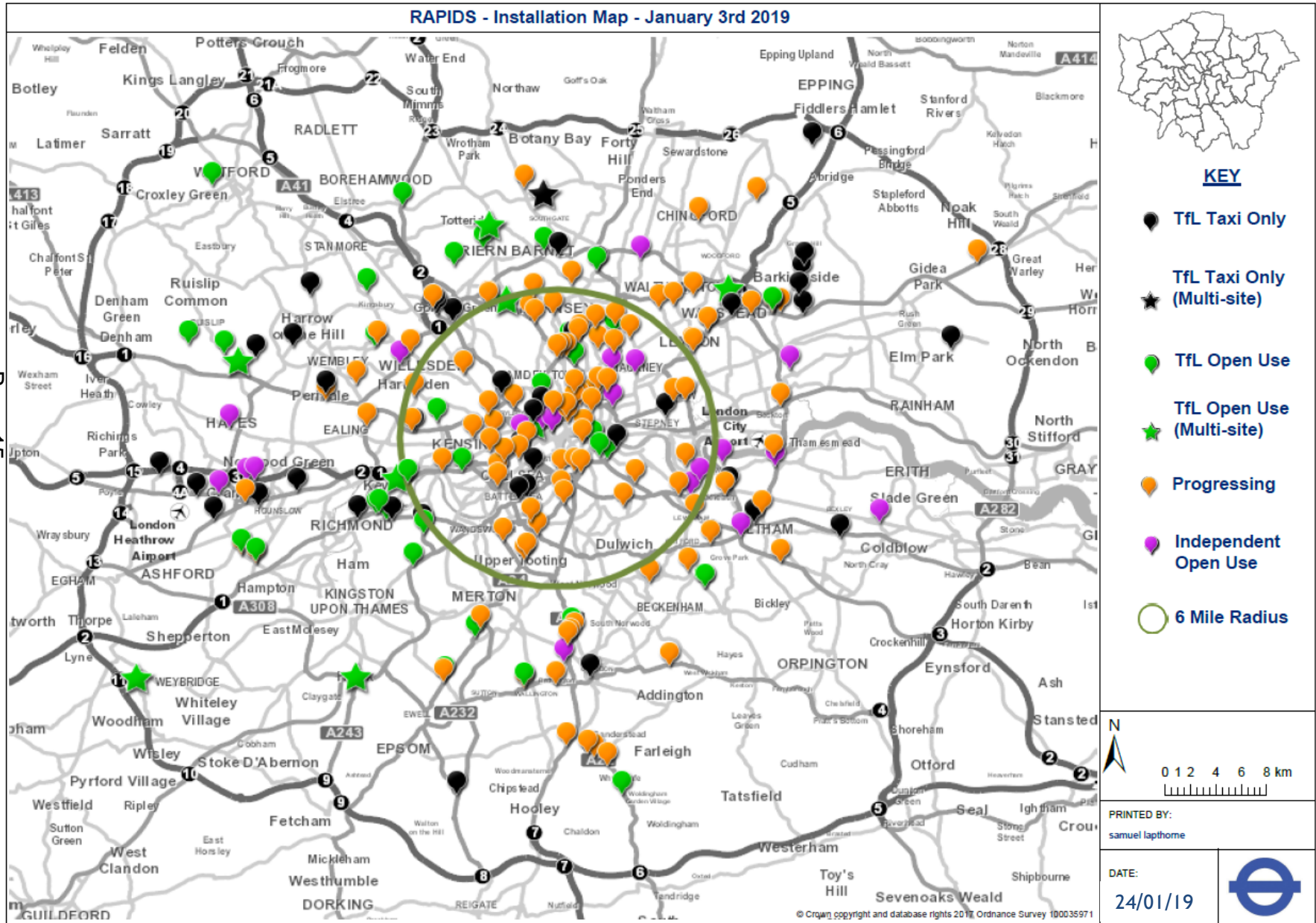
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# Rapids Installation Map - London Wide

Data produced on 24 January 2019

RAPIDS - Installation Map - January 3rd 2019

Page 15



# RAPIDS - Inner London Charge Points - Feb 2019



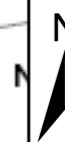
## Rapid Charging Bays

- TfL Open Use
- ★ TfL Open Use (Multi-Site)
- TfL Taxi Only

**Total RCPS = 63**  
**(across 54 locations)**

**Taxi Dedicated = 21**

**Public = 42**



0 1 2 4 6 8 km

PRINTED BY:

MatthewChandler

DATE:

**08/02/2019**



**Date:** 27 February 2019

**Item:** Quarterly Health, Safety and Environment Performance Report

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

### **1 Purpose**

- 1.1 This report provides an overview of the health, safety and environment (HSE) performance for London Underground (LU), TfL Rail, Surface Transport (including London Rail) and Crossrail.
- 1.2 Generally, this report covers inclusive, 16 September 2018 – 8 December 2018 referred to as Quarter 3.

### **2 Recommendation**

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

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

Appendix 1: Health, Safety and Environmental Performance – Quarter 3 – 2018/19

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

None

Contact Officer: Jill Collis, Director of Health, Safety and Environment  
Number: 020 3054 8158  
Email: [jill.collis@tube.tfl.gov.uk](mailto:jill.collis@tube.tfl.gov.uk)

# Transport for London Health, Safety and Environment report

Quarter 3 2018/19 (16 September 2018 – 8 December 2018)

MAYOR OF LONDON



**TRANSPORT  
FOR LONDON**  
EVERY JOURNEY MATTERS

# About Transport for London (TfL)

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'. We are committed to creating a fairer, greener, healthier and more prosperous city. The Mayor's Transport Strategy sets a target for 80% of all journeys to be made on foot, by cycle or using public transport by 2041. To make this a reality, we prioritise health and the quality of people's experience in everything we do.

We manage the city's red route strategic roads and, through collaboration with the London boroughs, can help 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 and improve air quality, revitalise town centres, boost businesses and connect communities.

We run most of London's public transport services, including the London Underground (LU), London Buses, the DLR, London Overground (LO), TfL Rail, London Trams, London River Services (LRS), London Dial-a-Ride, Victoria Coach Station (VCS), Santander Cycles and the Emirates Air Line. The quality and accessibility of these services is fundamental to Londoners' quality of life. By improving and expanding public transport, we can make people's lives easier and increase the appeal of sustainable travel over private car use.

We are moving ahead with many of London's most significant infrastructure projects, using

transport to unlock growth. We are working with partners on major projects like Crossrail 2 and the Bakerloo line extension that will deliver the new homes and jobs London and the UK need. We are in the final phases of completing the Elizabeth line which, when it opens, will add 10% to London's rail capacity.

Supporting the delivery of high-density, mixed-use developments that are planned around active and sustainable travel will ensure that 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 freezing TfL fares so everyone can afford to use public transport, using 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. We all need to pull together to deliver the Mayor's Transport Strategy; by doing so we can create a better city as London grows.

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91	Audit conclusions

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## 92 Appendix I: Sandilands investigation recommendations applicable to TfL

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# Introduction

Performance in the third quarter of this year was mixed. Unfortunately there were 2 accidental customer fatalities on our public transport network, one as a result of a fall on a bus and the other as result of a customer falling from a platform and being stuck by a train. The latest provisional road collision figures (July - September 2018) also indicate that the number of people killed or seriously injured on London's roads has increased. This emphasises that building strong partnerships with key stakeholders to drive improvements is key to eliminating deaths and injuries from our road and public transport networks.

With this aim in mind, during the quarter:

- We held our first Vision Zero Summit in November which brought together London politicians, councils and business leaders with victims of road trauma, emergency services representatives and international Vision Zero experts, to understand how they can help eliminate deaths and serious injuries from London's transport network
- We held our second Bus Safety Summit in October, with key players from the bus industry, policy-makers and research specialists. The event launched our world-leading Bus Safety Standard, which sets out our plans to make buses in London the safest in the world
- Our second Zero Harm Forum brought together over 30 of our key suppliers from our capital programmes. The agenda was led by our supply chain partners and looked at ways to strengthen health, safety and environmental performance across all parts of the supply chain

Overall, we are meeting our targets to reduce customer and workforce injuries:

- There were 5% fewer customer injuries across our network this quarter and 8% fewer workforce injuries compared to the same quarter last year
- Although the number of customer injuries on LU has increased by 14% compared with the same quarter last year, bus customer injuries have reduced for the fourth consecutive quarter
- There were 17% fewer injuries to bus customers than in the same quarter last year. The majority of the improvement was achieved in our two key areas of focus over the past year; slips, trips and falls (down 14%) and collisions (down 28%)

We also continued our programme of asset and infrastructure changes to eliminate risk at source. Key improvements delivered during the quarter include:

- Realigning the edge of the platform at Victoria and East Putney Stations to reduce the gap between the train and the platform and continuing our programme to install improved platform cameras and escalator signage
- Completion of works at Bruce Grove to deliver improvements for pedestrians and cyclists and the start of on-site works for the Old Street Gyatory improvements
- The opening of 3 new Quietways for cyclists
- The creation of five new Low Emission Bus Zones and the installation of new signage in advance of the introduction of the Ultra-Low Emission Zone

Gareth Powell  
Managing Director  
Surface Transport

Nigel Holness  
Managing Director  
London Underground

Stuart Harvey  
Director  
Major Projects

Jill Collis  
Director  
Health, Safety and Environment



Passengers using transport at Aldgate East



# Performance at a glance

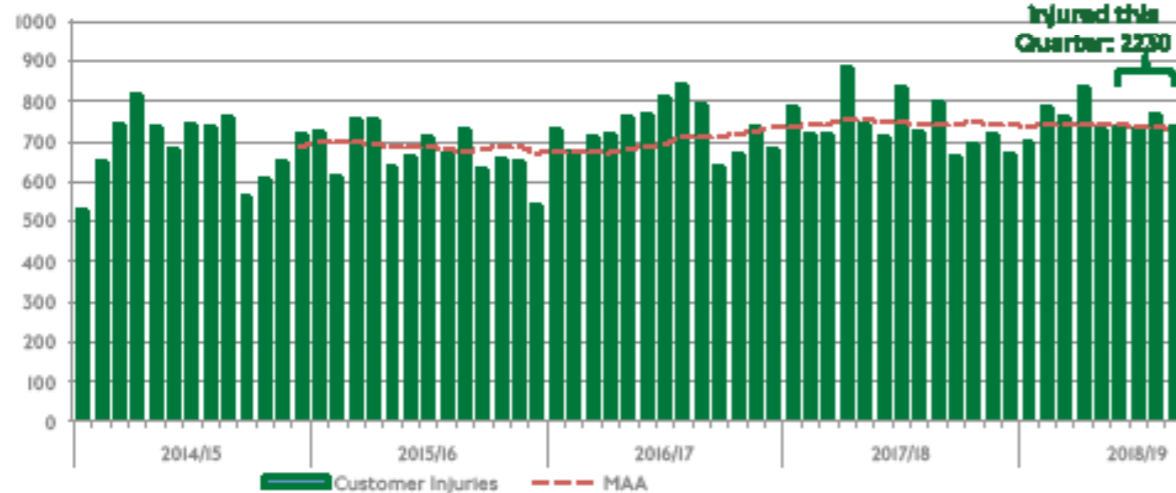
## 2018/19 TfL Scorecard

Long Term Objectives	2018/19 Scorecard	Year to date	
Outcome	Measure	Actual	Target
<b>Healthy Streets and healthy people (18%)</b>			
London's transport system will be safe and secure.	Reduction in people killed or seriously injured on the roads from 2005-09 baseline (%)	34.0*	45.4
	Reduction in people killed or seriously injured on the roads from 2005-09 baseline (incidents involving buses)(%)	57.7	58.0
	Injuries on the public transport network	8134	8266
London's streets will be clean and green.	Number of London's buses that are Euro VI compliant	6000	n/a

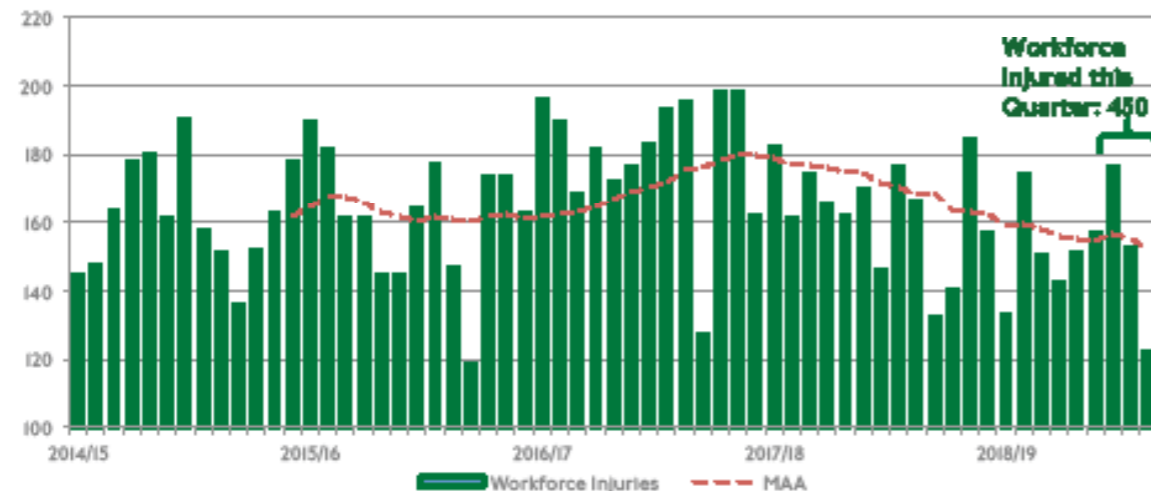
\* All 2018 data is provisional. This data is subject to change as this information is reviewed and managed by the Metropolitan Police Service (MPS).

## Customer and workforce injuries

Public transport customer injuries



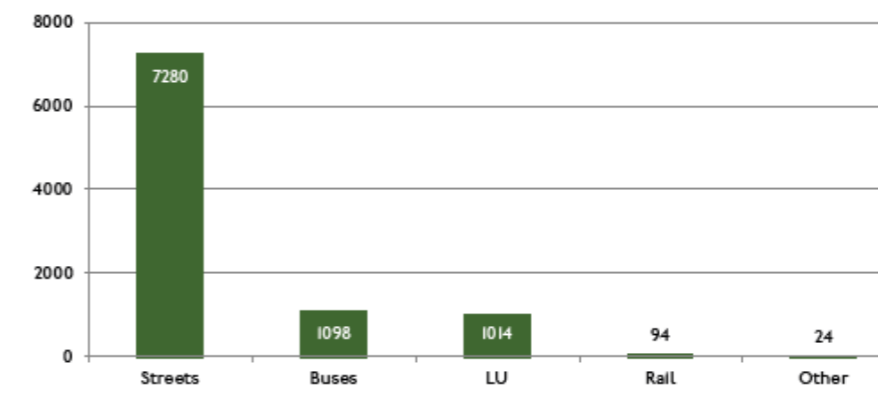
Workforce injuries



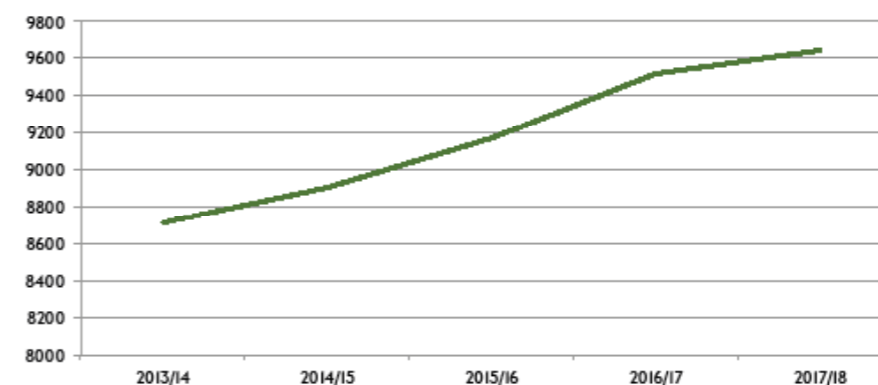
## Injuries on London's road and public transport networks

For the most recent quarter available (July-September 2018), there were 7,280 injuries on London's roads. This included 31 fatalities. All 2018 data is provisional. This data is subject to change as this information is reviewed and managed by the Metropolitan Police Service (MPS). Across our public transport networks, a total of 2,230 customers were injured, 5% fewer than the same quarter of last year. There were 2 customer fatalities during quarter 3, 1 on buses and 1 on London Underground (LU) compared with 2 fatalities on buses last quarter.

Number of customer injuries on the road and public transport networks (Quarter 3)



Number of customer injuries on the road and public transport networks (Annual totals)



2.9

Number of injuries per million passenger journeys on the LU network (12% ▲ against Q3 2017/18)



2.1

Number of injuries per million passenger journeys on the bus network this quarter\* (14% ▼ against Q3 2017/18)



0.9

Number of injuries per million passenger journeys within our rail operations this quarter (4% ▼ against Q3 2017/18)



4.4

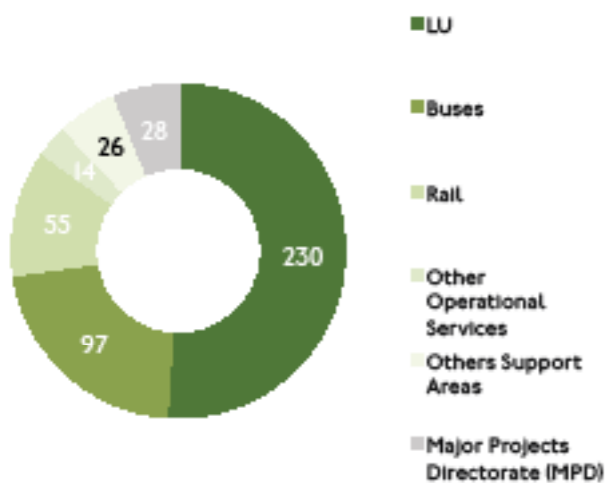
Number of injuries per million passenger journeys within our other operations this quarter (4% ▼ against Q3 2017/18)



\* Injuries to members of the public who are not bus customers are included in the Killed or Seriously Injured (KSI) figures within the streets section.

## Number of workforce injuries on the network (Quarter 3)

There were a total of 450 injuries to our workforce, a 8% decrease on the same quarter last year.



# 230

Number of workforce injuries on the LU network this quarter (2% ▼ compared to Q3 2017/18)



# 97

Number of workforce injuries on the Bus network this quarter (30% ▼ compared to Q3 2017/18)



# 43

Number of total construction workforce injuries quarter (19% ▼ compared to Q3 2017/18)



## Significant incidents

Significant incidents are incidents that result in either a fatality, 3 or more people requiring hospital treatment, or those resulting in a loss of more than £1 million. This quarter there have been 27 significant incidents across London's road and public transport networks, 25 of which were accidental fatalities:

- A customer was fatally injured at Farringdon station as a result of falling from a platform and being struck by a train
- A bus customer died from injuries sustained in a fall on a route 55 bus
- Three pedestrians were fatally injured in collisions with a bus on routes:
  - 225 on Deptford Broadway, Deptford
  - X26 bus on Pound Street, Carshalton
  - 114 Kenton Road, Harrow
- A further 20 people were killed on London's roads (provisional data for the period covered by this report, subject to change); 8 pedestrians, 3 cyclists, 3 motorcyclists, 6 car drivers

Other significant incidents arising from our public transport activities were:

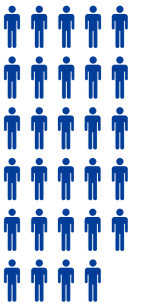
- A route 198 bus collided with a car, another bus and a bus station canopy in West Croydon. A 15 year old female suffered serious injuries with a broken collar bone and a punctured liver. A total of 18 people were injured in this incident. The bus driver was tested and failed a drugs test at the scene. He was arrested
- A fire at Orpington bus garage. The garage was successfully evacuated with no injuries sustained. Twelve buses were damaged due to the fire

Police and Regulator investigations are underway for these incidents. Fourteen historic incidents were concluded by the Coroner during the quarter. Causes of death were recorded as suicide (5), accidental (2), as a consequence of mental illness (1), and road traffic collision (2). A narrative verdict was given in respect of 3 deaths and an open verdict was recorded in respect of 1 death. Additionally the inquests into the deaths of those who were killed during the Westminster Bridge terror attack on 22 March 2017 were concluded.

# 25

Number of accidental fatalities

(13% ▼ against Q3 2017/18)



On 22 March 2017, 4 people were killed on Westminster Bridge in a terror attack when they were struck by a vehicle that was driven by the attacker along the pavement. The attacker also stabbed a police officer who died from his injuries in the grounds of the Palace of Westminster. The Coroner concluded that all 5 victims were unlawfully killed. He did not find the lack of barriers or the parapet height of the Bridge to have caused or contributed to the deaths of the victims. The Coroner issued a Prevention of Future Deaths (PFD) report, and suggested that we consider:

- Whether there is any further work we can do to improve protective security on major roadways and bridges in the capital, in response to national advice and known threats
- Reviewing the height of parapets and railings of bridges for which we are responsible. A response to the report is being prepared

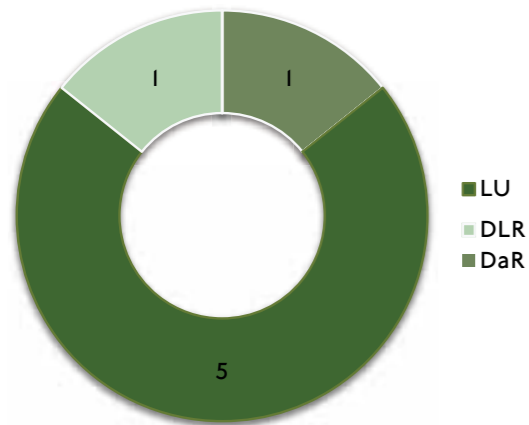
At Kingston (Cromwell Road) Bus station on 22 March 2014, an elderly bus passenger was hit by a reversing bus. The Health and Safety Executive prosecuted the driver of the bus from which the deceased alighted, but he was found not guilty in late 2017. The jury gave a narrative conclusion of accidental death by road traffic collision and detailed a sequence of events contributing to her death including there being inadequate signage for pedestrians at the back of the bus station. The Coroner indicated that he may issue a PFD report to us about signage in the station, the report is awaited.



Barriers to protect pedestrians on Westminster Bridge

## Statutory reporting of customer and workforce injuries

### Customer RIDDORs\*

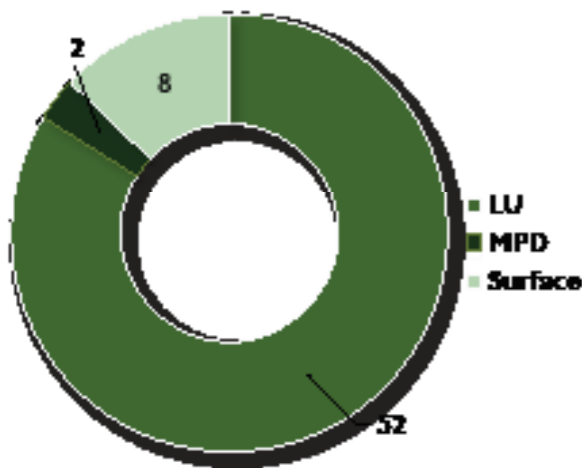


A total of 69 customer and workforce injuries were reported to our regulators; the Health and Safety Executive (HSE) and Office of Rail and Road (ORR) this quarter.

### Customer RIDDORs

There were 7 customer injuries that required reporting to our regulators this quarter. Five injuries related to LU, of which 4 were the result of falls. A further incident related to an injury to a customer due to a fall on a train on the DLR. A customer was taken to the hospital with hip strain after slipping on a Dial-a-Ride vehicle.

### Workforce RIDDORs\*



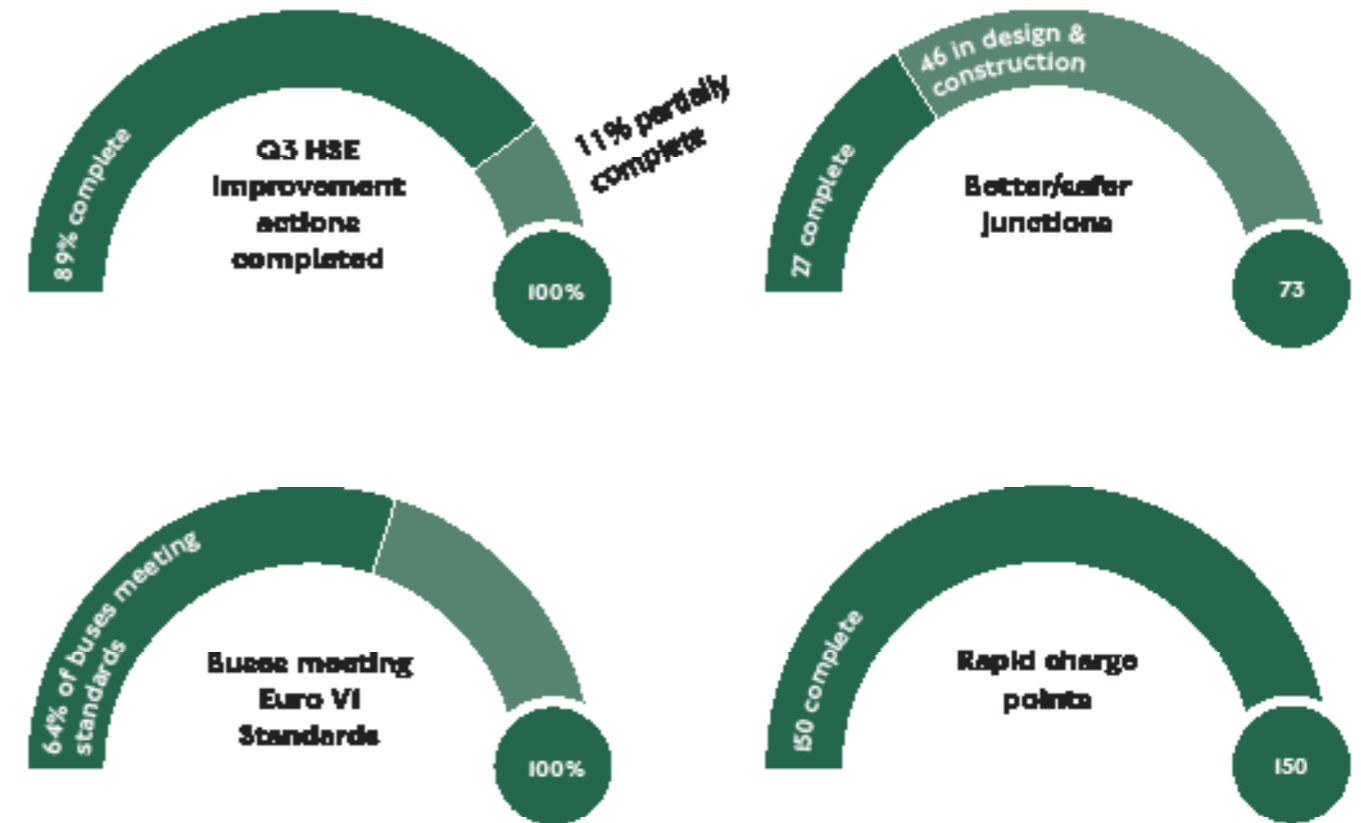
### Workforce RIDDORs

Two of the reportable incidents affecting our workforce this quarter were major, 1 arising from a slip, trip, fall and the other the consequence of an assault.

The other reported incidents related to minor injuries, and were triggered by the 7 day absence criteria within the regulations, rather than the severity of the injury.

Slips, trips and falls, workplace violence and injuries connected with contact with machinery/equipment or power tools were the main cause of injuries across Surface Transport and LU. Manual handling of tools was the cause of injuries in our Major Projects Directorate (MPD).

## Health, Safety and Environment Improvements



\* Reporting of Injuries, Diseases and Dangerous Occurrence Regulations (RIDDORs).



London's  
transport  
system will  
be safe and  
secure

# Spotlight on... Bus Safety Summit

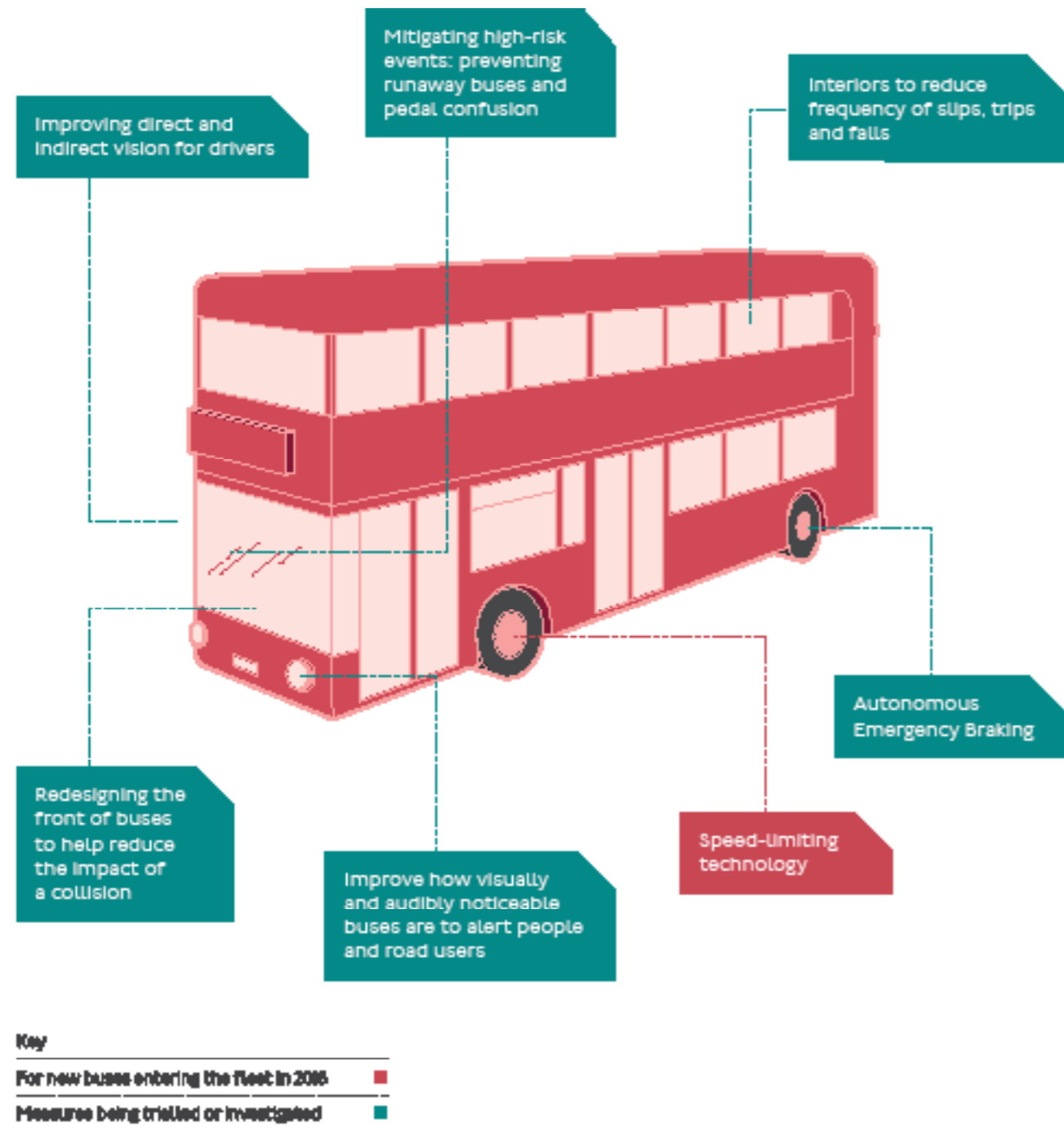


Figure I. Bus Safety Standard features

On 16 October we held our second Bus Safety Summit bringing together bus operators, bus manufacturers, policy-makers and transport research specialists. The event was opened by Heidi Alexander, Deputy Mayor for Transport. Delegates were reminded of the ambitious targets set in our Vision Zero action plan to end the toll of deaths and serious injuries on London's streets and the specific targets set for buses.

The event launched our Bus Safety Standard (BSS), which sets out our plans to make buses in London the safest in the world. It featured a number of stands and practical demonstration spaces which enabled delegates to gain a better understanding of the features and functions being trialled and introduced by the BSS. It also provided an opportunity for bus operators awarded funding for safety improvements under our Bus Safety Innovation Fund to feed back their findings and learning to the wider industry.

## Bus Safety Standard launched

In February 2016, as part of our bus safety programme, we committed to developing the BSS. Since then we have commissioned the Transport Research Laboratory (TRL) to research and develop that standard. This has been an evidence-based and collaborative project, consulting with the bus manufacturers and operators on technical feasibility, timelines and implementation, so that we have the confidence that the safety measures will make a real contribution to Vision Zero.

The BSS is focussed on vehicle design and safety system performance. As such it will be a substantial contribution to helping us achieve the Mayor's goal of no-one being killed in or by a London bus by 2030.

We already set higher standards for London buses than regulations require; including the areas of environmental and noise emissions, accessibility, construction, operational requirements and fire suppression systems. The new BSS goes further.

## Ground-breaking safety features

The requirements all operators will need to adopt by 2024 address 4 themes:

- **Driver Assist** - helping the driver to avoid or mitigate the severity of incidents
- **Partner Assist** - helping the other road users involved, to avoid the collision
- **Partner Protection** - reducing the severity of injuries for road users outside the bus in a collision
- **Occupant Protection** - reducing the severity of injuries for people on board the bus

These are illustrated in **Figure I. Bus Safety Standard features**.

### Benefits delivered in the near term

The BSS will also reduce road danger and injury in the short term. From the end of this year, any new London bus entering the fleet must include the following safety measures:

- Technology that automatically limits the speed of the bus to the sign posted speed limit
- An audible alert for pedestrians and other road users of the presence of quiet-running electric buses, which ensures the bus can still be heard by those who are blind or partially sighted
- Slip reduction measures inside buses such as high-grip flooring
- More blind-spot mirrors and reversing cameras
- Special warning pedal indicators for drivers to correct pedal confusion

These innovative safety measures have been thoroughly tested by the TRL, bus manufacturers and operators to ensure they can be implemented as quickly as possible.

### Continuous Improvements

The BSS complements initiatives that have already been implemented to improve the overall safety culture within our bus operations, such as regular assessments of safety management and culture within the bus operating companies and the use of a Safety Performance Index to monitor performance. The BSS is intended to be a rolling programme, so this initial large programme of research is just the starting point. The specifications will be updated



A pre-use check of a London bus

regularly to keep extending the preventative and protective benefits of these and future safety measures on buses. Testing and trials will continue to investigate the capability of new technologies and bus features via our Bus Safety Innovation Challenge.

Strong steps towards safer buses for London are achievable through this world-leading Bus Safety Standard, which we hope will be taken up by other transport authorities, bus manufacturers and operators globally.

## Streets - overview

**31**

Number of fatalities on streets this quarter  
▲ Up from 28 in Q3 2017



**1,220**

Killed or seriously injured on London's roads  
▲ Up 26% from Q3 2017/18\*



Long term trend - Killed or seriously injured on London's roads

### Performance headlines

- ✗ The greatest increase in those killed or seriously injured was amongst cyclists (83%)\*
- ✓ Pedestrians killed or seriously injured fell by 8%\* compared with the same quarter last year

### Did we deliver our planned improvements?

- ✓ Commenced on-site enabling works for the Old Street Gyratory improvements
- ✓ Opened Quietway 6 between Wanstead Flats and Barkingside, Quietway 14 from Blackfriars to Tower Bridge Road and Quietway 22 (Newham Greenway)
- ✓ Commenced detailed design on the TfL Road network sections of segregated Cycleway 4
- ✓ Completed works at Bruce Grove to deliver pedestrian and cycling improvements
- ✓ Completed consultation on proposals for pedestrian improvements to Tooting town centre, including improvements to pedestrian and cycling facilities, and a reduction in vehicle speed limits

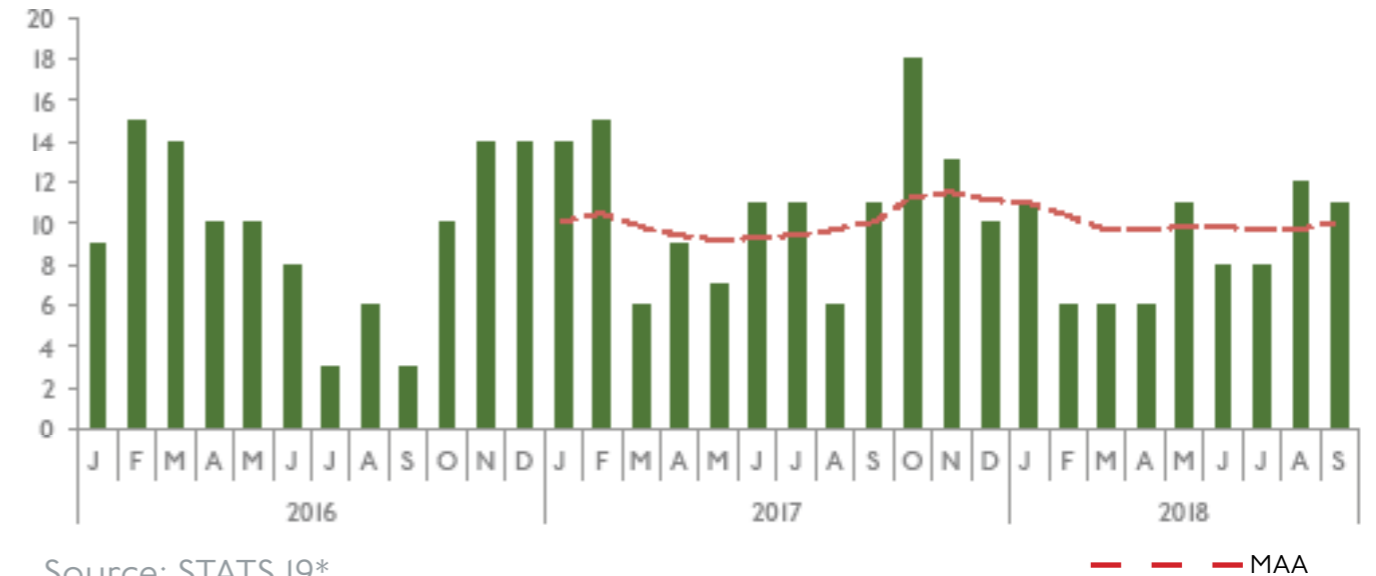
### Our plans for the next quarter

- Launch the Temporary Traffic Management Handbook to improve safety at roadworks
- Continue with our programme of Supplier Assessments for highway contractors
- Complete installation of zebra-crossings at bus-stop by-passes
- Continue regular high profile police enforcement operations
- Release a slower speeds toolkit to inform the developers of highway schemes
- Trial the effectiveness of localised interventions in influencing customer behaviour
- Open consultation on final proposals for the introduction of a Direct Vision Standard for HGVs
- Develop a methodology for predicting road risk
- Provide each London Borough with bespoke information on injury trends, risks and issues
- Start construction of segregated Cycleway 10
- Consult those with direct experience of road collisions and their aftermath, to inform future improvement plans

\* These figures are provisional and subject to change as a result of the MPS's data validation processes. In the last six months for which validation has been completed, on average the effect of MPS validation has been to reallocate approximately 20% of collisions that were initially believed to be 'serious' to the 'slight' category. This means that it is not possible at the time of writing to reliably compare this provisional data to previous years' performance.

## Streets - performance

### Fatalities on London's roads



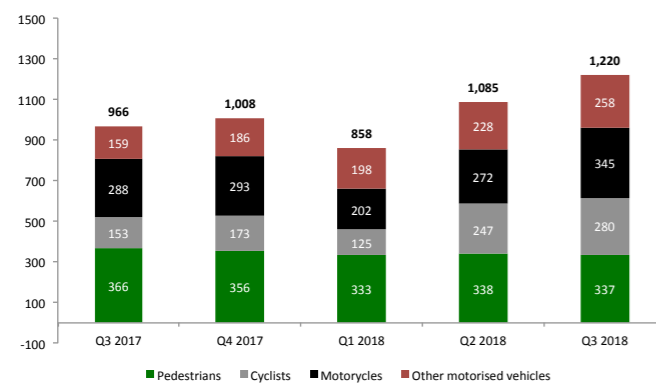
Source: STATS 19\*

Road casualty data is reported by calendar month. For the most recent quarter available, July - September 2018, a total of 31 deaths were recorded on London's roads, compared with 28 for the same period in 2017. Road safety data is based on calendar quarters rather than financial quarters. All 2018 data is provisional. This data is subject to change as this information is reviewed and managed by the MPS. All incidents involved adults over the age of 18; 11 were 60 years of age or over. The individuals killed in these incidents included pedestrians (16), pedal cyclists (6), motorcyclists (6), and car drivers (3).

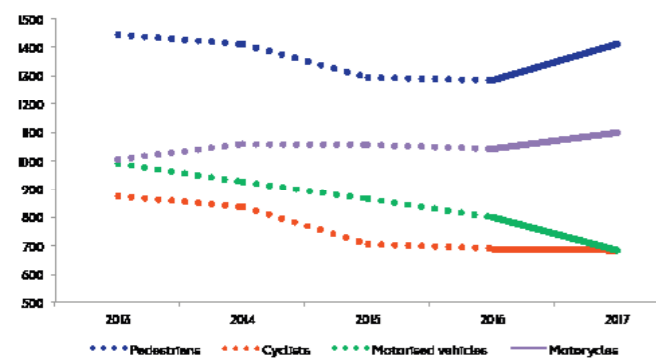


## People killed or seriously injured

Past five quarters (type of user)



Annual totals\*



The provisional figures for July-September 2018 indicate that the number of people killed or seriously injured has increased compared to the same quarter last year. These figures are provisional and subject to change as a result of the MPS's data validation processes. In the last six months for which validation has been completed, on average the effect of MPS validation has been to reallocate approximately 20% of collisions that were initially believed to be 'serious' to the 'slight' category. This means that it is not possible at the time of writing to reliably compare this provisional data to previous years' performance. Taken at face value, however, the greatest increase (83%) was amongst cyclists. This may be because there were more people cycling: levels of cycling in central London increased by 7.5% during quarter 3 2018 compared the same quarter last year, to the highest level on record - possibly as a result of the extended dry and warm weather conditions. The number of car occupants killed or seriously injured and the involvement of cars in killed or seriously injured collisions with cyclists increased. KSIs involving motorised vehicles and motorcyclists increased by 40% and 18% respectively compared to the same quarter in 2017. During quarter 3 there was an 8% reduction in the number of pedestrians killed or seriously injured compared with quarter 3 2017.

\* Figures from the end of 2016 have been reported using a new system (COPA). The dotted lines in the graph for calendar years 2013-2016 denote back-estimated figures following analysis undertaken with the Transport Research Laboratory to indicate how KSIs would have been reported under this system in previous years.



Old Street gyratory to be removed as part of Safer Junctions Programme

# Actions to reduce death and serious injury on London's roads

## Vision Zero Summit engages key partners

On 13 November 2018 we held a Vision Zero Summit to inspire senior leaders across London to take ownership and accountability for Vision Zero within their organisations. London politicians, councils and business leaders joined victims of road trauma, emergency services representatives and international Vision Zero experts to understand how they can help eliminate deaths and serious injuries from London's transport network. It enabled networking across these organisations to build momentum and enable joint delivery of initiatives. The London Boroughs are key partners in delivering the Vision Zero approach, and have embedded this approach into their local implementation plans.

## Immediate action to reduce risk and injury

We have launched a new process for site visits to locations that have recently experienced fatal or serious traffic collisions on or near our assets. These ensure that any quick precautionary actions that reduce the risk at that site, or at similar locations, are taken.

## Targeting dangerous drivers

In November, our Roads and Transport Policing Command (RTPC) partnership with the MPS began Operation Vision Zero, to focus on the most dangerous drivers. During an enhanced two week programme of enforcement, 4758 offences were dealt with by on-street officers. There were 507

drivers stopped for mobile phone use, 654 for speeding, 559 caught driving without insurance and 1,394 for mechanical defects. Officers also dealt with 519 cycling offences such as red light jumping.

## Infrastructure improvements to reduce road danger

Our programme of infrastructure improvements to reduce road danger and deliver specific improvements for Vulnerable Road Users continues.

## Making road junctions safer

In the quarter, construction was completed at 3 key locations on the Safer Junctions programme\*: Charlie Browns Roundabout in Redbridge, Farringdon Road/Clerkenwell Road and Farringdon Street/Snow Hill in City of London. Construction also started at Euston Road/Judd Street in early November to deliver safety improvements for cyclists.

The initial stages of construction commenced at Old Street Roundabout in November, with the main works due to follow in spring 2019. The project will transform the area, with the removal of the gyratory system and new and improved pedestrian and cycling facilities. We also published our plans for the redesign of Stoke Newington gyratory, which includes new pedestrian crossings, a 20mph speed limit and a new cycle lane.

## Improving town centres

Public consultation on proposals for improving Tooting town centre took place between October and December. These include

improvements for bus customers, pedestrians and cyclists, and a reduction in speed limits.

## Safer cycling - Mini-Hollands

The Mini-Holland Programme involves 98 infrastructure schemes and 5 behaviour change schemes across 3 outer London boroughs – Waltham Forest, Enfield and Kingston. Thirty two of the 103 Mini-Holland schemes are now complete, including the A105 Green Lanes scheme, a five kilometre protected cycle route linking Enfield Town to Palmers Green.

Further schemes currently under construction include segregated cycle routes on Wheatfield Way in Kingston, on the A1010 in Enfield and on Lea Bridge Road in Waltham Forest.

## Safer cycling - segregated Cycleways

Work continues on the remaining non-core parts of East-West segregated Cycleway. Handover of West and South Carriage Drive to The Royal Parks took place in December 2018, Detailed design work for North Carriage Drive has begun, with build due to commence in January 2019, subject to works licence and approvals. Main construction works at Trinity Square were completed in October and the final resurfacing works were completed in December. Following the public consultation on segregated Cycleway 4 in late 2017, the Response to Issues Raised Report was published in December 2018, with construction work planned to start in summer 2019. The detailed design has been progressing well, with draft detailed designs for 2 out of the 5 sections completed in December.

## Safer cycling - Quietways

In October we launched 3 new Quietways:

- Quietway 14 - a 2km route connecting Blackfriars Road and Bermondsey which will eventually connect to Deptford and Thamesmead. Five main roads are now safer to cross by bike or on foot and 2 streets have been closed to motor traffic.
- Quietway 22 - a 6.5km route connecting Stratford High Street to Cycleway 3 at Newham Way via West Ham and Plaistow Park
- Quietway 6 - a new 6.5km route connecting Wanstead Flats and Barkingside via a newly-built bridge in Valentine's Park, and a new two-way cycle track on Forest Drive



\*Improving those with the highest vulnerable road user collision rates between 2013 and 2015.

### Reducing risk at bus-stops

The project to retrofit zebra crossings onto 43 bus stop bypasses on existing segregated Cycleways is progressing well. Sixty per cent of the sites are complete and the crossings are in use. The remaining sites are planned to be complete by the end of March 2019.

### Lowering speed limits

The completion of the programme is on track to meet the Mayoral target of May 2020. We are continuing to look at other locations across London where the posted speed limit can be reduced as part of planned schemes, such as the Camden to Tottenham cycle route where a 20mph speed limit will be introduced.

### Making HGVs safer

We plan to improve safety for vulnerable road users through setting higher safety standards for Heavy Goods Vehicles (HGVs) coming into London with our Direct Vision Standard. This Standard will use a simple zero to five star rating system to define how much an HGV driver can see directly from each vehicle's cab, rather than through mirrors or other equipment. It will give regulators, manufacturers, operators and contractors an objective standard by which to rate and improve the safety of HGVs.

As the Standard and the associated HGV Permit Scheme proposal for London amount to a technical regulation, we were required to notify the European Commission to ensure that it did not conflict with 'free movement' within the European Union. On 6 December we were notified that the European Commission had no objections

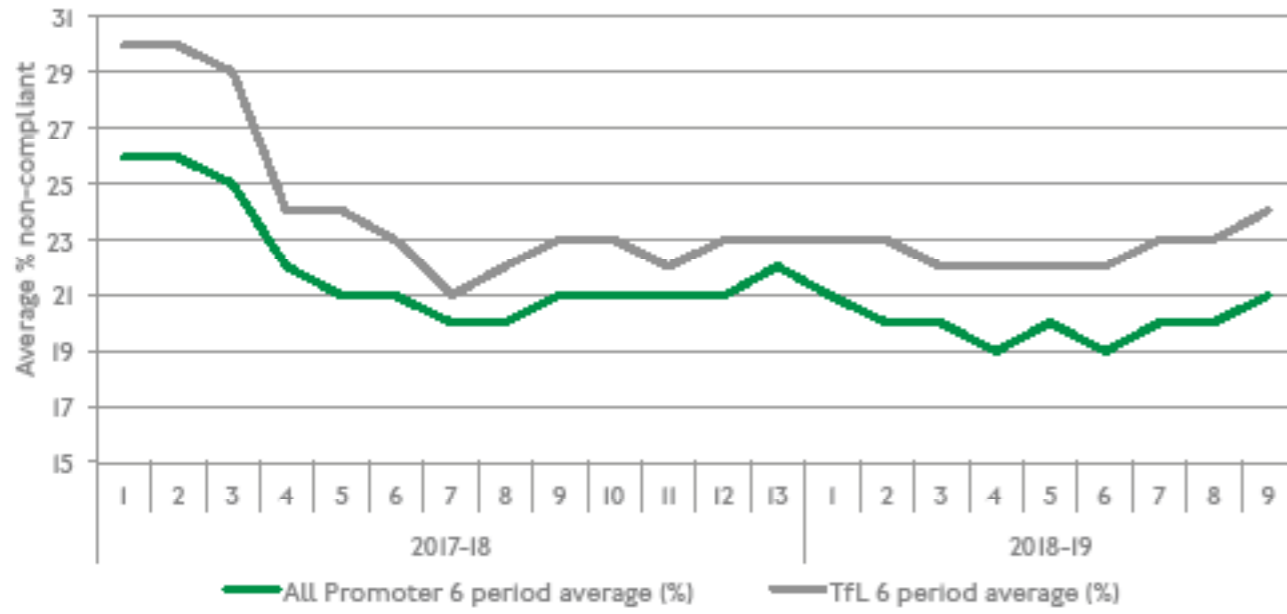


Cyclists on new Quietway 14

to our proposals. Achieving this milestone means we remain on track for issuing permits in October 2019. Although we have consulted on these proposals in the past, as the scheme has developed, we want to share more detail on how it works in practice. As such, an additional consultation was opened in January 2019.

# Actions to make roadworks safer

Safety at roadworks (Inspection failure rate) 



## Making roadworks safer

The 'Safety at Roadworks' measure monitors the number of signing, lighting and guarding (SLG) inadequacies at roadworks sites, observed during safety inspections (undertaken in line with the New Roads and Streets Works Act [NRSWA] Code of Practice for Inspections).

Following a period of improvement at the start of 2017/18, our own performance plateaued, and has remained static for some time. To drive improvement, performance recovery plans have been agreed with each individual London Highways Alliance Contract (LoHAC) contractor.

Within each recovery plan, the same stepped targets have been set:

1. A maximum of 15% failures by end of Q4 (2018/19)
2. A maximum of 12.5% failures by end of Q2 (2019/20)

## Innovating to improve safety

At 25 October we launched London RoadLab, our first open innovation programme where innovators pitch ideas for tackling some of the problems caused by roadworks; including how we can make them safer. The programme brings us together with partners like London Councils and utility companies to work together to solve issues. Those shortlisted will join a ten-week programme and work with experts to develop products that could have a positive impact across the Capital.



Protecting cyclists at roadworks

## Buses - overview

**1,098**  
Number of injuries on the bus network this quarter  
(17% ▼ against Q3 2017/18)



**2.1**  
Number of injuries per million passenger journeys on the bus network this quarter\*  
(14% ▼ against Q3 2017/18)



Long term trend injuries per million passenger journeys

### Performance headlines

- ✗ Four fatalities (3 pedestrians and a bus customer)
- ✗ Pedestrians continue to make up the largest proportion of Vulnerable Road Users (VRUs) killed or seriously injured by a bus
- ✓ Reductions in injuries arising from collisions 28% and slips, trips and falls 14%

### Did we deliver our planned improvements?

- ✓ Launch the Bus Safety Standard and Roadmap at our second Bus Safety Summit on 16 October, including a revised Bus Vehicle Specification
- ✓ Complete on road fatigue tests
- ✓ Interim report from the bus driver fatigue research.
- ✓ ISA operating on 700 buses and 50 routes
- ✓ Operators' forum to enable participants in the Safety Innovation Fund projects to share their learnings
- ✓ Safety campaign day at Croydon in December 2018, led by Abellio
- ✓ Consult operators and stakeholders to inform the design of new driver training to embed Vision Zero

### Our plans for the next quarter

- Follow up on actions arising from the Safety Campaign in Croydon
- Hold a Safety Campaign day in February 2019 led by Arriva
- Extension of the Bus Operator HSE Maturity Assessment to include greater engagement on environment issues and engineering
- The Bus Safety Innovation Challenge will provide Bus Operators with a new opportunity to test new technologies on-bus to improve safety (Q4 – Q1)
- Customer safety campaign at bus depots by all major operators

## Buses - performance

### Overview: customer injuries in Q3

Accidental Fatalities	Major Injuries*	All Injuries	Near Misses**
4	225	1098	6140

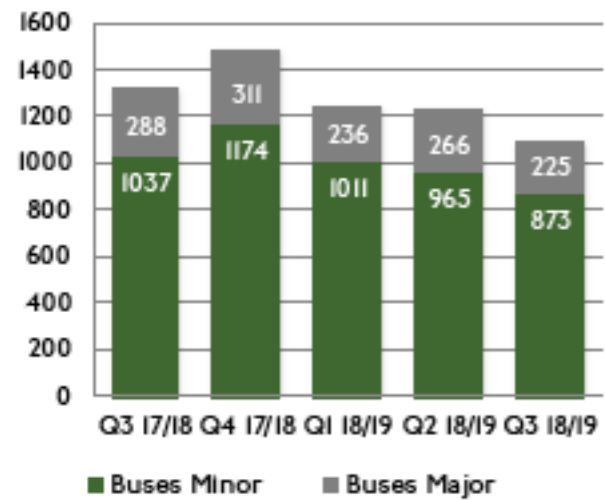
\* Injuries requiring hospital attendance

\*\* All incidents where no injury or damage arose

There were 1,098 injuries in quarter 3, equating to 2.1 injuries per million passenger journeys. This is a 14% improvement on the same quarter last year, when the rate was 2.4 injuries per million passenger journeys. 20% of injuries required hospital treatment; 12% were treated at the scene and the remaining 68% required no treatment. In the quarter, 4 fatalities were connected with our bus operations. They involved three pedestrians killed in collisions with our buses and a customer who later died from injuries sustained following a fall on a bus.

The number of incidents involving pedestrians increased. However, several of these cases involved pedestrians stepping out into the path of buses due to distraction, with little or no time for the drivers to react.

### Customer injuries 5 rolling quarters



Bus customer injuries in quarter 3 have reduced by 17% when compared the same quarter last year and the trend shows a significant decrease over the past 4 quarters. The majority of the improvement is due to fewer injuries on buses as a result of slips, trips and falls down (14%) and collisions down (28%).

### Top 4 causes of all bus customer injuries

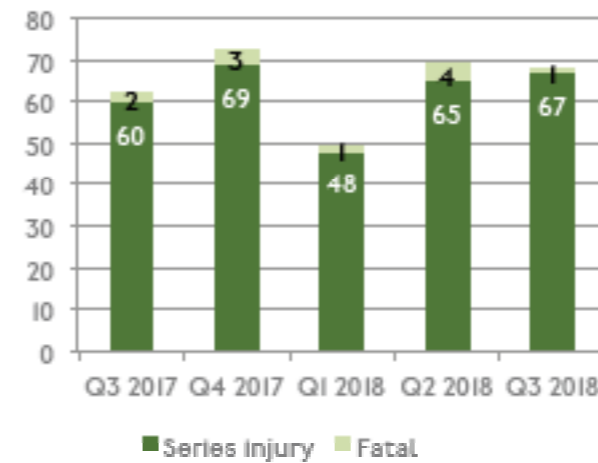
Slip Trip Fall	Struck by/ against object	Trapped fingers/ limbs	Collision
58%	22%	8%	7%

Despite slips, trips and falls having reduced for the past 3 quarters, they remain the dominant cause of bus customer injuries; accounting for 58% of all injuries and 59% of major injuries in the quarter. There were 632 customer injuries as a result of slips trips or falls in quarter 3. This equates to 1.2 slip, trip and fall injuries per million journeys (an improvement on 1.5 compared with the same quarter last year). The majority of slips, trips and falls occur within bus aisles, with sudden bus movement being the key contributory factor to this type of fall.

All major operators have committed to run a specific customer safety campaign at each of their depots over the coming 3 months.

### Killed or seriously injured in or by London buses

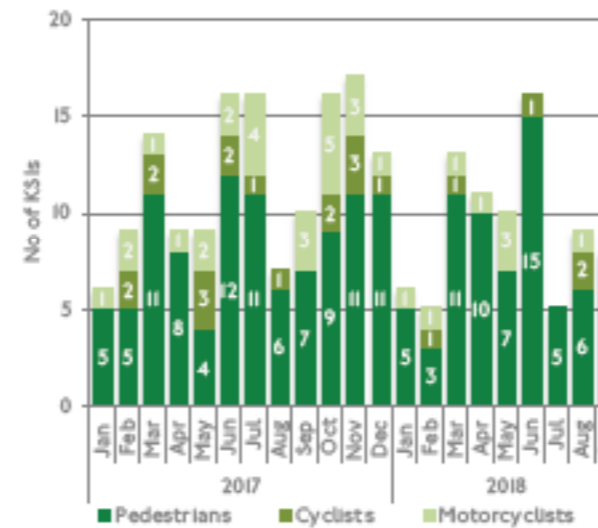
Past five quarters



Source: STATS 19

Road safety data is based on calendar quarters rather than financial quarters. All 2018 data is provisional. This data is subject to change as this information is reviewed and managed by the MPS. The number of KSIs reported by, or to, the police in quarter 3 rose by 10% compared to the same quarter last year.

### Vulnerable road user KSIs from collisions involving buses



Source: STATS 19

In quarter 3, 22 (32%) bus-related KSIs involved VRUs. Pedestrians continue to make up the largest proportion of VRUs killed or seriously injured by a bus, accounting for 77% of all VRU KSIs during quarter 3. When compared to the same period last year, the number of KSIs involving a bus has reduced by 33%, with fewer pedestrians and motorcyclists killed or seriously injured. However the number of cyclists killed or seriously injured has increased from 2 to 3.

## Actions to improve bus safety

### Targeted safety campaign at hot-spot

As planned, Quarter 3 saw a third large-scale safety campaign at a bus incident hot spot in Croydon on 5th December, supported by all the major bus operators. Operators took the opportunity to raise awareness of our Fatigue Research programme and encourage drivers to complete the fatigue survey.

There were no reported collisions on the day of the campaign, but the following issues were identified and will be followed up during quarter 4:

- Pedestrian behaviour on alighting trams, then stepping into the road
- Concerns regarding the availability of dedicated crossings
- Concerns regarding local anti-social behavioural issues

### Bus Operators act to improve safety

In addition to participating in TfL-led safety improvement activities, the Bus Operators are continuing their own programmes. Key activities this quarter include:

- The Go Ahead annual risk competition open to all staff to find new ways to improve welfare, safety and the environment
- The RATP Dev London awards ceremony to celebrate excellence in safety by staff
- The launch of a mobile Safety App by Tower Transit and Go Ahead for all staff to be notified of safety tips, bulletins and news updates

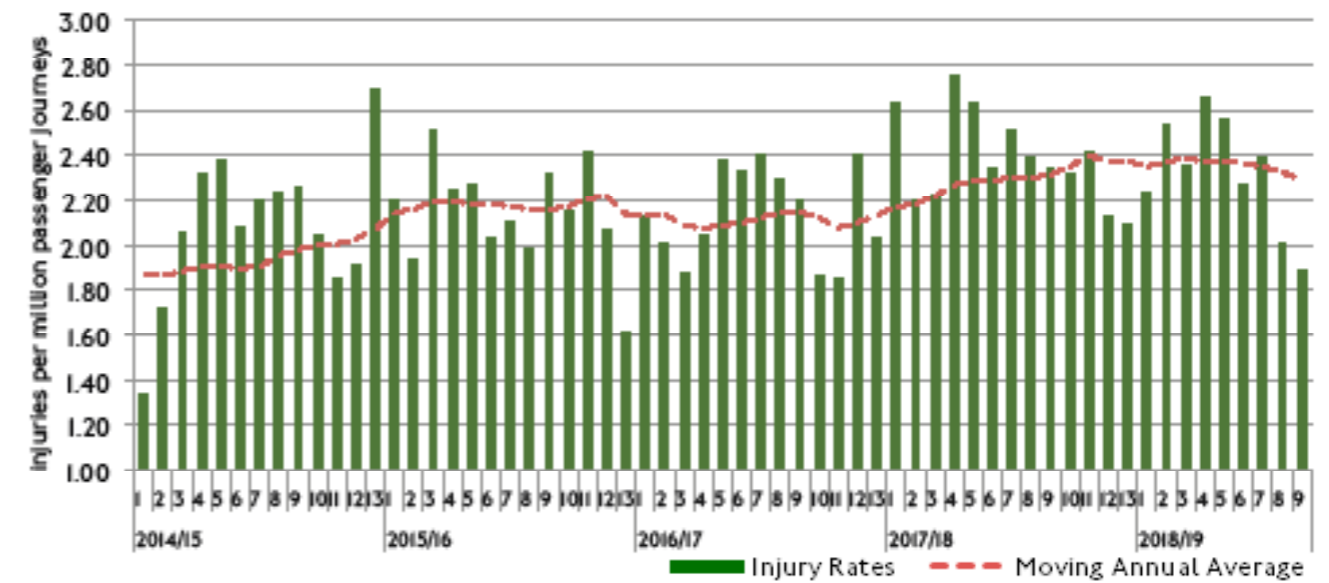
- Refresher courses for drivers by two Operators to promote driving with greater care and attention. Abellio use the 3 See's (see more Time, Mirrors, and Close Distance Following) and Metroline use A.C.T. (Assess, Check, Take Time)
- Applications for Certificate of Professional Competence (CPC) accreditation for training courses including; cycling and pedestrian awareness (RATP), the ACT course at Metroline, and Driver Quality Management (DQM) requirements at Stagecoach. These courses are also being embedded in the induction process to ensure all new and existing drivers receive this training as standard

### Sharing best practice to improve network safety

All bus operators attended a safety forum with us in quarter 3, where each representative shared their best practice safety ideas and initiatives. Many of these can be replicated by other operators, and as such, we will start to see some campaigns being replicated across London in 2019; for example fatigue equipment being tested in Go Ahead following RATP Dev's innovation fund trial, and London Cycling Campaign working with Abellio after a successful trial with RATP Dev.

## Long term trend

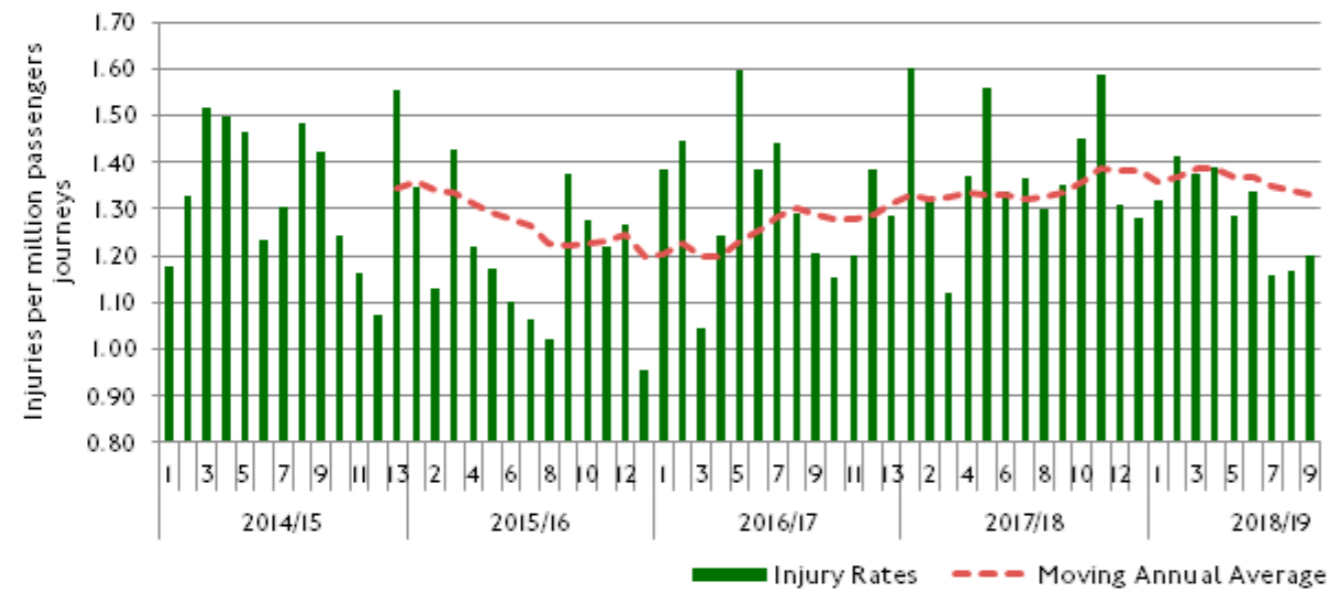
Bus customer injuries per million passenger journeys - long term trend 



Over the long term bus customer injuries per million journeys have shown a rising trend. While the number of injuries has remained broadly constant, the number of journeys has been declining over a five year period.

Since 2017/18 bus customer injuries have declined by on average by 2.5 incidents per period, although this reduction is not statistically significant.

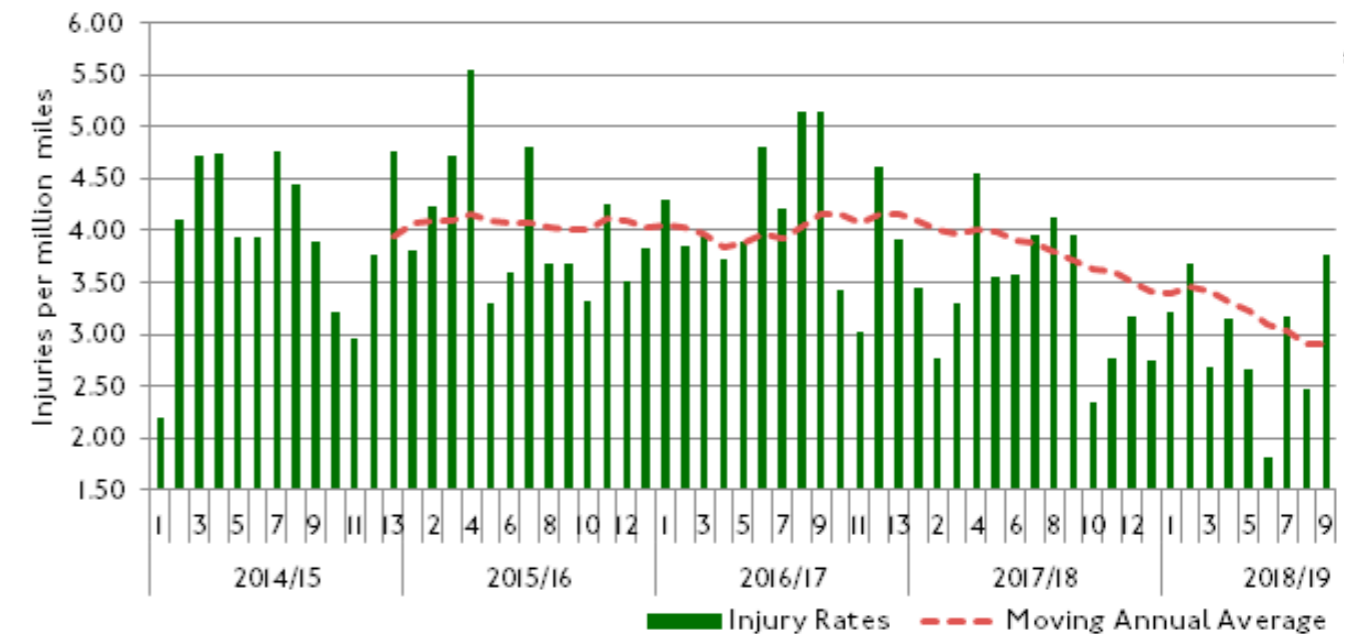
Customer safety - bus customer injuries from slips, trips and falls on buses 



Over the past 5 years, falls on buses have been the major factor for injuries to customers. Bus customer injuries resulting from slips, trips and falls are increasing with 1.3 injuries per million passenger journeys in the quarter, the same as the five year average.

Most of the falls (48%) that resulted in injury occurred within the bus aisle. Injuries sustained while boarding or alighting buses account for 20% which is an improvement from 734 injuries in quarter 3 of last year to 632 injuries this year.

Customer safety - customer injuries from bus collisions 



The number of collisions involving buses have been steadily falling, over the last 5 years, with the injury rate caused by collisions also falling over the last 2 years. When compared to quarter 3 of last year, there were 500 fewer collisions a reduction of 7.6%. The collision rate, drops from 96 collisions to 67 collisions per million miles this quarter compared to the same quarter last year.



# London Underground - overview

**1,014**

Number of injuries on the LU network this quarter (14% ▲ against Q3 2017/18)



**2.9**

Number of injuries per million passenger journeys on the LU network (12% ▲ against Q3 2017/18)



Long term trend injuries per million passenger journeys

## Performance headlines

- ✗ 14% increase in injuries on escalators compared with the same quarter last year, accounting for 42% of all customer injuries
  - ✗ 7% increase in injuries on stairs compared with the same quarter last year, accounting for almost a quarter of all customer injuries
  - ✗ Injuries at ticket gate-lines up 28% compared with the same quarter last year
  - ✗ Slips trips and falls accounted for 86% of all injuries
- Passenger numbers have increased 2% compared with the same quarter last year.

## Did we deliver our planned improvements?

- ✓ New 'hold the handrail' escalator signage for stations outside of the top 20 for incidents
- ✓ Check escalator excellence standards are being maintained
- ✓ Roll out Stair Excellence in full across the top 18 stations for incidents
- ✓ Update line-based Platform Train Interface (PTI) plans to align to the overarching plan
- ✓ Roll out a PTI video featuring a train operator sharing their experience of a serious PTI incident
- ✓ Roll out specific safety communications over the festive holiday period
- ✓ Realign the edge of platform at Victoria and East Putney stations to reduce the gap between the train and the platform
- ✓ Continue delivery of our Platform Camera Improvement project

## Our plans for the next quarter

- Roll out Escalator Excellence to stations outside of the top 30 locations for incidents
- Review signage at the top 20 stations for escalator incidents to encourage vulnerable and restricted mobility customers to use the lifts
- Review of the customer safety plans for the top 20 stations for Escalator Excellence
- Review of the impact of Stair Excellence and development of a further rollout plan
- PTI Focus days at PTI hotspots.
- Trial of selective door opening at Baker Street to prevent customers using a set of doors where the gap between the train and platform is largest
- Installation of high impact vinyl signage with customer safety messages at 4 stations
- Continued delivery of our Platform Camera Improvement project and on site improvements at 3 platforms
- Installation of under platform flashing blue lights at Baker Street platforms 1 & 2

# London Underground - performance

Overview: customer accidental injuries in Q3

Accidental Fatalities	Major Injuries*	All Injuries	Near Misses**
1	28	1014	150

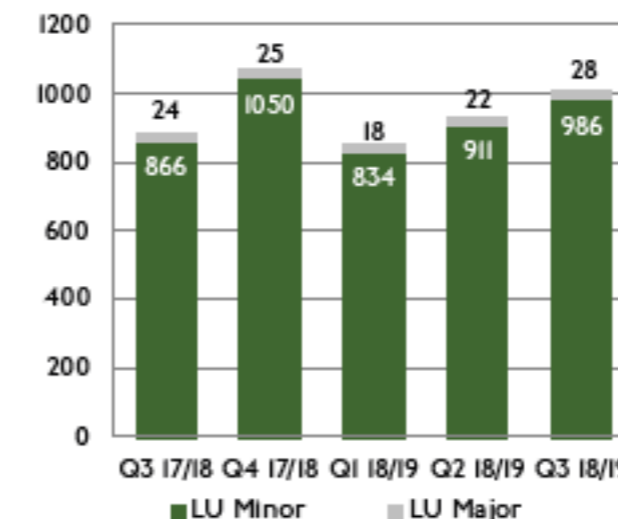
\* Injuries requiring hospital attendance

\*\* All incidents where no injury or damage arose

In quarter 3, there were 1,014 customer injuries, equating to 2.9 injuries per million passenger journeys, 12% worse than the same quarter last year. 2.7% of LU customer injuries this quarter were major injuries.

A customer was fatally injured at Farringdon station as a result of falling from a platform and being struck by a train.

## Customer injuries 5 rolling quarters



LU customer injuries have increased by 14% compared with the same quarter last year, with increases in both minor and major injuries. This is against a backdrop of a 2% increase in customer journeys. In quarter 3 most accidental customer injuries were on escalators (42%), on stairs (23%) and at the Platform Train Interface (PTI) (16%). Injuries on stairs rose 7% compared to the same quarter of last year.

We have seen an increase in the number of escalator incidents reported in response to the launch of targeted customer communications and staff interventions as part of our Escalator Excellence† campaign.

## Top three causes LU customer injuries

Slip Trip Fall	Hit by doors, gates or other objects	Other
86%	12%	2%

There has been an increase in injuries at gate-lines (28%) and on platforms (16%) this quarter, compared to the same quarter last year. We have recently completed a fresh review of our improvement plans to reduce customer injuries.

In response new actions will be implemented relating to leadership, accountability, local station plans and communications.

† Our 'Excellence' programmes set standards for good management practices and award 'Excellence' status to locations that meet those standards.

# Actions to improve safety on London Underground

## Tackling slips, trips and falls

Slips, trips and falls continue to be the biggest cause of customer injuries (86%). These occur mainly on escalators, stairs and at the PTI and continue to be the focus for our improvement activities. To reduce injuries on escalators and stairs:

- Escalator Excellence\* awards are in place 30 stations for accidents; with checks completed by the Senior Management Team at the top 20 to make sure that standards are being maintained and improvement actions are being implemented
- New escalator signage ('hold the handrail') has been installed at the remaining stations with escalators across the LU network
- Stair Excellence\* has been rolled out to 36 stations (18 more stations than planned in Q2). The programme focused on completing an asset condition check

and customer behaviour survey with improvements put in place to address the findings. Improvement themes included public address announcements, posters, staff engagement with customers and a focus on wet weather. These stations are being monitored for trends and to identify the impact on customer injuries

## Safer boarding and alighting

During quarter 3, we completed an in-depth review of the PTI plans for the top 8 locations for incidents to ensure they are focussing on the right areas. Actions taken during quarter 3 to raise staff and customer awareness of PTI risks and to prevent injuries included:

- PTI monthly focus days; including a focus on actions to prevent customers getting caught in the doors
- A trial at Baker Street to extend PTI safety announcements beyond 8pm; supported by noise monitoring to minimise noise for

local residents

- Launch of a staff awareness-raising video featuring a train operator talking about their involvement in a PTI incident
- Project works to realign the platform edge at Victoria and East Putney to reduce the gap at the PTI
- Under-platform flashing blue lights were installed at Farringdon to test the functionality of new prototype lamps to make the gap clearer to customers

Preparations made for future works included:

- Platform camera improvements at Stratford (platform 14) and Green Park (platforms 1 and 2)
- Safety workshops examining the feasibility of Active Gap Fillers, a device which extends from the platform to reduce the gap between the train and the platform

## Famous name supports festive campaign

We launched our seasonal customer communications campaign at the end of quarter 3. This focused on the hazards associated with intoxication with a key message to take care of yourself and your friends. The campaign included posters, targeted public address messages recorded by the London Ambulance Service staff and our senior managers, as well as singer Mariah Carey.

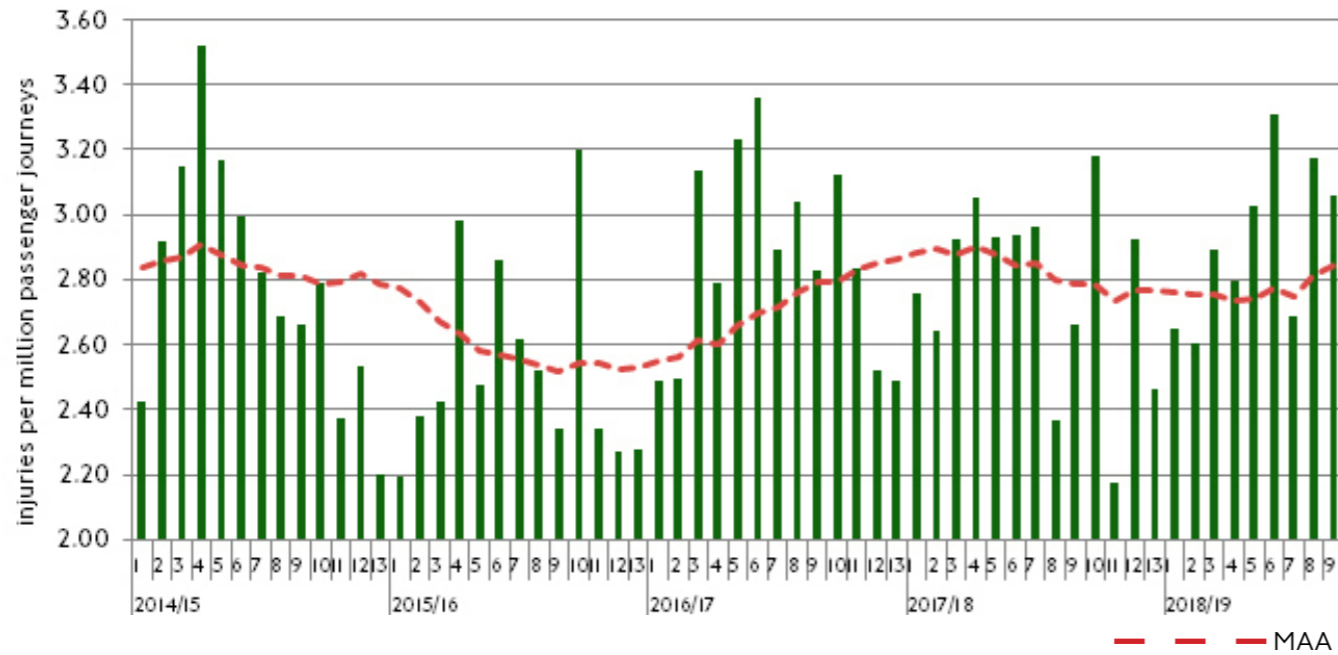


New escalator signage to encourage handrail use

\*Our 'Excellence' programmes set standards for good management practices and award 'Excellence' status to locations that meet those standards.

## Long term trend

LU customer injuries per million passenger journeys - Long term trend 



Since quarter 1 of 2015/16, LU customer injuries have risen at a rate of 0.6 injuries per period. There were 2.9 injuries per million journeys on the LU network this quarter compared to 2.7 for the same quarter last year, an increase of 12%.



Platform train interface at King's Cross

## Rail - overview



**94**

Number of injuries on our rail network this quarter (19% ▼ against Q3 2017/18)

**0.9**

Number of injuries per million passenger journeys within our rail operations this quarter (14% ▼ against Q3 2017/18)



Long term trend injuries per million passenger journeys

### Performance headlines

- ✗ One major injury reported by London Overground (LO) due to an assault at Clapham Junction
- ✓ 44% reduction in customer injuries on TfL Rail compared with the same quarter last year, despite a 22.5% increase in customer journeys

### Did we deliver our planned improvements?

- ✓ Formally launch the Trams HSE Improvement Programme.
- ✓ Report the results of the DLR 'readiband' fatigue management trial
- ✓ Commence the trial of the RSSB's new PTI tool to evaluate its value for DLR
- ✓ Launch an autumn/winter slips and trips poster and public announcement campaign across the DLR network
- ✓ Continue to work with the manufacturers of our trams to implement in-cab warnings to alert drivers to higher risk locations
- ✓ Prioritise tram crossings for risk assessment

### Our plans for the next quarter

- Start a review of the London Trams Safety Management System, to improve alignment with our operator's system
- Launch a periodic LO Safety Assurance Meeting for the principal safety stakeholders to collectively review performance, monitor trends and risks and initiate improvement actions
- Continue use of the RSSB PTI tool to assess the PTI across the DLR network
- Continue the DLR slip/trip/fall campaign through the winter
- Start an annual review of the Risk Matrix for Trams
- Start installation of the higher specification film to tram doors and windows

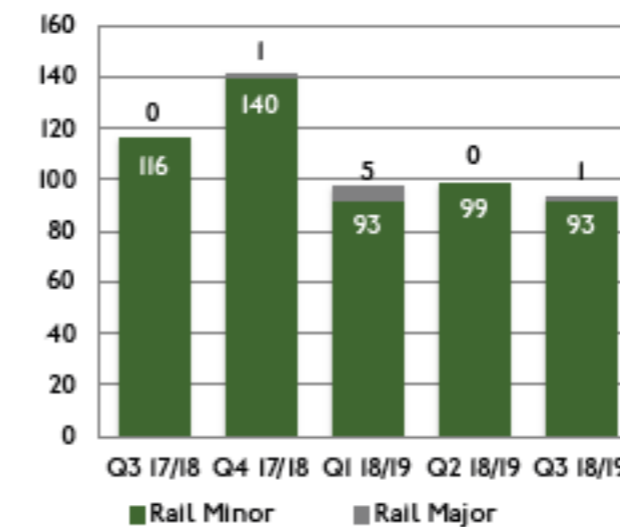
## Rail - performance

### Overview: customer accidental injuries in Q3

Accidental Fatalities	Major Injuries	All Injuries	Near Misses*
0	1	94	N/A

\*This data will be collated across our rail division and included in future reports

### Rail customer injuries 5 rolling quarters



A total of 94 customers were injured on our rail network in the quarter. This equates to 0.9 customer injuries per million passenger journeys, an improvement from 1.2 at the same time last year. The injuries occurred within TfL Rail (15), DLR (20), LO (49) and Trams (10). One of the injuries was major, resulting from a customer being stabbed at Clapham Junction station.

There were 19% fewer customer injuries compared to quarter 3 last year. A significant proportion of the decrease occurred within DLR, where the number of injuries decreased from 27 to 20 compared with quarter 3 last year. Sixteen (80%) of the customer injuries on the DLR resulted from falls, with five occurring on escalators.

The Trams network reported 10 customer injuries, up from 5 for the same period last year. This is equivalent to 1.4 injuries per million customer journeys, up from 0.7 in the same quarter last year. These were predominantly as a result of slips, trips and falls.

## Actions to improve safety on our rail networks

LO reported 49 injuries, equating to 1.1 injuries per million customer journeys in the quarter, compared with 1.2 injuries per million customer journeys in the same period last year. Slips, trips, and falls were the main cause of customer injuries (56%).

On the TfL Rail network, 15 customers were injured, a reduction of 44% compared with last year despite 22.5% more customer journeys across the network. This is equivalent to 1.1 injuries per million customer journeys; a significant improvement on the same quarter last year (2.4).



Customers using the stairs at Hampstead Heath Overground station



Trams signage at Mitcham

### New technology to improve tram safety

Work continued to implement the recommendations from the Rail Accident Investigation Branch (RAIB) investigation into the over-turning of a tram at Sandilands Junction in 2016. The contract to install a new safety system, which will automatically bring a moving tram to a controlled stop if it is exceeding the speed limit at designated locations, was awarded to Engineering Support Group limited on 14 December 2018. London's tram network will be the first in the UK to have an automatic braking system.

The RAIB listed 15 recommendations aimed at the UK tram industry following the overturning. We have progressed work on all the recommendations which are relevant to us, with some of the most vital already completed including a permanent speed reduction across the tram network, speed monitoring and signage at significant bends, an enhanced customer complaints process and the installation of a driver protection device that alerts to any incident or driver distraction or fatigue.

A new emergency lighting system, that will operate independently of the trams' battery has also been procured and will be installed over the summer of 2019. A new higher specification film will be fitted to all doors and windows to improve containment, as per recommendation 6, by spring 2019.

The Trams HSE Improvement Plan was formally launched on 5 October. The plan includes the following areas of focus:

- Fatigue management
- Review and update of Tram Safety Awareness training
- Level crossing risk assessments
- Management of plant on site
- Correct side door enable (CSDE) to prevent doors being opened on the wrong side

### Preventing fatigue

Work continued to investigate fatigue across the rail networks. The results of the DLR fatigue survey using a wearable fatigue monitor have been analysed; providing a baseline against which we can track improvements to user alertness arising from fatigue self-management and the implementation of revised fatigue management procedures.

### Safer boarding and alighting

Work continues to improve the management of risk at the PTI:

- On the weekend of 29/30 September, DLR conducted a trial of the service with a one-second door chime. This was part of our ongoing efforts to find the optimal length of warning chime from a safety and operational perspective. The three-second chime required by the Rail Vehicle Accessibility Regulations (RVAR) can encourage customers to rush, leading to the potential for injury. The outputs of the trials have been discussed with the DfT
- PTI assessments started across the DLR using the new version of the RSSB PTI tool. This version requires more detailed data and will therefore result in the extension of the timescale for completion of all assessments to July 2019

Customer injuries on the DLR have dropped

to nearer quarter 1 levels following a spike in quarter 2. This is partially due to the communications campaign featuring network wide station announcements targeting slips, trips and falls. The campaign will continue throughout the winter period.

### Safer travel for mobility impaired customers

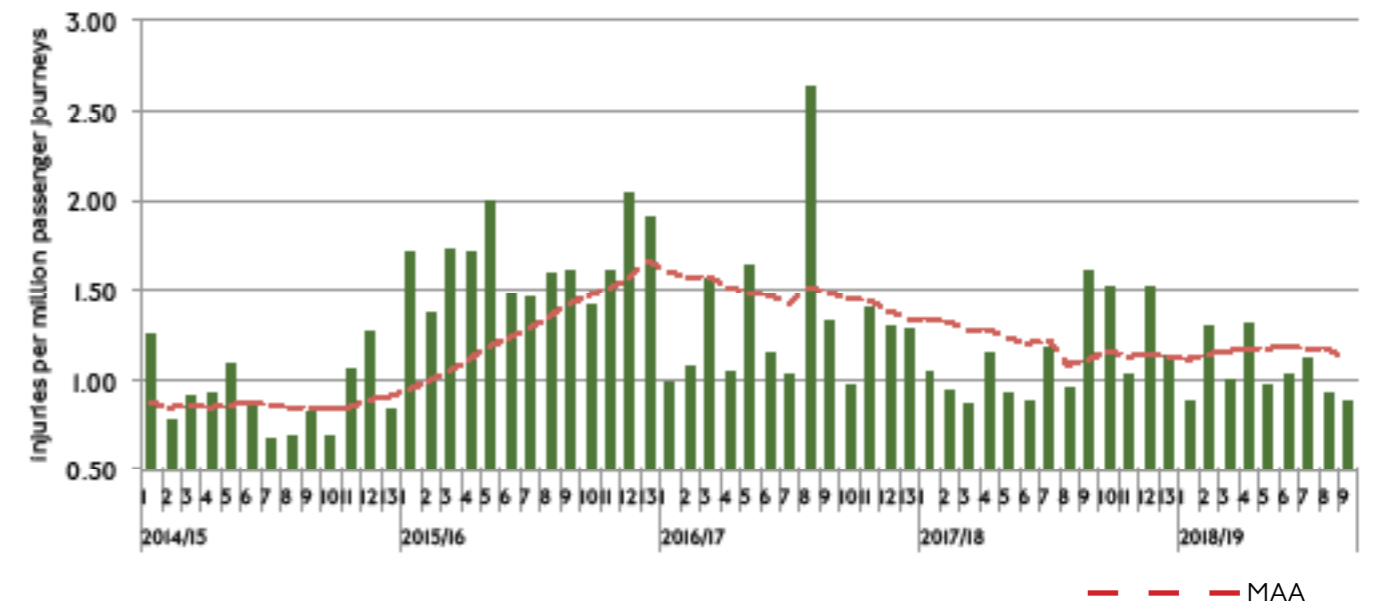
Keolis Amey Docklands (KAD), operator of the DLR has introduced free advice and training to mobility scooter and wheelchair users to help them stay safe while traveling on the network. Ambassadors, who have received accredited training from Whizz-Kidz, are available to meet those who need mobility support and their carers, to provide training on safe use of the network and guidance in how to request assistance during journeys.



A wheelchair user travelling on the DLR

## Long term trend

Rail customer injuries per million journeys – annual moving average 



On the LO networks, injuries in the quarter are 44% lower than the same quarter last year. However, Trams has shown an increase by 5 injuries since quarter 3 last year. In respect of DLR, the longer term trend is steady, but shows a reduction in injuries when normalised by passenger journeys. During 2018/19 injuries on TfL Rail are showing signs of improvement with average numbers falling.

## Other operations - overview



**24**

Number of injuries within our other operations this quarter  
(4% ▲ against Q3 2017/18)

**4.4**

Number of injuries per million passenger journeys within our other operations this quarter  
(4% ▼ against Q3 2017/18)



Long term trend injuries per million passenger journeys

### Performance headlines

- ✗ All 'other operations' major injuries arose from 2 causes; collisions and slips, trips and falls
- ✓ Work on the first safety improvement plans for the Thames commenced.
- ✓ There were no injuries on London River Services this quarter
- ✓ Contract for new Dial-a-Ride vehicles introduced new safety and environmental features

### Did we deliver our planned improvements?

- ✗ Formally launch the Safety Improvement Plan for the Thames

### Our plans for the next quarter

- Launch Safety Improvement Plan for the Thames
- Enhancing the investigation process in Dial-a-Ride to ensure lessons are learnt and assist the prevention process

## Other operations - performance

Overview: customer accidental injuries in Q3

Accidental Fatalities	Major Injuries*	All Injuries	Near Misses**
0	6	24	105

\*Injuries requiring hospital attendance

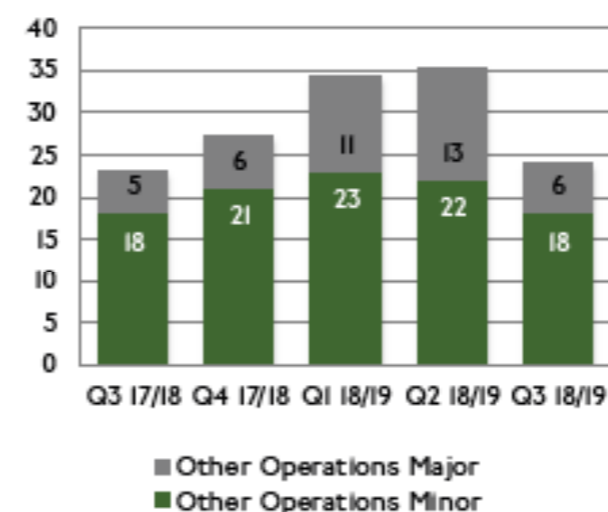
\*\* All incidents where no injury or damage arose

Twenty-four customers were injured across our other operations. This equates to 4.6 customer injuries per million passenger journeys. This is better than the same quarter last year when it was 4.9 injuries per million customer journeys.

Six of the injuries were classified as major:

- 3 on Santander Bikes; 2 collisions and 1 from a fall from a bike
- 3 in Victoria Coach Station (VCS); 2 from a fall; 1 due to intoxication

Other operational services customer injuries 5 rolling quarters



There was one more injury reported this quarter when compared to the same period last year. In the quarter, a significant proportion of injuries occurred within Dial-a-Ride (46%). Seven were due to falls, 2 by being struck by/against objects and 2 from trapped fingers.

Victoria Coach Station (VCS) accounted for 25% of injuries, with 6 injuries this quarter compared to 1 in quarter 3 of last year. Santander Bikes and Emirates Air Line (EAL) accounted for 21% and 8% respectively.

No customers were injured on the London River Services (LRS) as compared to 3 in the same quarter last year.

# Actions to improve safety of our other operations

## Top 4 causes of injuries

Slip Trip Fall	Collision	Cut/abrasion	Trapped fingers/limbs
50%	14%	14%	9%

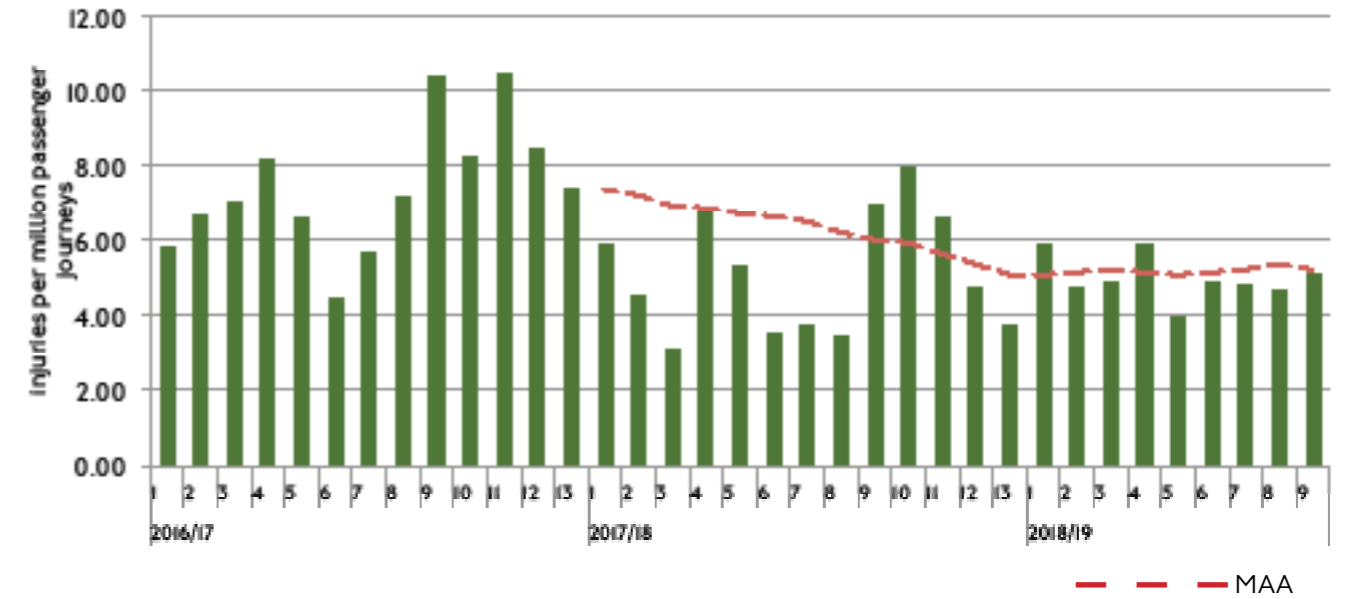
Work to develop a safety improvement plan for the Thames was completed during the quarter. We are working in collaboration with the Port of London Authority and other key stakeholders on the river. The formal launch of the plan will take place in February 2019.



Passengers waiting safely to board their coach at Victoria Coach Station

# Long term trend

## Other operational services customer injuries - long term trend



Overall, the trend for our other operational areas continues to show an improving trend indicating injuries have been declining since quarter 3 of 2016/17. This is also the case when normalised by journeys completed across our other operational services. However, more recently performance has plateaued.



## Safety feedback from customers

	Q3 2017/18	Q3 2018/19	Trend
London Underground	345	387	⬇️
London Buses	1,133	1437	⬇️
DLR	23	24	⬇️
London Overground	38	67	⬇️
TfL Rail	22	21	⬆️
London Trams	13	8	⬆️
Emirates Air Line	1	0	⬆️
Congestion Charge	0	0	↔️
Dial-a-Ride	4	9	⬇️
London River Services	5	1	⬆️
Santander Cycles	1	0	⬆️
Taxis	3	2	⬆️
Private Hire	0	2	⬆️
<b>Total</b>	<b>1,588</b>	<b>1,958</b>	<b>⬇️</b>

The rise in safety-related incidents compared to the same quarter last year can largely be attributed to the improved ease of reporting safety issues through our website. Safety feedback about buses continues to be the main reason for contact, the main themes are as follows:

Injury to person which includes:

- Drivers moving off before customers have sat down, causing a fall
- Drivers breaking harshly/emergency stops, causing customers to fall
- Drivers closing the doors as customers are boarding/exiting and so trapping customers

Damage caused by buses which includes:

- Buses hitting other road users
- Buses clipping parked cars

LU safety feedback has also increased from quarter 3 last year. The key themes are:

- Customers getting trapped in closing doors
- Escalator related (customers falling, having clothing trapped in mechanism)
- Customers slipping on wet floors

## Actions to improve safeguarding of vulnerable customers

We are in the process of reviewing and strengthening our safeguarding principles and guidelines. Safeguarding is now recognised across the organisation as an important topic and all service areas and directorates have a role to play in protecting children and vulnerable adults.

Our front line and back office teams already provide support to vulnerable customers. To ensure good practice is shared and to reward those areas across the organisation who deliver this, we will establish a monthly forum. This will ensure all activity to improve safeguarding is co-ordinated across the organisation.



Call centre taking details of safety concerns

## Counter-Terrorism and Security improvements

Our strategy for security is to understand the threats to our business; assess our vulnerabilities and consider the risks; and put proportionate measures in place that protect our customers, workforce, operations, infrastructure, information, assets and deliver our vision for a safe, secure and reliable transport system for London.

We are working closely with the Mayor's Office for Policing and Crime (MOPAC), Metropolitan Police Service (MPS), National Counter Terrorism Security Office (NACTSO) and London Councils to help determine a coherent London-wide approach to physical protective security, which reflects the Mayor's Transport Strategy and aspiration for Healthy Streets and enhancement of the public realm. This is being progressed through the Counter-Terrorism Strategy Board (CONTEST). Furthermore we are investigating, in conjunction with MOPAC, options for replacing the temporary security measures on the eight central London bridges (Vauxhall, Lambeth, Westminster, Waterloo, Blackfriars, Southwark, London and Tower Bridge) with a permanent solution. To date, we have undertaken engagement with the associated boroughs and other key stakeholders, including the MPS and Centre for the Protection of National Infrastructure (CPNI) specialists, and Threat and Vulnerability Risk Assessments (TVRA) have been conducted.

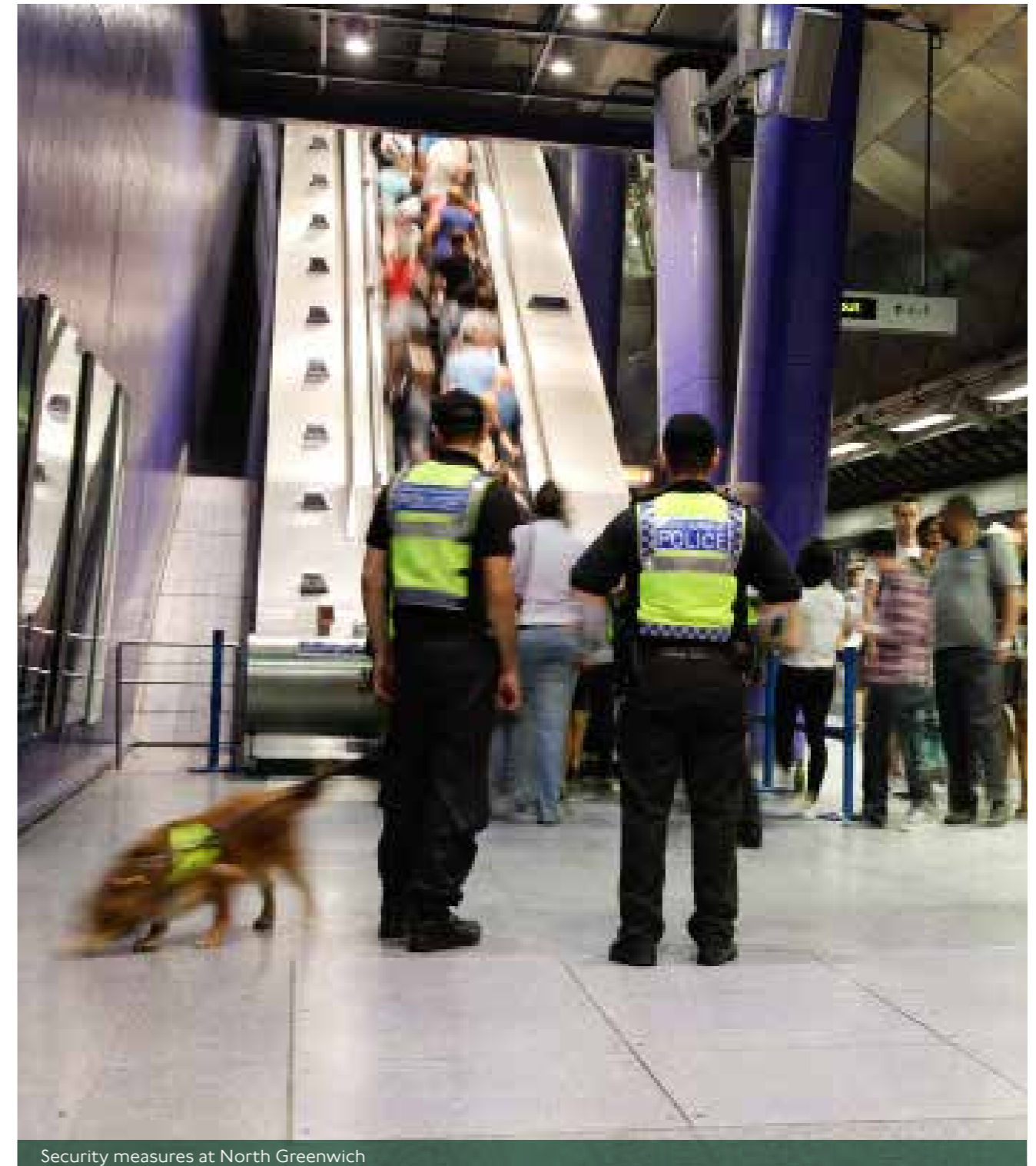
We are progressing with the pan-TfL Protective Security Programme which covers physical; people and personnel security and complements the cyber-security programme and the advanced security work in place in LU. The programme includes internal awareness amongst staff and training on risks and their role and contribution to better security.

The long term partnership with the British Transport Police and regulatory relationship with the Department for Transport means that mature risk controls are in place across LU.

A range of further improvements are underway which include:

- Integration of security management throughout our management system
- Speeding up security decision-making
- Ensuring that security guidance and associated arrangements reflect best practice

These plans are underpinned by objectives for senior directors to ensure effective accountabilities for security.



Security measures at North Greenwich

# Workforce safety - overview



## Performance headlines

- ✓ Workforce injuries 8% better than same quarter last year
- ✓ Accident Frequency Rate improving for LU construction teams and there have been no reportable injuries associated with our highway projects this quarter
- ✓ Violence against our total workforce 17% better than same quarter last year, including a 4% reduction for our direct employees
- ✗ Sickness absence due to mental health issues is 5.8% worse than the same quarter last year, continuing the rising trend

## Did we deliver our planned improvements?

- ✗ Extend the successful near miss reporting campaign used within LU Renewal & Enhancements to our LU operations and maintenance teams
- ✓ Start a root and branch review of the communication of safety critical information in LU
- ✓ Deliver additional bus driver toilets on 20 routes by December 2018
- ✗ Launch new HSE training for middle managers
- ✓ Complete gap analysis of fatigue management for tram maintenance staff
- ✗ Launch the revised Beacon award scheme across the organisation
- ✓ Extend the use of the reporting app for incidents and near misses
- ✓ Hold a pan-TfL Zero Harm Forum to promote a partnership approach to HSE management with our supply chain
- ✓ Continue the Finish Safe campaign on Crossrail



Long term trend TfL direct employee injuries



Long term trend TfL direct employee physical assaults



Long term trend TfL direct employee sickness absence (% available working days lost)

## Our plans for the next quarter

- Introduce conflict management training for our bus operations and enforcement workforce
- Launch a construction 'urban' safety plan to respond to an increase in violence against our construction workforce
- Refresh manual handling training for our DAR drivers following the introduction of our new vehicles
- Extend the Bus Operator assurance arrangements to include engineering
- Develop a workforce safety video for LU train staff
- Improve LU's processes for communicating operational messages
- Develop an improvement plan to address injuries arising from contact with machinery and tools on LU
- Launch the new HSE training module for managers
- Launch the revised Beacon award scheme across TfL
- Provide additional knowledge and skills to our internal design teams to designing out risk
- Facilitate joint workshops for our design supply chain partners to share their ways of working with sub-contractors
- Facilitate roundtable discussions for subcontractors to learn from main contractor experience of behavioural-based safety programmes
- Hold our third Zero Harm Forum to engage all tiers of the supply chain
- Start roll-out of body-worn cameras to the top ten LU stations experiencing assaults
- Promote the NHS-sponsored Sleepio App
- Train a further 50 Health and Wellbeing Champions
- Hold a Peer Support Network Conference



Contractors working on highway works

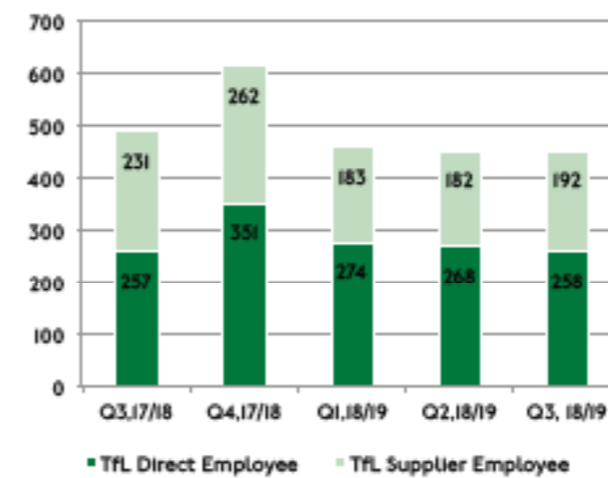
## Workforce safety - performance

Overview: workforce accidental injuries in Q3

Fatalities	RIDDORs*	All Injuries
0	62	450

There were 8% fewer workforce injuries compared with the same quarter last year. There were 16% fewer injuries to our supplier staff and 27% fewer injuries to our direct employees in the quarter when compared to quarter 3 of last year. Of the 450 workforce injuries during the quarter, 62 were reported to regulatory authorities (information on page 12). A further 27 were classified as major reported injuries mainly in connection with bus drivers as they required hospital attendance. These were due to 13 collision incidents, 5 assaults, 4 as a result of fall, 3 as a result of strain and 2 due to cuts.

Workforce injuries 5 rolling quarters



Our direct employees accounted for 57% of workforce injuries, 86% of these incidents occurred within LU, which accounts for 71% of direct employees within TFL.

Injuries to our supplier staff accounted for 43% of our workforce injuries. Bus drivers were the group most affected, accounting for 48% of supplier staff injuries.

Top 3 causes of injuries (all areas)

Machinery/ Equipment/ Powered Tools	Slip, Trip, Fall	Manual Handling
39%	29%	14%

In LU, most workplace accidents were due to contact with machinery, equipment and powered tools, eg. bumping arms, legs, or heads. There has also been a slight increase in the number of injuries due to slips, trips and falls this quarter (83) when compared to quarter 3 last year (75).

# Actions to improve workforce safety

## Building a positive safety culture

On the LU network, an injury free week was held in early December, focusing on a different accident type each day. A review of the data and findings from the week is underway. Specific winter weather guidance was issued to raise staff awareness of the hazards and how to take care of themselves.

As part of our ongoing promotion of a positive culture, there has been a focus on completion of Go, Look, See visits. The Go, Look, See visit involves the senior manager meeting with the member of staff at the location of the incident to show that we care and discuss the employee's thoughts on how the injury could have been prevented.

## Improving operational communication

In response to the quality of operational communications being a key factor in a number of incidents, we started our review of 'Operational Communications'. Key actions during quarter 3 included:

- The review of existing rules, drawing on learning from RSSB and Network Rail
- Identification of potential improvements to the process, system and forms used for monitoring the quality of operational communications
- Analysis to identify gaps in LU training and competence management for operational communications against the RSSB's standards and identification of potential solutions

## New training for managers

We finalised the content of our online training for all our managers. This will

remind them of their responsibilities for HSE management and engage them with the Vision Zero agenda. The course focuses on the key management activities required to ensure that health, safety and environmental risks are being managed on a day to day basis and how to build a positive culture. It also highlights the tools and guidance available to managers to assist with these activities. For managers involved in front-line delivery of services or projects, the online learning will be supplemented with classroom-based sessions. The online course launched in January 2019.

## New training for Designers

Work is underway to provide additional health and safety knowledge and skills to our internal design teams. This will ensure that opportunities are taken to design out risks in new or modified assets and ensure that we meet our legal duties under the Construction (Design and Management) Regulations.

## Improving fatigue management

A review of the maturity of our fatigue management systems was undertaken during quarter 3. As a result of this review, the following recommendations will be actioned to improve the quality and consistency of fatigue management across our organisation and our suppliers:

- Extend the LU and Rail Fatigue Risk Management System (FRMS) to the rest of TfL and embed good practice consistently across all areas
- Continue to monitor the various fatigue work streams with a view to sharing any pertinent findings
- Update fatigue management

requirements within contractual/framework arrangements with suppliers, informed by the current funded research

- Provide guidance to support conducting fatigue management assurance activities, including investigating how we can ensure that temporary labour is subject to an adequate FRMS

Work continued to investigate fatigue among employees across the rail networks:

- The results of the DLR fatigue survey using a wearable fatigue monitor have been analysed. This provides a baseline against which we can track improvements to user alertness arising from fatigue management and the implementation of revised fatigue management procedures
- A 3 month trial of the same device is underway across the London Trams team. Data from the trial will be utilised to understand the fatigue levels of staff and will influence the fatigue management system

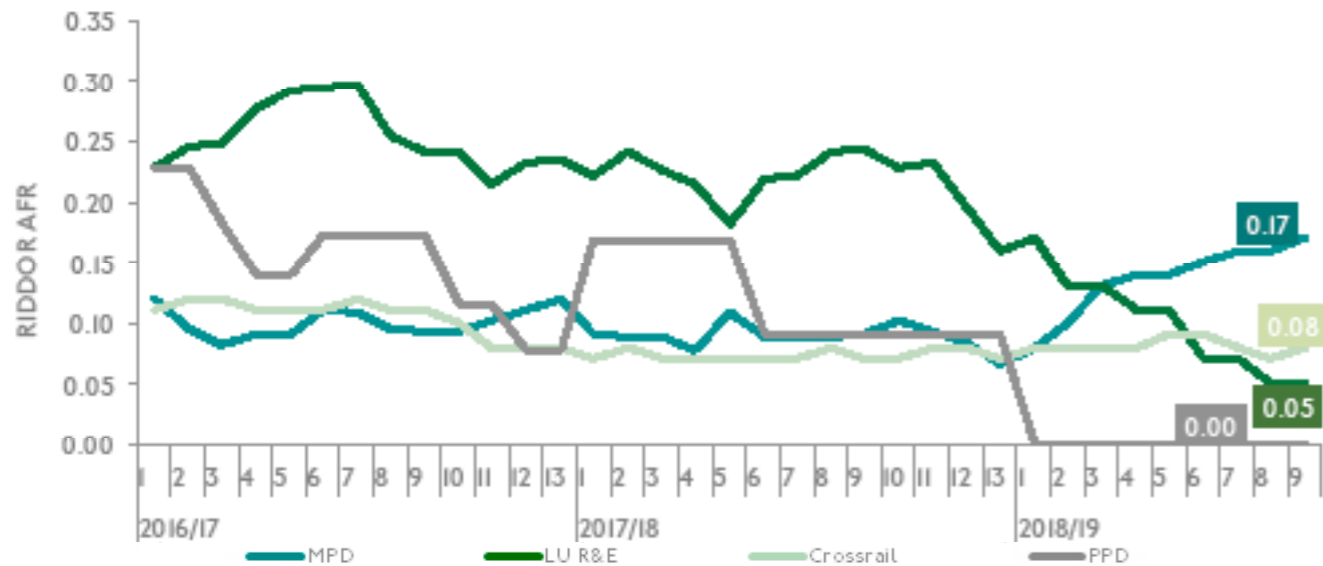
Work continued with our enforcement, bus operations and Dial-a-Ride workforce to shape their programmes for improving manual handling and conflict awareness training. Monitoring and review of bus operator workforce injuries continued as part of the safety assurance programme.



Track workers on the London Tram Network

# Actions targeting construction safety

Construction workforce Accident Frequency Rate (AFR)



Our construction workforce accounted for 42 of our workforce injuries in the quarter. This is a 12.5% increase on quarter 3 last year. Two of the injuries in the quarter were reported under RIDDOR, triggered by the length of absence from work, rather than the severity of the injury. There has only been one major injury this year, but there is an increasing trend for our reduced level of minor injuries becoming Lost Time Injuries and reportable under RIDDOR. While we seek to better understand and influence this, our core effort is going into reducing the number of injuries of all types, through good housekeeping and enforcing safe systems of work by improving awareness of the consequences of injury. We are working with our supply chain to understand the causes of this and ensure that those injured at work are receiving the appropriate support. For our direct employees, housekeeping and health hazards were the main cause of injuries. The majority of these occurred within LU, where there has been a stable trend since the start of last year. Slips,

trips and falls and non compliance with HSE rules (e.g. Safe System of Work & Personal Protective Equipment) are the second most common cause of injury for our construction workforce within LU and MPD.

On Crossrail, the RIDDOR Accident Frequency Rate (AFR) reduced again this quarter. The rate for the last two periods was 0.07, which is well below the target of 0.15 and matches the lowest rate this year. CRL will maintain our objective of achieving below 0.06.

### 'I am safe for..'

Within our major projects, we are rolling out the 'I am safe for..' campaign. Our workforce will be asked to write down who they are keeping safe for. The campaign has already been rolled out on our works at Ealing Common, where we are the Principal Contractor and has had a positive effect.

### Reducing utility strikes on highways

Although the overall trend for workforce injuries across our highway-related construction activities continues to show improvement, we remain focused on reducing the number of utility strikes by:

- Ensuring accurate and correct information is available and shared
- Sites are clearly marked up before breaking ground
- Appropriate working methods are used in close proximity to identified underground services
- Knowledge-sharing of best practice; a successful session was held on 12 October

### Safety on Crossrail

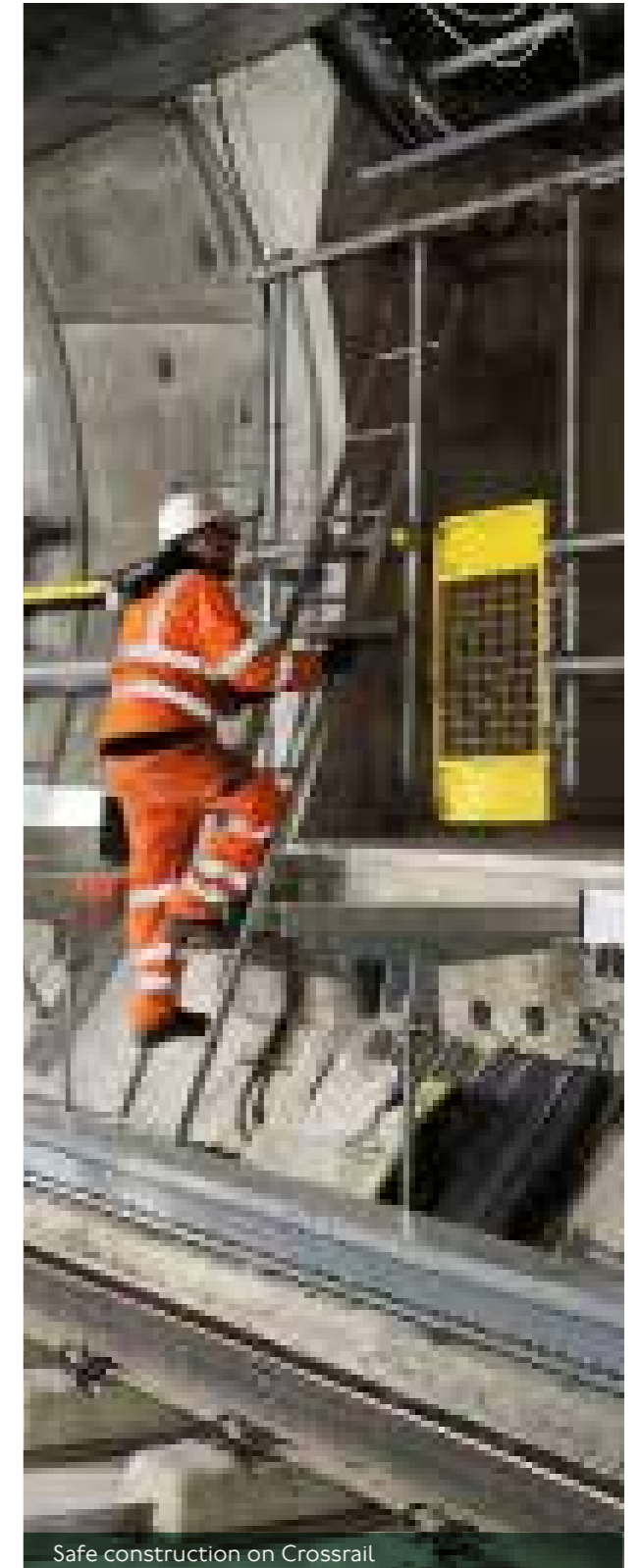
From June 2018 Crossrail Limited (CRL) began to plan and roll out a 'Finish Safe' campaign. Although the end date of the project has been extended, CRL continued with this approach throughout quarter 3. The key elements are:

- Ensuring basic safety rules are followed
- Increasing the impact of senior management engagement on site
- Promoting the importance of the role of site supervisors in ensuring site safety is being managed

Campaigns during the autumn and winter weather conditions and the festive holiday shut down/back to work activities.

CRL are now planning to deliver separate campaigns and initiatives for the final quarter of 2018/19.

The CRL Health and Safety Performance Index (HSPI) has been the cornerstone of



their leading indicators to highlight the drive to achieve the right safe behaviours. This quarter:

- All indicators have performed well
- The overall performance was 2.59 - significantly above the target level of 2.20

While significant safety incidents remain relatively infrequent across the CRL programme, this quarter saw an increase in the number of incidents classified as High Potential Near Misses (HPNMs), an important precursor indicator to more serious incidents. The rate for these incidents increased in each of the three periods. There was a particular focus on electrical incidents. At the end of the quarter we organised a 'Special' SHELТ meeting, where CRL brought together senior representatives from their supply chain to develop targeted work streams to tackle the adverse trend. Several work streams are now being delivered to address specific risk areas, and the trend for HPNM has reduced significantly. These will further feed into the next stages of the 'Finish Safe' approach.

The monthly CRL Health and Safety Learning Forum continued to share lessons from both incidents and best practice initiatives. Themes during the quarter included:

- Electrical safety
- Health and wellbeing
- Protecting underground services
- Working and height
- Controlling falling materials

CRL distributed a learning pack of the key findings from incidents to ensure that those who cannot make the meeting still benefit from this learning.

Health and wellbeing remains a significant issue for the Crossrail project. Maintaining a clear focus on mental resilience from top to bottom of the organisation, controlling factors that can lead to fatigue and maintaining high morale will be a key focus in quarter 4 for both CRL and the contracting companies.

### Collaborative working for a positive HSE Culture

On 5 November, we held our second TFL 'Zero Harm' forum which involved over 30 of our key capital suppliers. This pan-TfL forum brings together our internal project delivery areas alongside our suppliers. The Zero Harm initiative is led by Directors across our TFL capital programme through the control of a Zero Harm Leadership Group, with the agenda for the Zero Harm Forum led by our supply chain partners. A number of groups have been established to look at ways to strengthen performance, such as:

- Improving the relationships with sub-contractors throughout the supply chain
- Working together for a common purpose
- Involving suppliers at the right time to maximise HSE effectiveness
- Improving how we report positive and negative findings

The session demonstrated genuine enthusiasm and collaboration between us and our suppliers to improve safety, with a large number of strong ideas being generated for how we can work together and bring about real safety improvements. The ideas are being analysed and taken forward by each group, with progress to be reported back at the next Zero Harm event.



Our HSE awards

### Promoting and recognising best practice within our supply chain

The preparatory work to extend the Beacon scheme for construction across all our capital delivery projects continued during the quarter. The scheme establishes a model example of what our construction sites should look and feel like, and how they are managed, from a health, safety and environment perspective. It is designed to encourage best practice beyond statutory requirements and recognises:

- A consistently high level of HSE compliance and performance
- Care about appearance
- Respect for the community
- Valuing the workforce's health, safety and wellbeing

Beacon is currently being evaluated with the programme delivery teams to understand how best it can perform throughout the varied projects across TfL and how it can improve HSE performance by embracing 'what better looks like on site'.

During the quarter we extended our Supplier Assessment Tool (SAT) to a number of our suppliers undertaking highway-related works, to gather assurance that they are achieving the expected levels of HSE performance. The SAT checks cover a number of areas, including verifying suppliers have the relevant skills and competence, adopt a positive HSE culture, communicate effectively, and have robust arrangements to control risk throughout their work. The findings and actions are being shared to ensure learning and continuous improvement.

During the quarter, the TfL Supplier Awards were held. Winners in the Health and Safety categories were:

- The Northern Line Extension (NLE) team for the Best Health Initiative. The NLE Mental Health Programme is delivered collaboratively by the NLE Mental Health Steering Committee, made up of volunteers from our supplier Ferrovial Laing O'Rourke, LU and our subcontractors. Over the last 18 months the team has raised awareness of mental health and improving workforce wellbeing
- The Bank Station Capacity Upgrade (BSCU) team for the Best Safety Initiative. This was for their Sprayed Concrete Lining tunnel radial construction joint, which can be formed without the need for persons entering the excavation or under freshly sprayed shotcrete

The Innovation Award was presented to a safety-related initiative; the Go Ahead Safety Pledge (GASP). The pledge encourages attitude change through local staff engagement. The initiative has now been adopted across the wider bus industry.

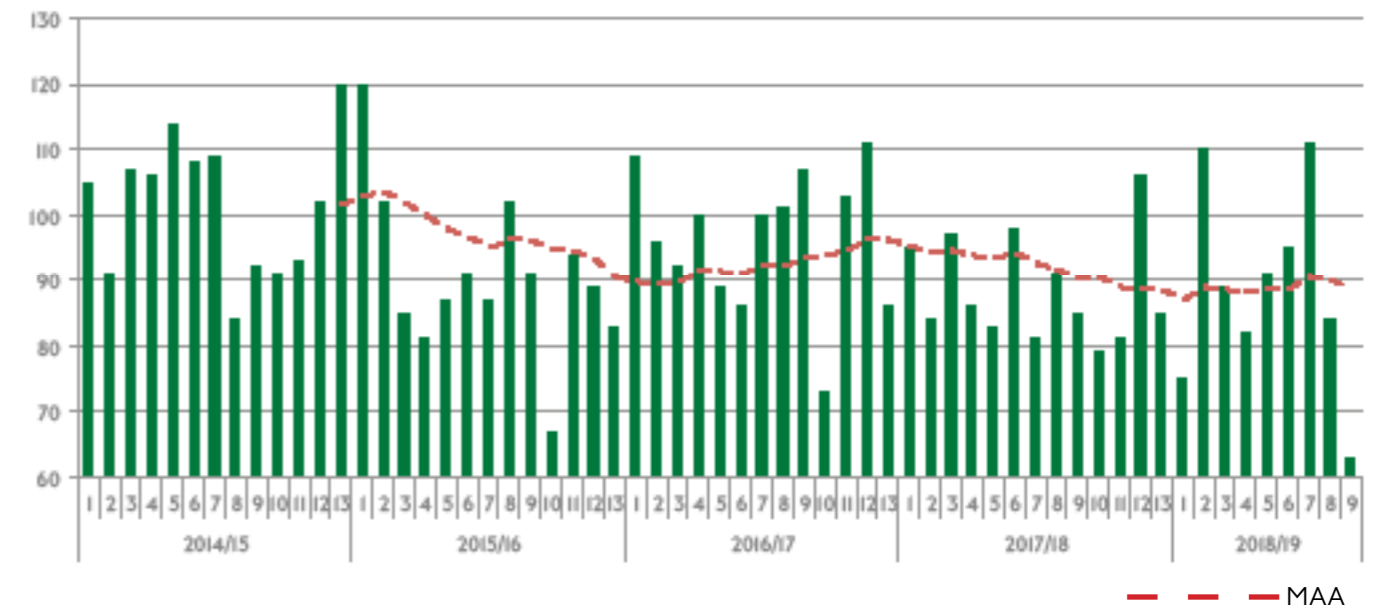
Our major projects have also been recognised for good HSE management at the New Civil Engineer Tunnelling festival. BSCU won the 'Innovation in Technical Product or Equipment Award' for the Orion environmental monitoring system, and also the 'Innovation in Instrumentation and Monitoring Award' for their fibre optic monitoring solution deployed on St Mary Abchurch (built by Sir Christopher Wren in 1681) whilst tunnelling underneath it.

### Improving ease of reporting of incidents and near misses

The reporting app for HSE-related incidents has had successful trials within one of our major projects. Technical changes have been made during the quarter to ensure the app is suitable for wider use in other areas of TfL from quarter 4.

## Long term trend

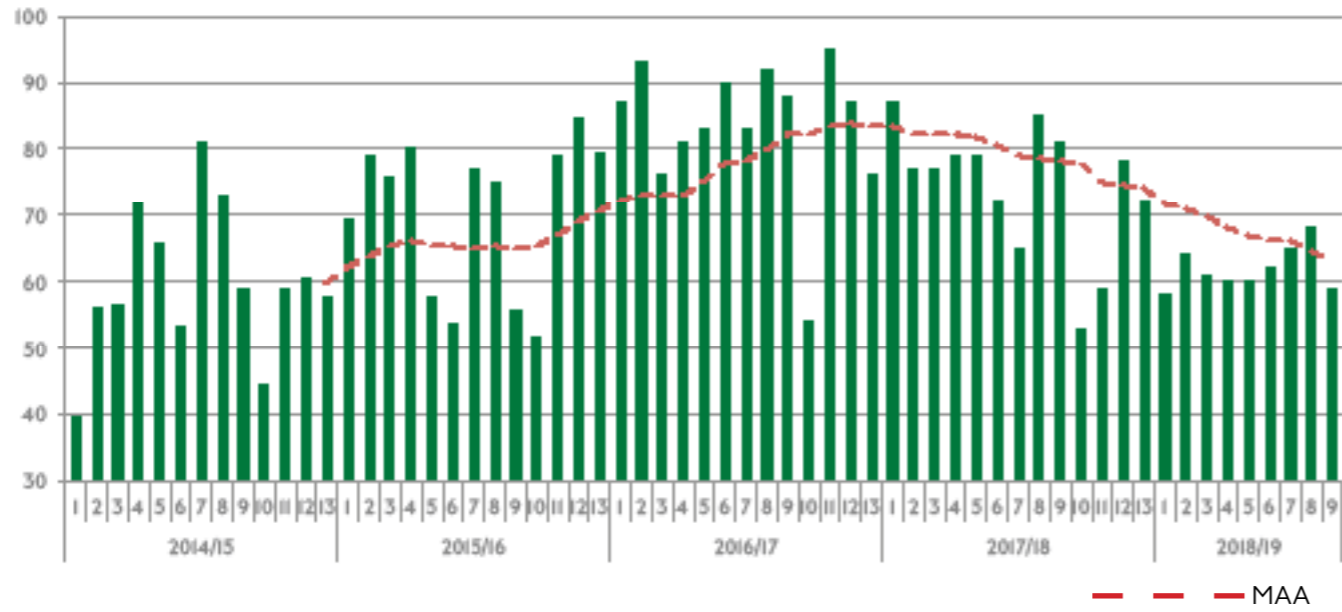
TfL direct employee total injuries - long term trend 



The overall trend for injuries to our direct employees since 2015/16 is improving by 8 fewer injuries on average per period. When compared with the same quarter last year, there has been no change to this number of employees injured.



TfL supplier total injuries - long term trend 



Injuries to our supplier employees shows a slight increase over the last 5 years, however we have seen a reduction in injuries within our supplier workforce since the start of 2017. This is mainly driven by the fall in injuries to our bus drivers who account for the majority of our supplier staff. Year to date when compared with last year, there has been a reduction of 21% reported by buses which equates to a 31% fall when compared to the previous quarter. Injuries caused by assaults have reduced by 48% since quarter 3 last year.



An apprentice learning safe working practices

# Workplace violence and aggression

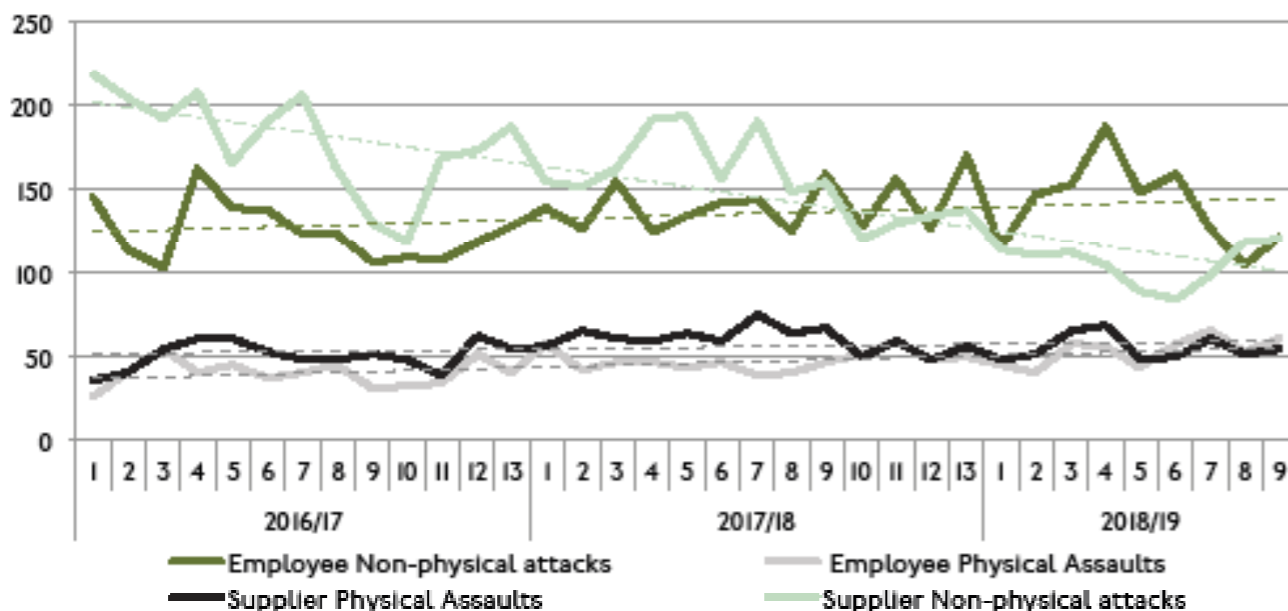
Overview: workplace violence in Q3 (TfL recorded data)

Physical Assaults	Non-physical Assaults	Total Assaults
345	691	1036

In the quarter, there were a total of 1,036 acts of violence towards our workforce, 33% of which were physical assaults. The total level of violence against our workforce in the quarter shows a reduction of 17% compared to the same quarter last year, resulting mainly from a reduction in assaults to supplier staff, 31% and 19% for non-physical and physical attacks respectively.

## Long term trends

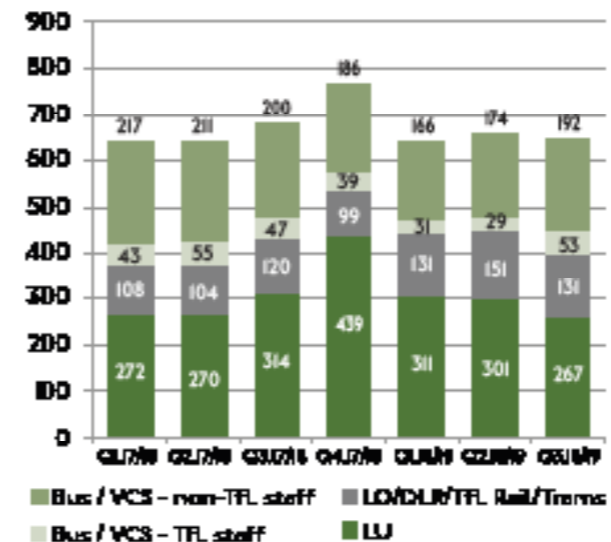
Workplace violence - long term trend



The general upward trend in workplace violence for London Underground which has prevailed since the later periods of 2016/17 has continued, with revenue disputes remaining the major underlying cause. The majority of this is fare evasion, principally double-gating, jumping over gates and forcing through gates. The re-introduction of Neighbourhood Policing is helping to address some of these fare evasion concerns.

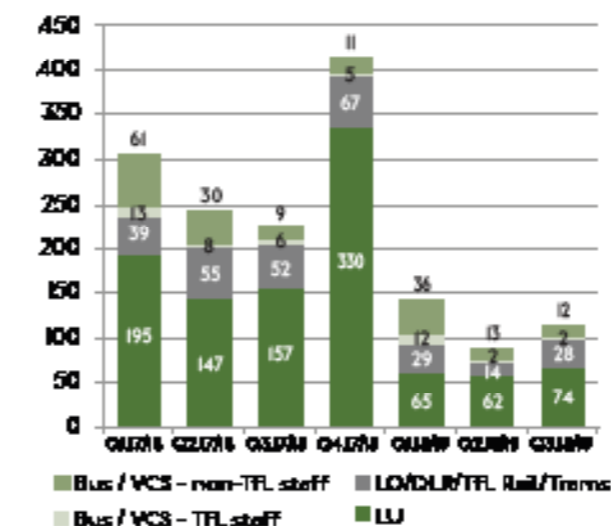
Data shown above are assaults recorded by TfL through internal reporting mechanisms. Not all assaults are reported to the police, and not all assaults will meet the threshold of being classified as a crime and included in police data.

Police recorded staff assaults (volume)



We work closely with the MPS Roads Transport Policing Command and the British Transport Police (BTP) to support investigations into violence (physical and non-physical) towards our workforce. The BTP and MPS report this information differently; the BTP reports on a broad range of outcomes, while the MPS reports the number of crimes detected through a formal sanction (a suspect being charged or cautioned for an offence). Positive outcomes include detections and take account of restorative and reparative outcomes. The rate comprises the number of positive outcomes and detections recorded (which can relate to crimes committed in any year) as a percentage of crimes recorded during the year.

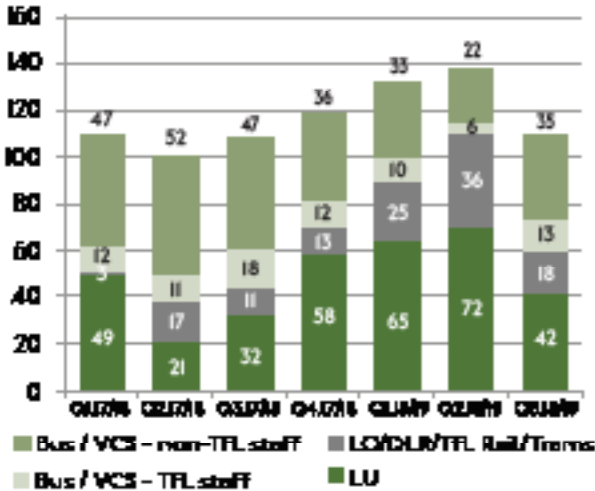
Police recorded staff assaults positive outcomes (volume)



In the quarter the overall positive outcome rate was 18%. This value fluctuates greatly between the BTP and the MPS and is reflective of the live nature of ongoing investigations with many cases open at time of reporting. The majority of recorded staff assaults were on the bus and LU networks (38 and 42% respectively), with the positive outcome rate for this quarter being 6% on the bus network and 26% on the BTP-policed TfL networks.

# Health and Wellbeing

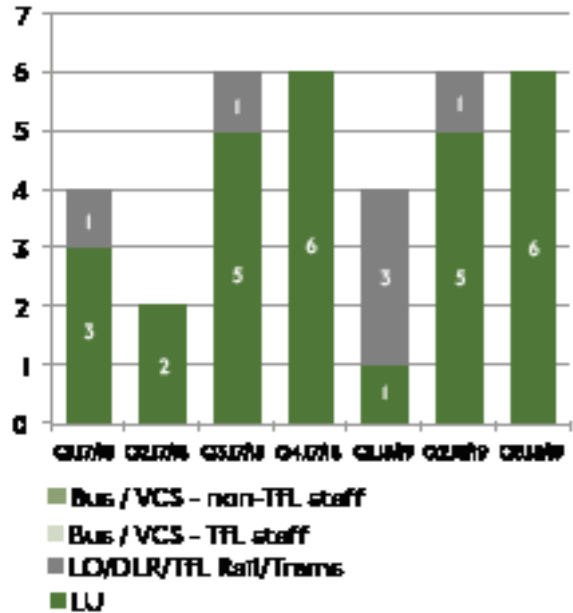
## Police recorded staff assaults which are deemed hate crime (volume)



The police will flag an offence as a hate crime if it is motivated by one or more of the factors of race, religion/faith, sexual orientation, disability or transgender identify. Tackling hate crime against our staff and customers is a priority for us and our policing partners. We lead a range of activities to deal with hate crime on our transport network to reassure our staff and passengers who feel more vulnerable to victimisation, and encourage people to report incidents to the police.

In the quarter the rate was 17%, a slightly lower rate than in the preceding two quarters. The majority of hate-related staff assaults are racially motivated (in excess of 80%) and this is consistent across all modes.

## Sexual offences against members of staff



The volume of offences remains low and are all of a low level nature (exposure and unwanted touching). There were no reported sexual offences against staff working on the bus network.

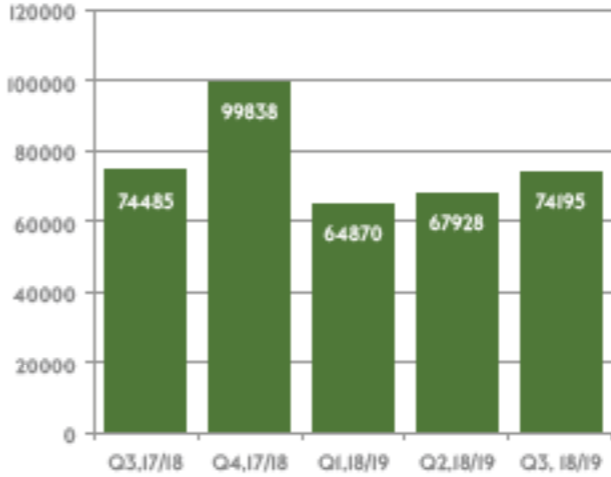
We continue to work with the BTP, City of London Police and the MPS on Project Guardian, a partnership initiative to increase the confidence in reporting sexual offences which occur on the London's public transport system, reduce the risk of becoming a victim, challenge unwelcome sexual behaviour and target offenders.

## Workforce sickness absence

Working days lost to sickness	% working days lost to sickness
74,195	4.79%

We employ almost 26,000 people and within our direct employee workforce, 82% of the working days were lost within LU (where 71% of our direct workforce is employed), and 13% within Surface Transport. We currently provide risk controls and employee support in respect of musculo-skeletal issues, mental health as well as accidents and assaults. During the quarter, 52% of the days lost were attributed to these 3 causes.

## Days lost to sickness absence – 5 rolling quarters



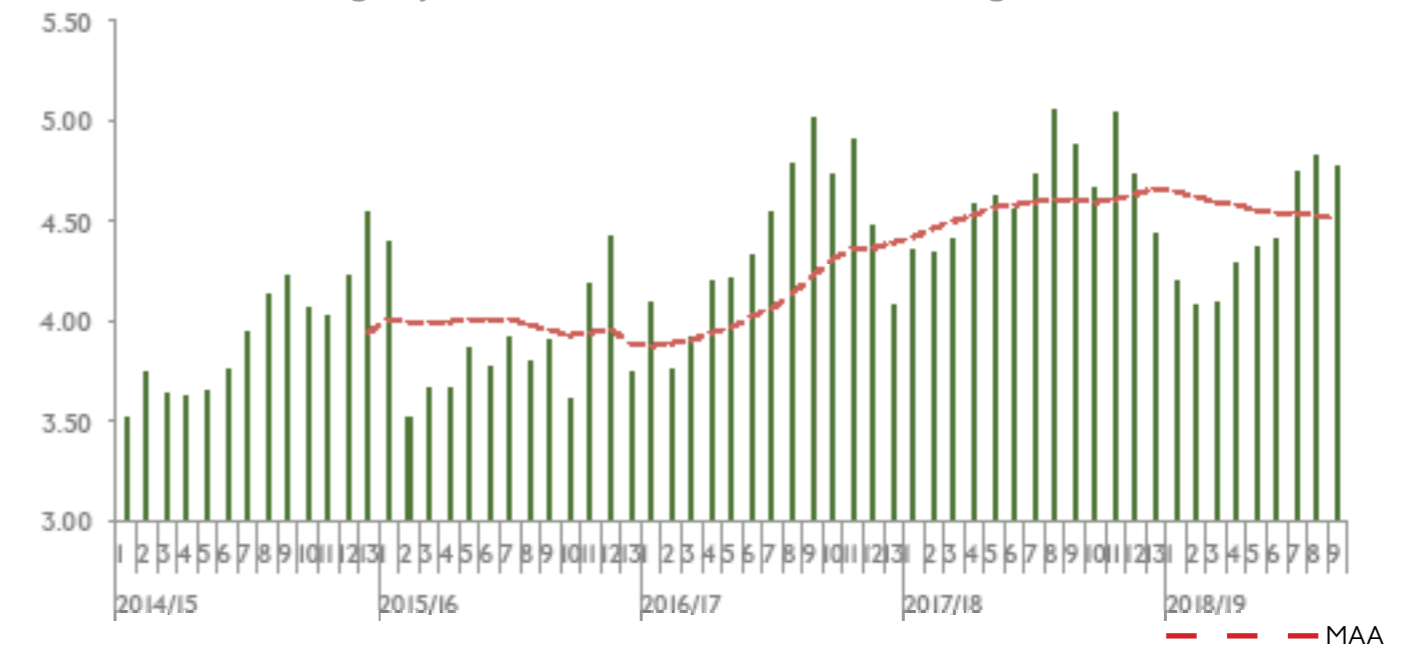
The total number of working days lost to sickness has decreased 0.04% (290) compared to the same quarter last year. In addition:

- The number of working days lost due to mental health increased by 5.8%
- The number of working days lost due to musculo-skeletal issues reduced by 4.3%
- Absence due to accidents and assaults reduced by 1.9%
- The proportion of working days lost to neurological issues and heart disease increased by 13% and 6% respectively

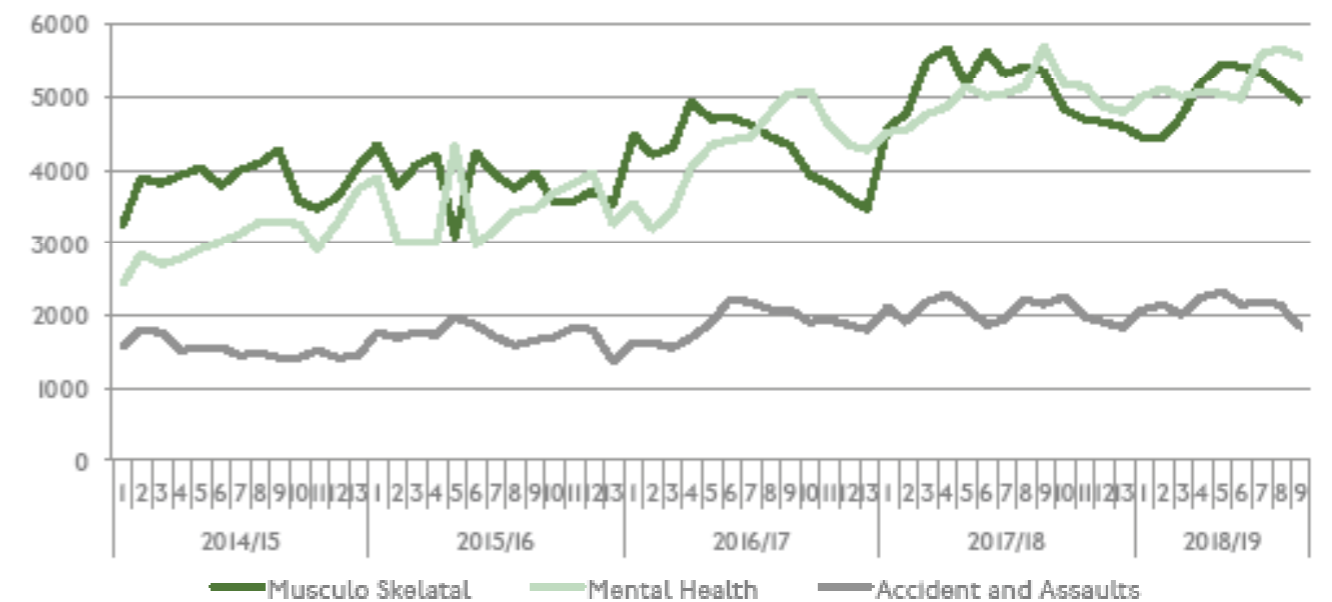


## Long term trend

% Available working days lost - all sickness absence - long term trend 



Working days lost due to sickness causes for areas with specific work related risk controls - long term trend 



The number of working days lost since the start of 2014/15 shows a marginal increase over the past 2 years. The percentage of working days lost due to all sickness this quarter is 2.2% lower than the same quarter last year. The long term trend for the number of working days lost due to musculo-skeletal and mental health causes is increasing by approximately 40 days per period over the last two years.

## Health matters

In September the Health Matters part of the our Health and Wellbeing Programme was launched, encouraging a focus on adopting a healthy lifestyle. Staff engagement activities included:

- Know Your Numbers Week 10-16 September: Our employees were encouraged to take part in the UK's biggest blood pressure testing event by having their blood pressure checked at one of Blood Pressure UK's Pressure Stations and to take an online test to find out their heart age, (an indicator of increased risk of suffering a heart attack or a stroke) and how to reduce it
- National Fitness Day 26 September: Our employees were encouraged to take part in the 90 free activities across the capital designed to get people active and encourage healthier lifestyle choices. We partnered with Public Health England to challenge employees and Londoners to walk briskly for 10 minutes twice a day and track their progress with the Active 10 app



## World Mental Health Day

On World Mental Health Day, which took place on 10 October we promoted techniques and support available to promote good mental health, including:

- The three step approach 'Taking in the Good' to enhance resilience, which encourages reflection on positive experiences
- Promoting our staff network groups and awareness of mental health issues faced by these groups
- A focus on the importance of sleep in maintaining good physical and mental health, including promotion of our online sleep assessment tool, which provides tailored advice on changes to help employees get the most from their sleep

We also provided guidance to staff on managing the stresses and pressures that they may encounter leading up to and during the Christmas period and how to access support during this time.



Know Your Numbers Week - 10-16 September

# London's streets will be clean and green



Cyclists on Quietway 13 in Haggerston

## Environment - overview

**3.5%**  
Reduction in non-traction energy use



**1.5%**  
Reduction in traction energy use



**35%**  
Reduction in CO2 emissions from head office use



### Performance headlines

- ✗ Year to date increase in London Overground traction energy of 4.8%
- ✓ On track with plans to prepare for the launch of the Ultra Low Emission Zone on 8 April 2019
- ✓ On track with roll out of 12 Low Emission Bus Zones
- ✓ On track with launch of green Dial A Ride vehicles

### Did we deliver our planned improvements?

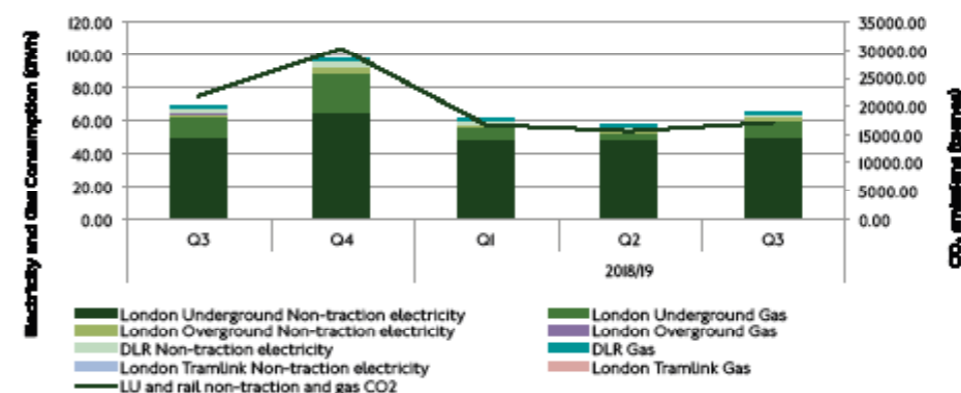
- ✓ Deliver 3 Low Emission Bus Zones (5 were delivered)

### Our plans for the next quarter

- Continue preparations for the launch of ULEZ in April 2019
- Launch a package of measures to reduce air pollution and congestion in central London

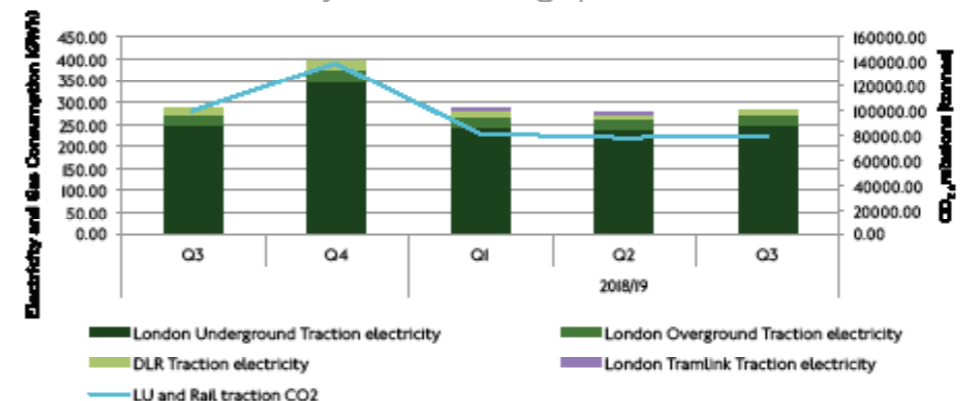
## Environment - performance

### Non-traction electricity and gas use 5 rolling quarters (GWh)



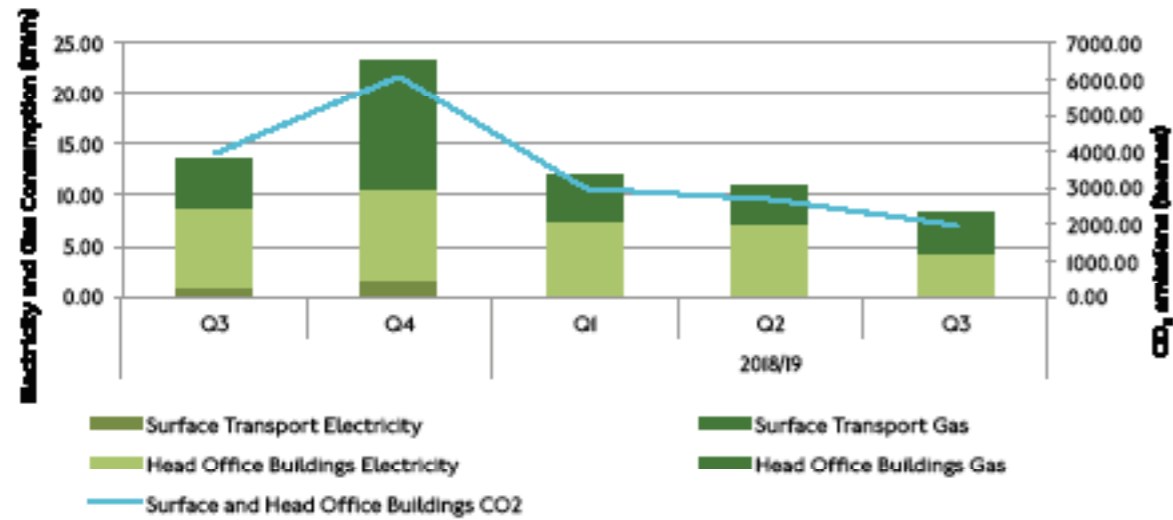
Our usage of non-traction energy fell by 3.5% with a total of 53.7 GWh used during quarter 3. So far this year, we have used 160.6 GWh of non-traction energy (down 1.3% on the equivalent period of last year). LU is responsible for the majority of consumption and recorded a 0.6% decrease on quarter 3 last year. Energy use reduced in London Overground and DLR. CO<sub>2</sub> emissions have reduced by 21% this quarter when compared to the same quarter last year.

### Traction electricity use 5 rolling quarters (GWh)



Our usage of electricity to run our trains fell by 1.5% with a total of 280.2 GWh used during quarter 3. So far this year, we have used 837.7 GWh of traction energy. LU is responsible for the majority of consumption and recorded a static performance compared to the same period last year, despite increases in service levels, such as the introduction of the new Jubilee line timetable in May 2018. For London Overground, there was a 4.8% increase and DLR recorded a reduced consumption by 38.4%. Total CO<sub>2</sub> emissions from rail traction energy were 80,177 tonnes in quarter 3, an improvement of 20% compared to quarter 3 last year.

### Surface transport and head office gas and electricity consumption (GWh)



In our head office buildings, we used 3.94 GWh of gas, down from 4.74 GWh used in the same quarter last year. For electricity, we reduced our energy use by 43%. As both our gas and electric usage has decreased, overall energy efficiency and carbon emissions have improved by 35% this year to date. This is predominantly the result of the successful recommissioning of the gas Combined Cooling, Heat and Power plant at our Palestra head office building in December 2017. This plant generates electricity by burning gas, resulting in an increase in gas consumption, as electricity consumption has decreased.

### Environmental incidents in Q3

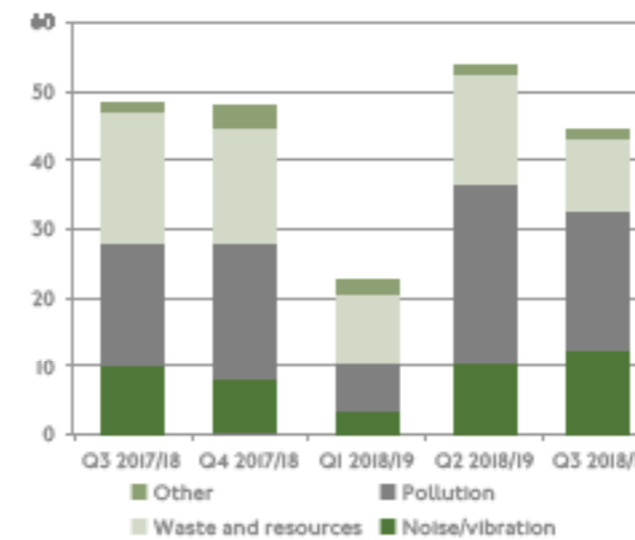
Streets	Buses	LU	Rail	Major Projects	Total
0	0	32	0	12	44

There were 44 incidents in quarter 3, an 8% improvement on quarter 3 last year, when there were 48.

### Top 4 causes of environmental incidents

Pollution	Waste & Resource	Noise & Vibration	Other
48%	23%	27%	2%

### Environmental incidents - 5 rolling quarters





## Actions to improve London's environment

### Environmental complaints

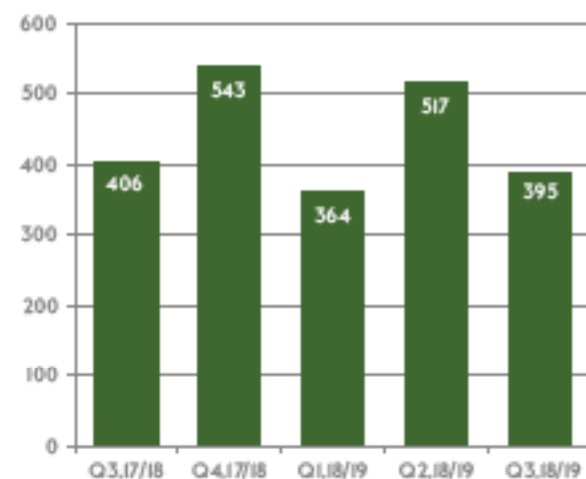
Streets	Buses	LU	Rail	MPD	Other	Total
15	119	185	70	6	0	395

### Top 4 causes of environmental complaints

Operational noise	Smell/Cleanliness	Works noise	Vegetation
28%	23%	21%	10%

A total of 395 environment related complaints were received during quarter 3, compared with 406 in quarter 3 last year. LU had 185 complaints in quarter 3 compared with 184 last year. Of these, 68 complaints related to operational noise, 39 to odour or cleanliness and 34 to works noise. For buses, 45 complaints related to odour or cleanliness, 25 to air pollution, 25 to noise and 24 to graffiti, waste and litter.

### Number of environmental complaints in last 5 quarters



Environment-related complaints have fallen 6% compared with the same quarter last year. This has been driven by a fall in complaints related to air pollution, operational noise, smell/cleanliness and vandalism/waste/litter/graffiti associated with our bus operations. Improvements have also been seen in the number of complaints related to habitats and vegetation on the LU network; although there has been an increase in complaints relating to street vegetation. On our rail networks, complaints relating to operational noise and smell/cleanliness have increased. The LU network has seen a rise in complaints about works noise.

### Ultra-Low Emission Zone (ULEZ)

We are continuing to prepare for the launch of the ULEZ in central London on 8 April 2019. We have begun installing more than 300 ULEZ warning road signs across central London. The signs, which are being installed at the same locations as existing Congestion Charge signs, warn drivers at all entry points to the zone, and on a number of key approach routes, to ensure their vehicle meets the tough new emission standards.

We have been running an extensive multi-channel communications campaign since spring 2018 to prepare drivers for the ULEZ. In addition to advertising to raise awareness of the ULEZ and how the scheme works, we have sent more than 2.5 million emails and contacted registered Congestion Charge users whose vehicles do not meet the ULEZ standards, to remind them the new zone begins on 8 April 2019. We are also contacting other drivers identified in central London whose vehicles are not currently ULEZ-compliant. This has helped encourage 1.3 million visits to our online compliance checker, where people can check if their vehicle complies with the ULEZ emission standards and over one million visits to the ULEZ home web page.

The volume of communications has increased since September and will continue, including the use of new channels such as high profile large format roadside posters at seven high traffic locations.

We have been engaging extensively with key stakeholders in London, including the automotive industry, leasing companies, business groups, arts and culture sector, community and accessibility groups,

customer and active travel groups, Borough communications and transport teams. We have produced a leaflet on ULEZ, which is being distributed to key organisations such as the Federation of Small Businesses, to pass on to their members.

### Low Emission Bus Zones Go Live

We are more than half-way towards the roll out of 12 Low Emission Bus Zones in London following the launch of five more clean corridors, bringing the total in place to seven. These busy roads are now served only by the cleanest diesel buses which emit a fraction of the most harmful tailpipe emissions and have been contributing to healthier streets and people as each bus was upgraded during the conversion process. The Mayor formally announced these in Camberwell on 15 November. They lie between:

- High Road to Green Lanes
- Camberwell to New Cross
- Wandsworth to St John's Hill
- A12 Eastern Avenue to Homerton Road
- Edgware Road - Kilburn to Maida Vale

Their creation follows the launch of the first zones in Putney High Street and the Brixton to Streatham zone and is part of a much larger upgrade of all buses in the 9,000-strong fleet between now and 2020. More than 60% of diesel buses are currently at this ultra-clean engine standard and the rest will follow through a combination of retrofitting or replacement with new vehicles over the next couple of years.

The launches were supported with PR, posters along the route and customer relationship management activity using the TfL database.

### **Electric Bus Depot**

RATP Dev, who operate a number of our bus routes, upgraded their Shepherd's Bush depot to run electric vehicles. The depot houses buses for routes C1 and 70, which will be all electric. The aim is to progressively turn Shepherd's Bush into a depot with a full electric fleet, to make it RATP's first zero-emission bus garage in London.

### **Greener Dial-a-Ride Vehicles**

The first batch of 90 green Dial-a-Ride vehicles arrived in London - the new low-emission vehicles will be introduced 4 months ahead of the ULEZ. Emissions will be reduced further as the majority of these vehicles have technology to stop engines unnecessarily running when the vehicle is not moving. The wider fleet of around 300 will continue to be upgraded ahead of the expansion of the ULEZ to the North and South Circulars in 2021.

### **Reduction of Single Use Plastics**

We launched our action plan for cutting unnecessary use of single use plastic and disposables within our estate, including plastic bottles, disposable coffee cups, plastic cutlery and micro plastics in cleaning products. These requirements were included in the contract for our new head office canteen provider appointed in December 2018.

### **Support for World Car-free Day**

Around 50 streets across London went car-free on 22 September as part of World Car Free Day. The event supported London Play, a charity that works to give children the freedom to play safely in the street.



Our new low emission Dial-a-Ride vehicles

# Regulatory investigation and enforcement update

In November, following the hearing into an incident on 4 June 2016 where a contractor working on track improvements was injured as a result of being crushed against a platform at Whitechapel Station by a road rail vehicle, LU was fined £100,000 plus costs and its Principal Contractor Balfour Beatty Rail Limited was fined £333,000 plus costs.

Surface Transport previously reported an incident on the A40 in November 2011, in which a motorcyclist was injured as a result of temporary bridging plates installed over defective expansion joints on the A40 Westway. The Health and Safety Executive investigation is still ongoing and no formal warnings or notices have been issued to date.

In October, the RAIB issued their report into the detrainment of customers onto live electrical track on the LO network near Peckham Rye station, 7 November 2017. They concluded that:

- The incident occurred because the driver initiated the detrainment of customers without the traction current being switched off
- He did this because he was given instructions by control room staff who had misunderstood the actual location of the stranded train
- The train driver and the signaller did not reach a clear understanding about the actions that were required to safely detrain the customers. The delay caused unrest among the customers on the train and contributed to stress and task overload of the driver, which affected his decision making

- The driver's experience and skills did not enable him to cope with these demands, and Network Rail did not effectively implement its own procedures for managing an incident involving a stranded train

Underlying factors were that:

- Arriva Rail London (ARL) strategic command and Network Rail signalling staff were not adequately prepared to manage the incident
- The railway industry standards and procedures relating to stranded trains place little emphasis on the need for practical training for those involved

The RAIB also observed that there were a number of deficiencies in the training and briefing of staff and in the ARL control room arrangements.

The RAIB has made three recommendations, directed to Arriva Rail London and Network Rail, intended to improve the response of the railway industry to train failures and other abnormal events, and has identified three learning points relating to the importance of following the correct procedures when preparing to evacuate customers from trains, ensuring that communications are properly understood, and passing on the details of incidents promptly and effectively.

We will monitor ARL's action against these recommendations via the ARL Safety Executive meeting.

## Audit conclusions



A total of 8 health, safety or environmental related audits were conducted in the quarter. Three were concluded as 'adequately controlled'.

One audit had a conclusion of 'poorly controlled'. The testing of LU station staircase pressurisation testing was concluded as poorly controlled due to the absence of a maintenance regime for the related assets. These staircases and associated systems may be used by the London Fire Brigade (LFB) to access stations in an emergency and the corrective actions have included consultations with the LFB.

Four were concluded as 'requires improvement':

- Following a change of supplier to manage legionella risk, the audit found there are a number of key activities that require implementation to meet statutory requirements
- The audit of testing of LU Station Emergency Lighting concluded not all British Standard requirements were met which meant compliance with the Regulatory Reform (Fire Safety) Order 2005 cannot be fully demonstrated
- Following a previous 'poorly controlled' audit of earth structures, this audit found the action regarding inspection backlog was complete but three areas still required implementation
- The audit of asset data changes being handed over from projects into the asset management systems concluded compliance with the project management system was not consistent and the absence of a central project register hindered planning and assurance

# Appendix I: Sandilands investigation recommendations applicable to TfL

Table I: Sandilands investigation recommendations applicable to TfL and its subsidiaries

Recommendation	Progress to date
UK tram operators, owners and infrastructure managers should conduct a systematic review of operational risks and control measures associated with the design, maintenance and operation of tramways.  [RAIB recommendation 2. Links with RAIB Recommendation 1, 10, and TfL Recommendation 5]	<p>Together with Tram Operations Ltd we are represented on the UK Tram Industry Sandilands Sub Committee, established to consider the RAIB findings and take action on behalf of the UK tram industry.</p> <p>Our (together with TOL) review of route risk assessments and the network risk model has been shared with the wider UK tram industry. The industry is reviewing all risk assessments within the industry to agree a standard approach. The LT/TOL risk assessments have been reviewed and revised in line with this approach. An industry risk model is under development via UK Tram and the Light Rail Safety and Standards Board.</p> <p>We presented an overview and findings of Risk Model work to Rail Safety and Standards Board Risk Management Forum in June 2018.</p>
UK tram operators, owners and infrastructure managers should work together to review, develop, and install suitable measures to automatically reduce tram speeds if they approach higher risk locations at speeds which could result in derailment or overturning.	<p>The tender process for the installation of a new safety system on the London Trams network that will automatically apply the brakes should the speed limit be exceeded at high risk locations, continued.</p> <p>The Invitation to Tender was issued 31 July and the contract was awarded to Engineering Support Group limited on 14 December 2018. The system will be installed and in operation by the end of 2019, including a period of training and familiarisation with tram drivers ahead of it becoming fully operational. TOL are an active stakeholder in this.</p> <p>The new system will automatically bring a moving tram to a controlled stop if it were to exceed the speed limit at a designated location. The system will also automatically alert the operations control centre.</p> <p>The system will initially be configured to priority locations as suggested by the RAIB but will have the flexibility to be introduced elsewhere on the tram network.</p>
UK tram operators, owners and infrastructure managers should work together to research and evaluate systems capable of reliably detecting driver attention state and initiating appropriate automatic responses if a low level of alertness is identified.  [RAIB recommendation 4]	<p>In progress: Working closely with TOL, LT has procured and commissioned the 'Seeing Machine Guardian' driver protection system fleet wide. This system uses proven facial movement technology to monitor driver fatigue and distraction. The system was fully installed across the LT fleet in October 2017.</p> <p>An additional feature of the Guardian system is that it is programmed to alert drivers if the maximum speed goes above 70kph.</p> <p>TOL were closely involved in the selection and implementation of this system and played the major role in securing driver support.</p> <p>LT and TOL have already hosted several delegations, including UKTram and others, to demonstrate the technology in operation.</p>

Recommendation	Progress to date
UK tram operators, owners and infrastructure managers, in consultation with the DfT, should work together to review signage, lighting and other visual information cues available on segregated and off-track areas required by drivers on the approach to high risk locations.	<p>UK Tram commissioned a review of systems capable of reliably detecting driver attention state and initiating an appropriate automatic response if a low level of alertness is detected. We will evaluate the systems identified by the review when it is published to see if the Guardian system fully implements this recommendation or if further work is needed.</p> <p>We undertook a comprehensive review of tram speeds and speed signage across its network.</p> <p>As a result the following measures were put in place by September 2017. TOL are an active and engaged stakeholder on this initiative:</p> <ol style="list-style-type: none"> <li>1. The maximum tram speed on the network was reduced by 10kph, from 80kph to 70kph. The effect is that the potential for coasting in high speed areas has been removed, and that continual speed management is required in these low workload areas so increasing driver alertness.</li> <li>2. Additional step down speed signage was implemented in all locations where speeds reduced by more than 20kph, enhancing driver visual cueing and orientation.</li> <li>3. Where speed signs are located immediately in advance of higher risk locations, e.g. a tram stop or a curve with low approach visibility, the sign has been enhanced with the addition high visibility outer border as an additional visual cue to drivers of an approaching hazard.</li> </ol> <p>iTram</p> <p>We will implement iTram to provide audible in-cab over speed alerts. iTram is a performance monitoring tool that as well as driving safety improvements by trend analysis of tram speeds, also utilises GPS technology to provide over speed warnings to drivers at all points across the network. It is therefore an enhancement on the Guardian system which can only alert drivers if they exceed the maximum speed limit.</p> <p>Fitment across the fleet will be completed by December 2019</p> <p>Review of Visual Cueing</p> <p>Together with TOL we have completed a comprehensive Route Hazard Analysis. The conclusion is that the already completed installation of additional speed signage work improves driver visual cueing on the network. Conceptual designs for enhanced visual cueing in Sandilands tunnel are under TOL driver consultation.</p> <p>Tunnel Lighting</p> <p>Post the Sandilands incident we installed additional temporary lighting on the approach to the Sandilands tunnel. While our road tunnel lighting experts developed a permanent solution.</p> <p>The new design will adopt best practice from the automotive industry to reduce the impact of glare on driver's eyes both when entering and exiting the tunnel. Work is expected to be complete on the improved tunnel lighting by December 2019.</p> <p>We are also trialling illuminated warning signs, similar to those used on roads to warn drivers their speed is above the limit. The effectiveness of these signs will be evaluated in summer 2019 and the feedback will be shared with the UK tram industry.</p> <p>[RAIB recommendation 5. Links to TfL Recommendation 1]</p>

<p>UK tram operators and owners should, in consultation with appropriate tram manufacturers and other European tramways, review existing research and, if necessary, undertake further research to identify means of improving the customer containment provided by tram windows and doors.</p>	<p>We have commissioned the manufacture and testing of several prototype windows that may provide an appropriate level of additional containment. These prototypes have been assessed against the conditions likely to have been encountered during the Sandilands incident, and take into account any affect they may have on ease of access for the emergency services.</p> <p>We concluded that mainline rail crash worthiness standard GM/RT2100 is more likely to offer protection against the conditions experienced during the Sandilands event. Strengthening film on top of the existing tempered glass has been selected as the immediate solution to strengthen glazing on trams.</p> <p>The extensive testing with safety experts has progressed and a new higher specification film that is 75% thicker (from 100microns to 175microns) will be fitted to all doors and windows to improve containment by spring 2019.</p> <p>We are investigating the practicalities of modifying tram doors and we will consider the recommendations made by the RAIB when designing new vehicles in the future.</p>
<p>[RAIB recommendation 6. Links to TfL Recommendation 8]</p>	
<p>UK tram operators and owners should install (or modify existing) emergency lighting so that the lighting cannot be unintentionally switched off or disconnected during an emergency.</p>	<p>In conjunction with industry experts, we have formulated a Technical Specification for the retrofitting emergency lighting to its fleet. The system will be fully autonomous, and will operate independently of the trams battery system in the event of an emergency.</p> <p>A new emergency lighting system, that will operate independently of the trams' battery in the event of an emergency, has been procured and will be installed over the summer of 2019.</p> <p>TOL are an active and engaged stakeholder on this initiative.</p>
<p>[RAIB recommendation 7]</p>	
<p>UK tram operators and owners should review options for enabling the rapid evacuation of a tram which is lying on its side after an accident.</p>	<p>We will work with tram operators and tram manufacturers to identify and evaluate options to achieve this objective.</p>
<p>[RAIB recommendation 8]</p>	
<p>TOL and LT should commission an independent review of its process for assessing risk associated with the operation of trams.</p>	<p>The network risk model and route risk assessments have been reviewed and updated. They have been shared with the wider UK tram industry and we also presented an overview and findings of Risk Model work to Rail Safety and Standards Board Risk Management Forum in June 2018. Work has also been completed on our tram crossing risk assessments for Croydon town centre.</p> <p>A joint management process for the embedment of the models has been developed.</p> <p>The industry is reviewing all risk assessments within the industry to agree a standard approach. The LT/TOL risk assessments will be further reviewed and revised in line with this approach.</p>
<p>[RAIB recommendation 10. Links with RAIB recommendation 2]</p>	

Recommendation	Progress to date
<p>TOL should review and, where necessary, improve the management of fatigue risk affecting its tram drivers with reference to the ORR's good practice guidance. [RAIB recommendation 11]</p>	<p>TOL are implementing a safety improvement plan designed to address the intent of this recommendation through their own internal safety governance arrangements.</p>
<p>TOL should commission an external organisation to review, the way that it learns from operational experience. [RAIB recommendation 12]</p>	<p>TOL have implemented a 'Just Culture' Programme designed to address the intent of this recommendation through their own internal safety governance arrangements.</p>
<p>TOL and LT should review and improve the process for managing public and employee comments that indicate a possible safety risk.  [RAIB recommendation 13]</p>	<p>Complete: We have reviewed our customer complaints procedure and implemented improvements to ensure that any safety issue raised by a customer is dealt with efficiently and thoroughly across the TfL network.</p>
<p>TOL and LT should review and improve their processes for inspecting and maintaining on-tram CCTV equipment to greatly reduce the likelihood of recorded images being unavailable for accident and incident investigation. This recommendation may apply to other UK tram operators.  [RAIB recommendation 14]</p>	<p>All LT Bombardier fleet has been fitted with new CCTV image recorders. CCTV health checkers which actively monitor the status of recording units and identify faults.</p> <p>A review is underway to establish whether similar remote monitoring capabilities can be introduced on the Stadler vehicles as is now used on the Bombardier vehicles. We are progressing with procurement documentation.</p>
<p>TOL and LT should review and revise where required existing tram maintenance and testing documentation to take account of experienced gained, and modifications made, since the trams were brought into operational service. [RAIB recommendation 15]</p>	<p>LT has undertaken a comprehensive review of its written standards, maintenance processes and identified quality deficiencies. LT has appointed an independent entity to author new written standards, maintenance processes and forms addressing all quality gaps. This process will be in two phases, with sixteen critically prioritised standards and associated documents being delivered in the first phase. 4 standards have been issued for review.</p>
<p>Review available driver cues in relation to braking points on approaching a curved section of the tramway.  [TfL recommendation 1. Links to RAIB recommendation 5]</p>	<p>Overall network top speed has been reduced from 80kph to 70kph. Additional 70kph signs have been provided to aid driver awareness of the permitted maximum speed.</p> <p>A design and signal sighting exercise has been concluded and the provision of additional step down speed signage to aid driver speed awareness and visual cueing is complete.</p> <p>Additional visibility signs have also been provided, which will heighten driver speed awareness in high risk areas.</p>

Recommendation	Progress to date
<p>Review of arrangements for the monitoring and management of speeding.</p> <p>[TfL recommendation 2. Links to RAIB recommendation 3]</p>	<p>LT has commissioned the installation and commissioning of the 'iTram' system, which will provide driver over-speed alerts network wide. iTram will also provide oncoming hazard awareness to drivers of high risk areas.</p>
<p>Review of traction brake controller (TBC) driver's safety device design.</p> <p>[TfL recommendation 3]</p>	<p>LT has procured and commissioned the 'Seeing Machine Guardian' driver protection system fleet wide. This system provides proven driver fatigue and distraction management via facial recognition technology.</p>



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Date: 27 February 2019

Item: 2018 Road Danger Analysis

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## This paper will be considered in public

### 1 Summary

- 1.1 This paper presents an overview of the number of people involved in fatal collisions as reported by the police during 2018, compared to previous years, and the publication schedule for finalised 2018 collision data for London.

### 2 Recommendation

- 2.1 The panel is asked to note this paper.

### 3 Background

- 3.1 Any death or serious injury on our roads is a tragedy, and our priority is to eradicate such incidents. Figures for 2018 show that the number of people killed in road traffic collisions, occurring on the public highway, fell to the lowest level on record with 110 police reported fatalities during 2018 compared to 131 in 2017 (Appendix 1, table 1). This data is collected by the police in accordance with Department for Transport (DfT) STATS20 instructions for road traffic collisions.
- 3.2 The greatest reduction in fatalities was amongst people who were walking, which fell from 73 in 2017 to 53 in 2018 – the lowest number on record. This was followed by fatalities of people who were riding a motorcycle, which fell from 31 to 22 people and to the equal lowest level on record. However people who rode a motorcycle still made up 20 per cent of all fatalities in 2018 despite making up only two per cent of traffic.
- 3.3 The involvement of large goods vehicles in fatalities of people who were walking almost halved, with 12 fatalities involving a large goods vehicle or a tipper truck in 2018 compared to 21 in 2017 (Appendix 1, table 2). The involvement of cars and taxis in fatalities of people who were riding a motorcycle also almost halved, falling from 15 in 2017 to eight fatalities in 2018.

- 3.4 Despite overall reductions, fatalities of people who cycle increased from 10 to 12 – the highest level since 2014. Fatalities of people who travel by car also increased from 14 to 17, with over half resulting from loss of control and with no other vehicle involved. Half of all fatalities of people who cycle occurred during May and June, partly reflecting increases in cycling during the summer of 2018, which was one of the driest and warmest on record. Levels of cycling during this period within central London increased by eight per cent compared to the previous summer. However, the involvement of cars in fatalities of people who cycle increased from one in 2017 to four during 2018, and we are undertaking further analysis to better understand the reasons for this.
- 3.5 There was one fatality of a person travelling by bus, resulting from a fall within the bus, and one fatality of a person travelling by a private hire vehicle and one fatality of a person travelling by taxi during 2018. Overall, buses were involved in 8 fatalities in 2017 and 10 fatalities in 2018, and taxis were involved in five fatalities in 2017, falling to three fatalities in 2018. One person who was walking was fatally injured in a collision with an electric bicycle during 2018.
- 3.6 Three teenagers who were walking were fatally injured in Hayes in 2018, when they were hit at high speed by a car in a collision for which the driver was convicted of causing death by dangerous driving.
- 3.7 During 2018, 30 people were reported by the police to have died as a result of incidents that are not defined as road traffic fatalities under DfT STATS20 instructions (Appendix 1, table 1). These incidents include suicides and deaths from natural causes. Figures are now available from the police for 2018, which we will continue to report alongside DfT defined road traffic fatalities.
- 3.8 The picture in 2018 again serves to highlight that much more needs to be done to eradicate the devastating consequences of people losing their lives or being seriously hurt on the roads. Safety is our top priority and we are focused on delivering every element of the Vision Zero Action Plan, published in July 2018, to bring this about. We will continue to concentrate on four key areas of safe speeds, safe streets, safe vehicles and safe behaviours. In particular we will continue to undertake detailed analysis of collisions resulting in people who walk, cycle and ride a motorcycle injury and collisions involving buses, so that we can take action.

## **4 2018 collision figures**

- 4.1 The Metropolitan Police Service (MPS) introduced a new collision reporting system in November 2016, which affects data for London. Under the previous system, officers recorded whether, in their judgement, an injury was 'slight' or 'serious'. Under the new system, officers input their own records using an 'injury-based assessment'. This assessment is in line with DfT STATS 20 instructions and can be expected to provide a better assessment of the severity injuries. This has, however, resulted in more injuries being classified as severe rather than slight.

- 4.2 Combined with the introduction of online self reporting by the police<sup>1</sup>, which has enabled a greater number of collisions to be reported, data collected after November 2016 was difficult to compare with earlier data.
- 4.3 To address this issue, the Transport Research Laboratory undertook a 'back-casting' exercise to enable pre-November 2016 data to be compared with post-November 2016 data. Their approach was consistent with that adopted by the DfT and the Office for National Statistics.
- 4.4 We are working with the police to provide more frequent publication of the number of people killed throughout the year, including those that fall outside of STATS20 instructions for road traffic collisions as defined by the DfT, such as suicides and those resulting from natural causes.
- 4.5 Figures for the number of people seriously and slightly injured during 2018 are currently provisional. Finalised collision figures, including the number of people Killed and Seriously Injured (KSI), are scheduled to be published in-line with the DfT national dataset on 27 June 2019. This will include a factsheet, data files and updates to the online London Collision map at [www.tfl.gov.uk/roadsafety](http://www.tfl.gov.uk/roadsafety).

**List of appendices:**

Appendix 1 – STATS20 data

**List of background papers:**

None

Contact Officer: Alex Williams (Director of City Planning)  
Number: (020) 3054 7023  
Email: alexwilliams@tfl.gov.uk

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<sup>1</sup> <https://www.met.police.uk/ro/report/rti/report-a-road-traffic-incident/>



## Appendix 1

Table 1: Number of STATS20 reported road traffic fatalities (2005-09 baseline to 2018) and non-STATS20 reported fatalities (2018)

Road user	2005-09 baseline	2011	2012	2013	2014	2015	2016	2017	2018	2018 non STATS-20*
Pedestrian	96	77	69	65	64	66	61	73	54	6
Pedal Cycle	17	16	14	14	13	9	8	10	12	1
Powered 2 Wheeler	43	30	27	22	27	36	33	31	22	2
Taxi / Private hire	1	0	2	1	0	1	0	0	2	0
Car	49	32	19	25	19	20	10	14	16	14
Bus / Coach	2	1	2	1	0	1	1	2	1	5
Goods vehicle	2	1	1	2	2	1	1	1	0	1
Other~	1	2	0	2	2	2	2	0	3	1
<b>All</b>	<b>211</b>	<b>159</b>	<b>134</b>	<b>132</b>	<b>127</b>	<b>136</b>	<b>116</b>	<b>131</b>	<b>110</b>	<b>30</b>

The Department for Transport (DfT) STATS20 instructions are that all road collisions involving human death occurring on the Highway and notified to the police within 30 days of occurrence, and in which one or more vehicles are involved, are to be reported. This is a wider definition of road accidents than that used in Road Traffic Acts.

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/230596/stats20-2011.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/230596/stats20-2011.pdf)

~A mobility scooter rider, a pony and trap carriage driver and a pedestrian using a child scooter were fatality injured during 2018 and are categorised under DfT STATS20 instructions as 'other' road user.

\*Non-STATS19 police reported fatalities are those that do not meet STATS20 instructions above and include suicide and death from natural causes. This data has been reported by the police for 2018.

Table 2: Number of STATS20 reported road traffic fatalities by the vehicle involved and road user (2018)

Casualty type	Vehicles involved											
	Road user	Pedal Cycle	Motorcycle	Bus	Car	Taxi	LGV	Large goods vehicle	Skip/ tipper/ refuse /grit lorry	Multiple vehicle conflict	None (Solo collision)	Unknown
Pedestrian	1	2	8	25	0	3	9	4	0	0	2	<b>54</b>
Pedal Cycle	0	0	1	4	1	1	4	1	0	0	0	<b>12</b>
Motorcycle	0	1	0	7	1	4	1	2	0	6	0	<b>22</b>
Taxi and Private hire	0	0	0	1	1	0	0	0	0	0	0	<b>2</b>
Car	0	0	1	7	0	0	1	0	1	6	0	<b>16</b>
Bus / Coach	0	0	0	0	0	0	0	0	0	1	0	<b>1</b>
Light Goods Vehicle (<=3.5t)	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Medium Goods Vehicle (3.5 - 7.5t)	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Heavy Goods Vehicle (>=7.5t)	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Other	0	0	0	2	0	0	0	0	0	0	1	<b>3</b>
<b>Total</b>	<b>1</b>	<b>3</b>	<b>10</b>	<b>46</b>	<b>3</b>	<b>8</b>	<b>15</b>	<b>7</b>	<b>1</b>	<b>13</b>	<b>3</b>	<b>110</b>

Date: 27 February 2019

Item: Bus Driver Facility Improvements

**This paper will be considered in public**

**1 Summary**

- 1.1 This paper provides an update on the Bus Driver Facilities Programme.
- 1.2 The Bus Driver Facilities Programme aligns with the Mayor’s Transport Strategy by ensuring that the bus network is operationally efficient and reliable and therefore meets customer expectations. Well located toilets mean that drivers can access facilities within the time constraints of their breaks, allowing them to resume their bus service as timetabled and avoids unscheduled breaks mid route.

Alignment to the Mayor’s Transport Strategy

Strategic Driver / Policy	A Good Public Transport Experience
Primary Outcome Indicators	R2. Public transport reliability and performance (Buses)

- 1.3 Needing the toilet is a distraction for bus drivers, impacting their ability to concentrate on the road, and is a basic human need. By reducing distractions facing bus drivers, the safety of bus passengers, pedestrians and other road users is improved.

**2 Recommendation**

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

**3 Background**

- 3.1 Bus driver facilities are an integral part of running an efficient and safe bus network. Providing these facilities is as important as other bus infrastructure such as bus stops, shelters and stations. If we are unable to provide facilities we may in some circumstances need to make changes to the bus network.
- 3.2 Provision of toilet facilities has previously been addressed by a mixture of public and private amenities. While this ensures that the vast majority of drivers have access to a toilet during all hours of operation, some routes are left not fully served, for example, where we have an agreement with a local business for drivers to use their toilets, but that business is not open for all hours of the operating day.

- 3.3 Those routes where toilets are not available at all times can be addressed by a mixture of permanent or temporary facilities. We install these facilities using TfL's permitted development rights following discussions with the local planning authority and other stakeholders.
- 3.4 Routes are classified as either Priority 1, 2 or 3 depending on their level of toilet provision, and the below table outlines the route prioritisation as agreed with all key stakeholders including Unite, the bus drivers' union.

**Table 1: Priority Classification**

Priority	Description
1	Routes without any staff facilities at either terminus
2	Routes that have limited access and run beyond the opening hours of the available facilities
3	Routes with a round trip greater than 150 minutes with a toilet provision only at one end
New	Sites where a route is being extended or introduced that do not have existing facilities

- 3.5 On 13 February 2018, the Mayor of London announced £6m of funding to help deliver the toilets on the highest priority routes in order that all bus routes have access to toilet facilities during all hours of operation. This funding enables us to deliver facilities on 42 of the highest priority routes. These are predominantly priority two routes – see table two below for further details.
- 3.6 In addition to addressing the highest priority routes on the existing bus network we are also progressing work to ensure that facilities are provided to support planned bus service changes. We will not make changes to the bus network that result in reduced toilet provision.

## 4 Progress and Forward Programme

- 4.1 A significant step change in the provision of facilities has been achieved since the Mayoral announcement in February 2018. There are now an additional 21 priority routes that have access to a facility, six of which are permanent. A list of the sites is included in Appendix 1.
- 4.2 We are targeting an accelerated programme that will provide facilities on forty-two priority routes by the end of July 2019. These will be a mixture of permanent or temporary facilities. We are currently working towards a stretch target to ensure all these facilities are permanent by April 2020.
- 4.3 Table two summarises the distribution of routes in scope and the number that now have a facility.



**Table 2: Priority routes resolved to date**

Priority	Number of routes within scope	Number of routes that now have access to a facility
1	2	1
2	36	20
3	4	0

- 4.4 Our contractor has completed detailed surveys for all of the routes in scope and has commenced detailed design work. We will be converting existing temporary facilities to permanent over the next six months as well as installing more temporary facilities to meet the target of 42 routes with facilities by the end of July 2019.
- 4.5 We have updated the design of the standard facility so it is more cost efficient, better suited to the needs of bus drivers, is environmentally friendly and can be used as both the temporary and permanent facility. We have completed the manufacturing of the first batch of units.
- 4.6 The provision of facilities can, depending on the location, be a sensitive subject for local stakeholders. We recognise this and have engaged with boroughs, landowners and stakeholders to ensure we place facilities in locations that are considerate of the local environment. We always agree a location with boroughs in advance and issue letters to residents and businesses prior to installation.
- 4.7 In selecting a suitable location we make sure that we comply with our duties under the Equality Act locating facilities so that they allow space for pedestrian movements and do not create any safety issues.
- 4.8 Facilities need to be located at the route terminus within 200 metres of the bus stand, as agreed at the outset with Unite and the Bus Operating Companies. They also need to be within sight of the bus, with good lighting, sufficient space for a facility and access to utilities. The siting of facilities therefore needs to carefully consider all of these factors to ensure operations aren't impacted and that the bus service remains efficient and runs to timetable.
- 4.9 The majority of facilities have been installed with no issues or concerns from local communities, however, some have resulted in complaints from residents and stakeholders. In one instance this was the result of the failure of our supply chain to deliver letters in advance of the installation. Where this is the case we have met with residents and stakeholders to discuss their concerns or responded to correspondence explaining why these facilities are important.

- 4.10 We have also introduced additional checks to ensure future installations minimise the impact on local communities, such as ensuring stakeholder correspondence has been issued as planned. We will continue to work with stakeholders to ensure we can provide these important facilities with as little impact as possible.

## **5 Ongoing Work**

- 5.1 We will continue to engage with bus drivers, operators and Unite to ensure that as bus routes change, they are all assigned the correct priority within the programme and that new facilities are delivered on the highest priority routes.
- 5.2 We will continue to identify opportunities for developers to provide facilities for bus drivers as part of Section 106 contributions and other negotiated agreements.

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

Appendix 1: List of routes with a facility installed since February 2018  
Appendix 2: Example of sites installed

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

SSHRP – Bus Driver Facility Improvements, 27 September 2018  
SSHRP – Bus Driver Facility Improvements, 28 February 2018

Contact Officer: Claire Mann, Director of Bus Operations  
Number: 020 3054 9465  
Email: [ClaireMann@tfl.gov.uk](mailto:ClaireMann@tfl.gov.uk)

## **Appendix 1: Routes that now have a facility (since 2018)**

- (a) Route 370 - Lakeside (*permanent solution*)
- (b) Route 214 – Moorgate (*permanent solution*)
- (c) Route 271 - Moorgate (*permanent solution*)
- (d) Route H13 – Ruislip Lido (*permanent solution*)
- (e) Route 274 – Lancaster Gate (*permanent solution*)
- (f) Route 393 – Clapton Pond (*permanent solution*)
- (g) Route 174 - Harold Hill
- (h) Route 290 - Staines Bus Station
- (i) Route R68 - Kew Retail Park
- (j) Route 368 - Barking Hart Estate
- (k) Route 430 - Roehampton
- (l) Route 130 - Vulcan Way, New Addington
- (m) Route W15 - Cogan Avenue, Waltham Forest
- (n) Route 78 – Nunhead St Mary’s Road
- (o) Route R1 – St Paul’s Cray
- (p) Route 415 – Tulse Hill Station
- (q) Route 273 – Petts Wood Station
- (r) Route 499 – Gallows Corner, Tesco
- (s) Route E5 – Toplocks Estate
- (t) Route H28 – Syon Lane Tesco
- (u) Route W14 – Woodford Bridge

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**Appendix 2: Examples of site installed**

**Woodford Bridge**



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**Date:** 27 February 2019

**Item:** Energy Strategy Update

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

#### **1 Purpose**

- 1.1 The purpose of this paper is to update the Panel on current progress related to the TfL Energy Strategy presented to the Panel last year.

#### **2 Recommendation**

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

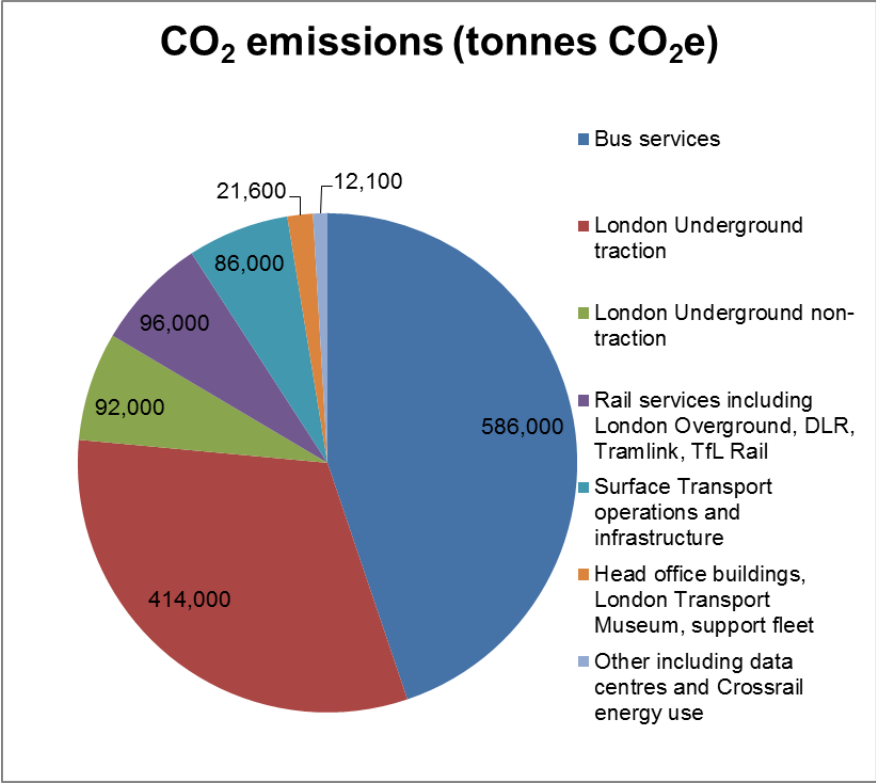
#### **3 Background**

- 3.1 TfL's Energy Strategy sets out the approach to achieving best value for money from TfL's operational spend and capital investment in energy, while seeking to meet the Mayor's strategic aims for TfL's energy use and CO<sub>2</sub> emissions. It focuses on the reduction of CO<sub>2</sub> emissions from TfL's direct operations, including bus services, rail traction energy, stations, depots and head office buildings.
- 3.2 The Energy Strategy contributes to three key Mayoral ambitions set in the Mayor's Transport Strategy (MTS) and London Environment Strategy:
- (a) The TfL bus fleet to emit zero exhaust emissions by 2037 at the latest;
  - (b) Aim for all TfL-controlled rail services to be zero carbon by 2030; and
  - (c) Meeting a 60 per cent reduction in GLA group CO<sub>2</sub> emissions on 1990 levels by 2025.
- 3.3 The Energy Strategy was agreed and endorsed by the Panel in June 2018. It includes twelve key initiatives, which can be consolidated into four high-level work streams; energy efficiency, low carbon energy generation/storage, road transport electrification and low carbon energy procurement. Feasibility studies are being undertaken to identify key projects that will be prioritised on their ability to significantly reduce carbon emissions and financial benefit and an update on each of these is provided in sections 6-9 below.

## 4 Overview of TfL’s direct CO2 emissions

4.1 TfL’s total CO2 emissions from its direct operations were 1.31 M tonnes CO2e in 2017/18. These emissions are broken down in Chart 1 below:

**Chart 1: Breakdown of CO<sub>2</sub> emissions from TfL operations, 2017/18**



4.2 Buses and London Underground (LU) account for the majority of TfL’s direct CO<sub>2</sub> emissions. Bus emissions have reduced by 13 per cent since 2012/13, as hybrid and electric vehicles have been introduced to the fleet; emissions will reduce further as more zero emission buses are rolled out. LU’s emissions have fallen by 28 per cent from their peak in 2014/15, as additional energy consumption from increased services is more than counterbalanced by reductions in the emissions intensity of grid electricity. However to meet the 2030 target the electricity supplying the Tube will need to be less carbon intensive than that forecast for the grid.

## 5 Energy investment in the 2018 Business Plan

- 5.1 TfL’s Business Plan includes provision to support the workstreams in the energy strategy, including:
- (a) Investment in zero emission buses and supporting infrastructure upgrades in order to meet the target for a zero emission bus fleet;
  - (b) Investment in solar generation and energy efficiency initiatives in TfL Buildings under the RE:FIT framework, with c1.1 MW of solar generation capacity to be installed in this phase of works; and



- (c) Provision over 2018/19 and 2019/20 to further develop high priority opportunities identified in the Energy Strategy. This includes feasibility studies for generation and energy efficiency initiatives, and support for potential private wire opportunities.
- 5.2 As feasibility studies for energy strategy initiatives are undertaken and high level business cases for priority schemes are developed, we are pursuing options to leverage third party financing opportunities to deliver initiatives.
- 5.3 This work seeks to establish the suitability of each discrete project for private financing. This activity will be informed by the outcomes of ongoing technical feasibility studies, in particular understanding:
- (a) The operational interfaces between a third party owning and operating infrastructure and TfL operations;
  - (b) The maturity of the technologies;
  - (c) The capital requirement; and
  - (d) The predictability of revenues.
- 5.4 There is precedence of financing structures based on third party funding being used for some areas identified in the Energy Strategy, for example larger scale new generation assets. However initial engagement with subject matter experts indicates that there is little precedent for similarly structured deals for other potential initiatives, such as solar power with the public sector.

## **6 Energy Efficiency workstream**

### **Traction energy efficiency:**

- 6.1 LU is responsible for the majority of TfL's traction energy consumption and is the main area of focus. Work is underway to ensure that major LU line upgrade projects deliver maximum energy efficiency benefit in terms of whole life cost. Key work areas to note are:
- (a) the new Deep Tube Upgrade rolling stock for the Piccadilly line will be energy efficient through the use of a lighter weight, articulated design which allows the use of fewer bogies and wheelsets per train. The train specification also includes a full regenerative braking capability to recover traction energy. This capability will be further enhanced by the selection, by the supplier Siemens Mobility, of permanent magnet motors as part of the traction system;
  - (b) Work has also carried out with Thales to assess the benefits of Green CBTC (Communication Based Transmission Control) – optimising coasting to deliver energy efficiency improvements on the Jubilee line. The assessment has concluded this solution would provide benefits and a technical implementation concept has been agreed. Delivery is being considered as part of the Jubilee Line Optimisation Programme (JLO) as this technology requires the simultaneous update of additional signalling

systems to deliver value for money. JLO requirements are being developed with expected implementation by first half of 2021; funding to include coasting as part of the works is still to be confirmed; and

- (c) As part of the energy strategy programme, we are seeking sites where quick payback energy efficiency interventions could be installed and where external funding could be obtained to design and trial innovative solutions, such as battery and flywheel storage.

#### **Non-traction energy efficiency:**

- 6.2 Measures to improve energy efficiency have been undertaken around the network in recent years, including lighting upgrades across street lighting and in traffic signals, the tram network and river piers, and improvements to electrical and mechanical systems at LU stations which is considered business-as-usual activity.
- 6.3 A £2m programme of energy efficiency measures at TfL buildings delivered under the GLA's RE:FIT framework was completed in late 2017, which is guaranteed to achieve a minimum of £200k savings per annum. Our Palestra head office building was the largest of the nine sites in the programme. The RE:FIT team recommissioned the 10 year old Combined Cooling, Heating & Power (CHP) system, replaced one electric chiller as well as the 34 obsolete Building Management System controllers and installed new Domestic Hot Water plate heat exchangers to provide more consistent hot water for showers, catering and hand washing. After 13 months of CHP run time (ie by end of December 2018) we have achieved an E-rated Display Energy Certificate score of 101, which compares very favourably to the G-rated 182 score from 2010 (when the original project handed over a CHP running 24/7 at full output). In 2018, we saved £426k in building utilities running costs and improved annual energy efficiency and carbon emissions by 16 per cent.
- 6.4 The energy strategy programme will deliver a pilot scheme focused on lighting efficiency at Hainault depot in 2019, installing LED lighting to reduce electricity consumption and carbon emissions. A similar intervention at Hammersmith and City depot achieved £60k annual savings and 1.4 years of payback with a capital investment of £100k. We are working to collect data from across the business to identify further opportunities to improve energy efficiency. Business cases will be developed by spring 2019 for funding appraisal.

## **7 Low Carbon Energy Generation workstream**

### **Solar PV**

- 7.1 Several buildings are included in our Solar programme procured through the GLA's RE:FIT framework, which will install a total of 1.1MW of peak generating capacity. Installation of the first panels is scheduled to start in June 2019 and be completed by Nov 2019 on a building within the Acton Depot complex.
- 7.2 The energy strategy programme includes a roof mapping exercise to assess the entire TfL building portfolio for potential solar generation capacity, alongside an assessment of TfL owned undeveloped (including trackside) land. The solar

mapping will be completed in February 2019. The assessment of TfL estate started in January 2019; the first phase will identify the locations with highest potential for development and initial outputs are expected from April 2019. From spring 2019 the outputs from the first stage will be assessed in further detail to identify a range of feasible sites large enough to generate interest in third party investment. Concurrent work is underway to understand the level of opportunity for solar schemes to be funded through an off balance sheet, third party funded financing model, prior to potential engagement with investors.

### **Waste Heat**

- 7.3 We have completed our work on site to deliver the first tube waste heat recovery scheme at City Road. Joint testing and commissioning with London Borough of Islington will be undertaken in 2019, which will then see the scheme fully operational. To identify future waste heat sites we have completed an internal study that identified more than 50 potential vent shafts that could be developed for waste heat export.
- 7.4 As part of the energy strategy programme we are using the GLA's DEEP framework to further analyse opportunities and understand potential heat recipients. This will be split into two studies, one to further advance our technical understanding at the potential sites and another to develop the commercial proposition and inform how TfL should proceed. The technical study is currently out to tender and we anticipate appointing a supplier at the beginning of March 2019. Both will complete in late summer 2019. TfL continues to pursue third party funding options, recently being successful in gaining Innovate UK funding to develop a waste heat feasibility study at York Road disused station on the Piccadilly line.

## **8 Road Transport Electrification workstream**

### **Optimised Electric Vehicle charging:**

- 8.1 We are continuing to support the introduction of publicly-available electric vehicle charging infrastructure in London. There are c2,200 slow charging units across London and 162 rapid charging points. The programme of rapid charge point installations will install 300 charge points by 2020, a proportion of which are exclusively for the use of zero emission capable taxis. We are supporting the Mayor's Electric Vehicle (EV) Infrastructure Taskforce, bringing together stakeholders from a number of sectors in order to develop a shared delivery plan for increasing EV infrastructure in London. This includes exploring potential future commercial models for us to develop and/or run our own chargepoint infrastructure.

### **Optimised / accelerated bus electrification**

- 8.2 There are currently 165 electric buses in London's fleet, making it one of the largest electric bus fleets in Europe. A further 90 due to join by the end of 2019, including 68 double deck electrics. The buses zero emission roadmap work has so far taken a preliminary look at our route to a fully zero emission bus fleet by 2037, including a deep dive into alternative vehicle technologies, conversion of the fleet, power and energy supplies and commercial development

opportunities. This zero emission work has now been incorporated into a wider commercial review, which among other outcomes will include mechanisms and a road map for how we could achieve a zero emission bus fleet. This work will report in late spring 2019.

## **9 Low Carbon Energy Procurement workstream**

### **Grid Procurement**

- 9.1 In December 2018, the Finance Committee approved authority for the continuation of energy procurement through the Crown Commercial Service (CCS) frameworks from April 2021 to March 2022. CCS continues to offer effective management of price risk and allows TfL flexibility to source energy through individual bilateral procurements outside of this framework without any penalties. To achieve the zero-carbon railway 2030 ambition as set out in the London Environment Strategy, TfL is exploring opportunities to source energy from suppliers who, through security of signing a long term power purchase agreement (PPA), will build additional renewable generation assets that will feed the UK National Grid. Work to understand the timing, procurement options and impact/benefits is underway and will be incorporated into a procurement strategy which will be closely linked to a strategy on options to procure energy through private wires connected to TfL infrastructure. Due to the potential greater benefits offered by private wire connections (when compared to grid-sourced energy), work to understand and deliver these schemes quickly is TfL's priority. A procurement strategy will be developed by end of 2019.

### **Private Wire**

- 9.2 Directly connected sources of energy may offer TfL a number of benefits, including guarantee of low-carbon origin, lower costs and price certainty in the longer term. In late 2018, TfL conducted an early market engagement exercise to better understand potential opportunities that are close enough to TfL infrastructure to be technically and commercially feasible. This attracted significant interest from potential suppliers and from the initial proposals submitted, we conducted a number of 1:1 meetings for more detailed discussion. Proposals can be grouped into two broad categories depending on the generation source: 1) Continuous load e.g. Energy from Waste and Combined Heat and Power generation in London; and 2) Intermittent load e.g. solar PV. We consider there to be a range of potentially beneficial options worth pursuing and are currently compiling information to inform a procurement strategy, which will be complete by autumn 2019. In parallel (and similar to other workstreams), we are exploring potential models that would allow us to deliver such schemes using third-party finance.

## **10 Next steps**

- 10.1 Included in Appendix 1 is a programme that outlines the key milestones within the development of the Energy Strategy programme during 2019. It is suggested that an update be provided to the Panel at its meeting on 10 July 2019.

**List of appendices to this report:**

Appendix 1 – Summary of Energy Feasibility Programme

**List of background papers:**

None

**Contact Officer:** Alex Williams, Director of City Planning  
**Number:** 020 3054 7023  
**Email:** [AlexWilliams@tfl.gov.uk](mailto:AlexWilliams@tfl.gov.uk)



# Appendix 1: Summary of Energy Feasibility programme

	1 7 1 0	2018/19												2019/20															
		Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20		
<b>Renewable generation</b>																													
<b>Energy procurement</b>																													
<b>Funding &amp; Financing</b>																													
<b>Waste heat</b>																													
<b>Energy efficiency</b>																													
<b>EV Commercial model</b>																													

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**Date: 27 February 2019**

**Item: Human Resources Quarterly Report**

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## **1 Purpose**

- 1.1 To provide the Safety, Sustainability and Human Resources Panel with an update on key Human Resources (HR) led activities and performance for Q3 2018/19.

## **2 Recommendation**

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

## **3 Background**

- 3.1 This is the third HR Quarterly Report to the Safety, Sustainability and Human Resources Panel for the 2018/19 reporting year.
- 3.2 The HR Quarterly Report focuses on providing the Panel with an update on a number of key HR activities underway, the TfL Scorecard, recruitment and Diversity & Inclusion interventions.

### **Appendices:**

Appendix 1: HR Quarterly Report

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

None

Contact Officer: Tricia Wright, Chief People Officer  
Number: 020 3054 7265  
Email: [TriciaWright@tfl.gov.uk](mailto:TriciaWright@tfl.gov.uk)

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# HR Quarterly Report

2018/19 Quarter 3 Update

# HR Quarterly Report – 2018/19 Quarter 3 Update

## Executive Summary

This Human Resources (HR) Quarterly Report provides an overview of key developments that have taken place in the third quarter of the 2018/19 financial year, covering between 16 September and 8 December inclusive.

During this quarter we confirmed our scorecard results for the Total Engagement and Inclusion Index measures. Total Engagement remained constant at 46 per cent, with our Inclusion Index also unchanged at 43 per cent.

Our all workforce and senior manager representativeness measures are behind target for the quarter, with all employee representativeness remaining at 69.9 per cent in Q3, and senior manager representativeness declining to 40.6 per cent.

Despite these measures, our recruitment activity continues to deliver diverse appointments across the organisation. In the first three quarters, of all those recruited, internally and externally, 41.6 per cent were BAME, and 36.4 per cent were female. However, low turnover coupled with lower levels of external recruitment is reducing our ability improve the representativeness of our employees at the pace desired.

## Report Content

### Section 1 – TfL Scorecard – People Measures

- Workforce Representativeness
- Total Engagement
- Inclusion Index

### Section 2 – Our People

- Recruitment
- Leavers
- Promotions

### Section 3 – Workforce Composition

- Permanent Headcount
- Workforce composition by area
- Non-Permanent Labour

# Section 1: TfL Scorecard – People Measures

This section provides the Panel with an update on the four People measures included on the TfL Scorecard, along with key activities which support the delivery of our Scorecard targets.

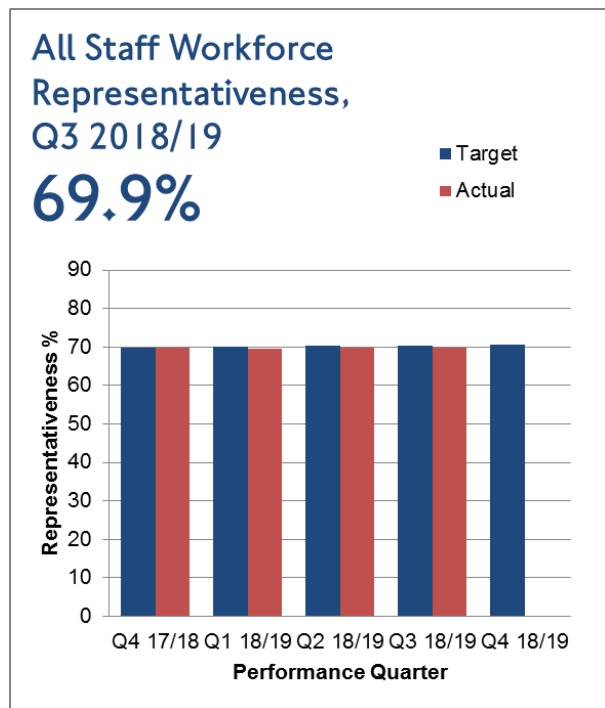
## Workforce Representativeness

### Total Workforce Representativeness

The Workforce Representativeness measures are an indicator of how closely TfL employees reflect the economically active London population.

The Scorecard target for Total Workforce Representativeness in 2018/19 is 70.7 per cent. In Q3 we fell short of the target of 70.5 per cent, with a total workforce representativeness score of 69.9 per cent.

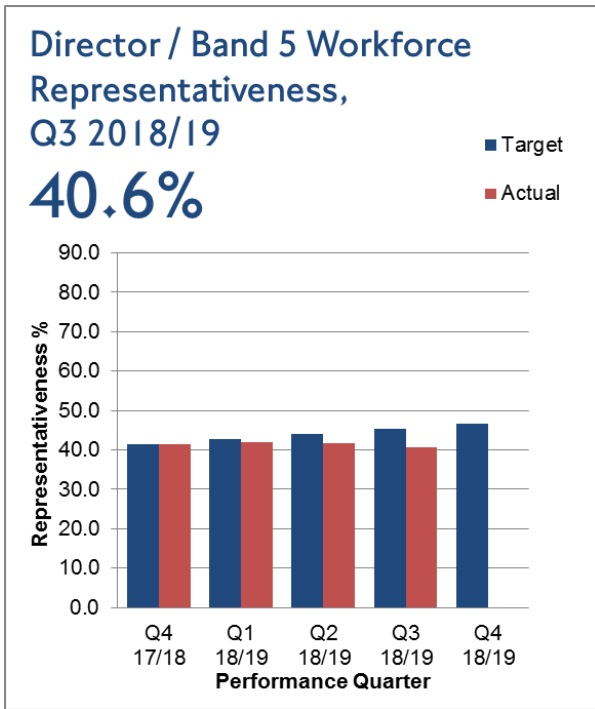
Despite this representativeness measure remaining at 69.9 per cent in Q3, we continue to build the foundations which will drive greater representativeness in the future. A summary of these activities are detailed in this report.



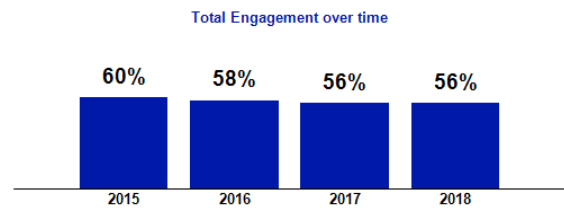
### Director / Band 5 Workforce Representativeness

For the Director and Band 5 workforce representativeness scorecard measure, the 2018/19 target is 46.6 per cent. At the end of 2017/18 our scorecard outcome was 41.6 per cent.

In Q3 our senior manager representativeness reduced from 42 per cent to 40.6 per cent, behind the Q3 target of 45.3 per cent. This was in part driven by the recent disclosure campaign where several senior managers whose protected characteristics were not previously known, declaring themselves as being part of majority groups. There has also been lower turnover at Band 5 and Director level in business areas which have recently undergone Transformation, with many senior managers new to role, limiting our ability to make inroads with this measure.



Engagement scores are provided in a separate paper to be tabled at this Panel.



## Total Engagement

The Total Engagement scorecard measure is derived from the annual Viewpoint employee survey which ran between the 9 and 26 October 2018.

Total Engagement for 2018 was 56 per cent, below our 2018/19 TfL Scorecard target of 57 per cent, but consistent with the 2017 Total Engagement score, halting a recently declining trend.

The response rate to the 2018 Viewpoint survey was 66 per cent which was the highest response rate to the survey in its current format. The response rate was up from 57 per cent in 2017 providing us with a more detailed picture of life at TfL from which to build targeted action plans.

The average scores do however mask different variations, both positive and areas for significant improvement, within the organisation. A more detailed breakdown of the Viewpoint survey, and the Total

## Inclusion Index

The Inclusion Index is another measure from the annual Viewpoint survey and measures how inclusive our employees feel we are as an organisation.

The perceptions around inclusion are also stable, remaining at 43 per cent following a 3 per cent decline seen in 2017. This is below our scorecard target for 2018 of 46 per cent.

This demonstrates that there is still work to be done to promote a more inclusive culture.

The below section outlines some of the activities undertaken in the previous quarter to promote a more inclusive environment for our people:

## Gender and Ethnicity Pay Gap Reports

In January, we published our annual Gender and Ethnicity Pay Gap reports. The pay gaps at TfL have increased marginally due to more women and BAME candidates applying for and working in operational roles which tend to have lower rates of pay, compared to roles such as train operators or engineers, which are higher-paying roles.

We have made progress with an increase in the proportion of women and BAME employees within our organisation, including in senior management roles. However, we know we need to go much further and that's why we are working hard to tackle the pay

gaps head-on by continuing to improve our recruitment and hiring processes as well as encouraging more diverse candidates to consider a career in the transport industry.

### **New Equality Impact Assessment**

The full review of the EQIA process is now complete with a new training programme launched on 14 January. This seeks to build the capability of our people to consider and identify the impacts of our work on diversity and inclusion, both for our customers and colleagues. This will aim to create a cohort of 'super users' within the business who will be able to complement the D&I team.

### **Purple Light Up**

To celebrate the UN's International Day of Persons with Disabilities, we joined the #PurpleLightUp campaign which is an initiative to acknowledge the economic contribution of disabled employees. The theme was also used to raise awareness of the barriers that others face, and the role we all play in reducing these.

As part of the celebrations, we raised the purple flag over 55 Broadway. Operational managers were provided with an information pack to raise awareness amongst front line staff of the day and what to look out for.

Our Staff Network Group for Disability also held an open forum for all employees to meet the group and gain a better understanding of barriers faced by disabled employees.



### **Diversity and Inclusion Trade Union Forum**

On 24 January 2019, we held our first D&I Forum with our Trade Union colleagues. This forum is dedicated to discussing and working alongside our Trade Unions to help identify and address key diversity and inclusion issues across the organisation.

The first Forum discussed potential areas for co-design and collaboration, along with the strategic direction for the newly formed Diversity, Inclusion and Talent team within HR. This will allow greater collaboration between TfL and our Trade Union Colleagues to build a more diverse and inclusive working environment across the organisation.

### **Steps into Work**

An event was held at Endeavour Square to celebrate the 12 students who have recently completed their Steps into Work programme. Steps into work is a partnership between TfL, disability specialist employment agency Remploy and Barnet and Southgate College.

Each year the programme gives 12 young adults with complex employment barriers the opportunity to develop sustainable workplace experience, invaluable knowledge and skills towards gaining paid employment.



The national employment average of people with learning disabilities is six per cent full or part time. Compared to this, 70 per cent of our 2017 intake found paid employment within 12 months of completing the programme. From September 2019, we will be doubling the number of places on the scheme to 24, giving more people with learning disabilities the opportunity to get into employment.

### **Safeguarding**

Safeguarding means protecting children and adults at risk in our workplace and on our network. The TfL Executive Committee takes this very seriously and has appointed Staynton Brown as its lead in this area. Since its inception the Safeguarding Leads Group (SLG) has met several times and has endorsed a detailed work programme that is being progressed. Much of the current activity is focussed in HR. The SLG recently signed off TfL's safeguarding policy and guidance, the next steps are to communicate this across the organisation once Business Services have been appraised of it. Other achievements include the training of 8 Designated Safeguarding Officers (DSO) in HR – a call has gone out for the business to nominate people locally to be trained as DSOs; this will help to increase that capability across TfL. Internal audit have completed their audit of safeguarding; the findings are generally positive recognising the fact the implementation of the work programme will strengthen this area of work even further.

### **Anonymous Recruitment Software**

As part of our drive to remove any potential bias from the recruitment process, automatically removing demographic information from CVs is a key enabler to help achieve this.

We have now confirmed our commercial agreement to implement Anonymous Recruitment Software and roll this out for all recruitment at TfL by the end of the financial year (excluding recruitment where CVs are not required such as apprentice recruitment). This, alongside other measures such as diverse interview panels, will help to remove any potential bias in our recruitment activity.



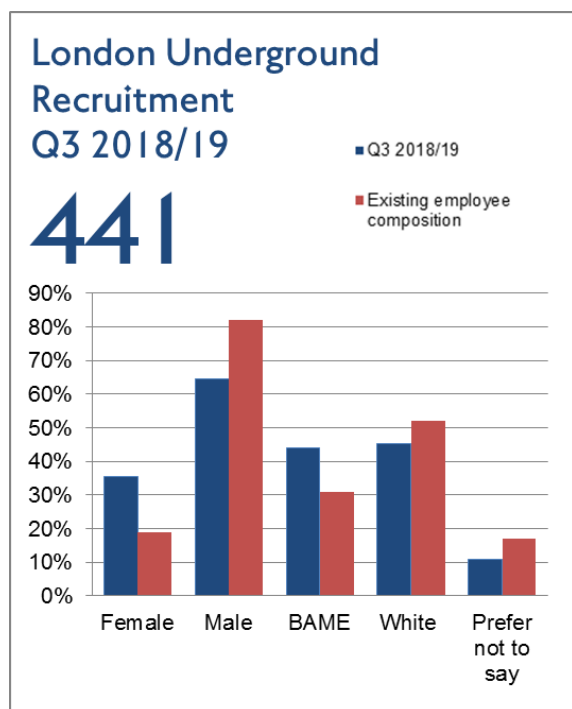
# Section 2: Our People

## Ongoing Recruitment Activity

The following section shows the composition of all recruitment by business area during Q3. This includes both internal and external recruitment, along with promotions and changes to roles within the same band/grade.

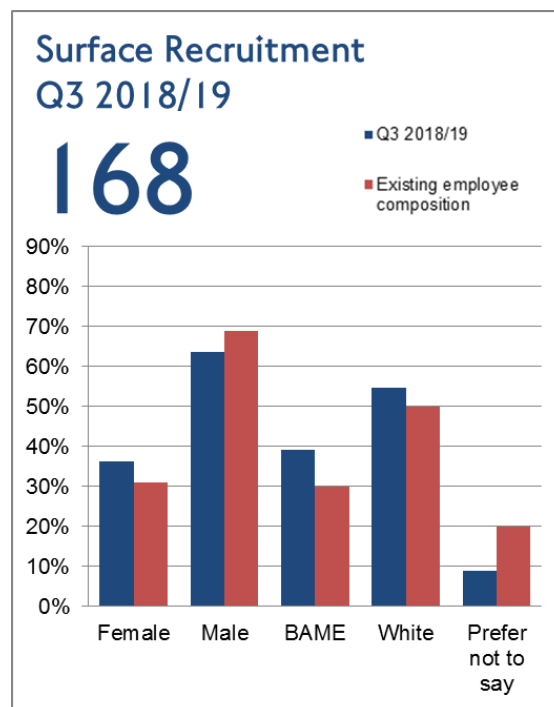
### London Underground

Black and Minority Ethnic (BAME) recruitment was in excess of 44 per cent during Q3, significantly higher than the existing employee population of 31 per cent. Female recruitment was 35 per cent in Q3, this is nearly double the existing 18 per cent of LU population that is currently female.



### Surface Transport

Recruitment in Surface during Q3 was more diverse than the existing surface employee population females and BAME employees. Female recruitment was 36 per cent, up on the 31 per cent of Surface that are female. BAME recruitment was 39 per cent in Q3, up on the 30 per cent of the existing surface population that declare as BAME.

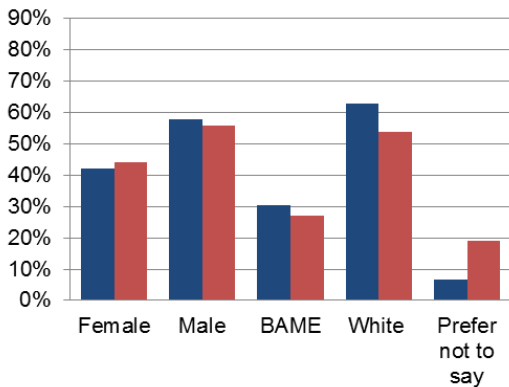


### Professional Services

Recruitment in Professional Services was broadly reflective of the existing employee population during Q3. Over 42 per cent of those recruited in Q3 were female, slightly below the existing population of 44 per cent female. BAME recruitment was slightly higher than the existing employee population, with 31 per cent against 27 per cent respectively.

**Professional Services  
Recruitment  
Q3 2018/19**

**394**

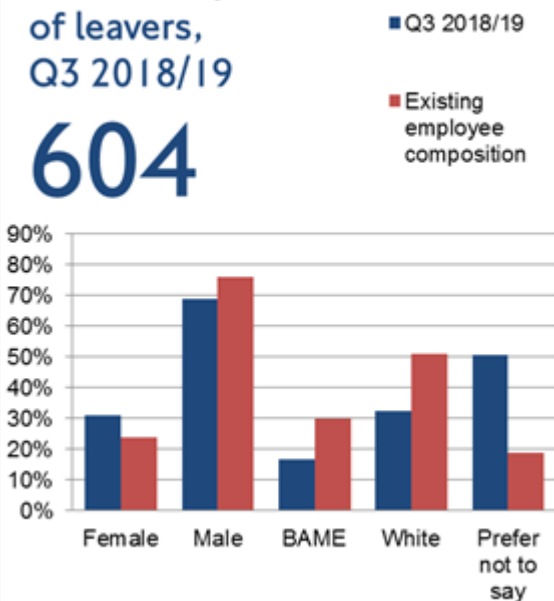


**Leavers**

In Q3 a total of 604 employees left the organisation, a turnover rate of 2.2 per cent. If combined with the turnover rate for Q1 and Q2, the turnover rate to date for 2018/19 is 7.9 per cent.

**Workforce profile  
of leavers,  
Q3 2018/19**

**604**



Whilst this low turnover rate can indicate job satisfaction and job security, it can also reduce the speed by which the organisation can change its representativeness.

In Q3 there were proportionally fewer BAME employees leaving the organisation than the existing employee composition, with 17 per cent of leavers coming from a BAME background, compared with over 30 per cent of the existing employee population.

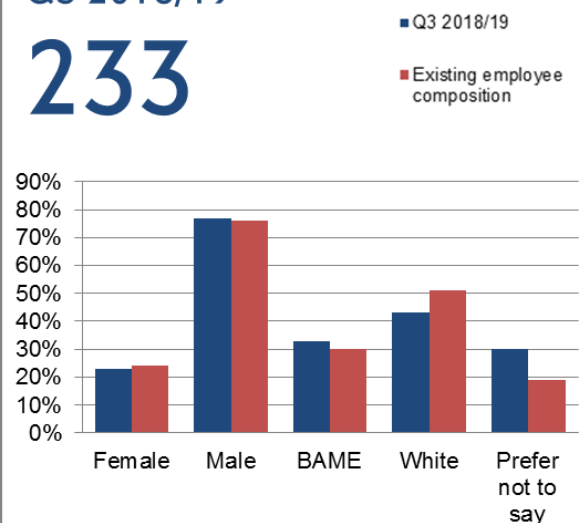
**Promotions**

In Q3 a total of 233 employees were promoted. This is defined as a change in role from one pay band to the one above. This does not include lateral moves.

Of those promoted in Q3, 23 per cent were female which is slightly lower than the existing employee composition which is 24 per cent female. The proportion of those promoted declaring as BAME was higher than the existing employee composition, with 33 per cent of those gaining promotion declaring as BAME, against 30 per cent.

**Workforce profile of  
promotions, All Employees  
Q3 2018/19**

**233**



# Section 3: Workforce Composition

## Permanent Headcount

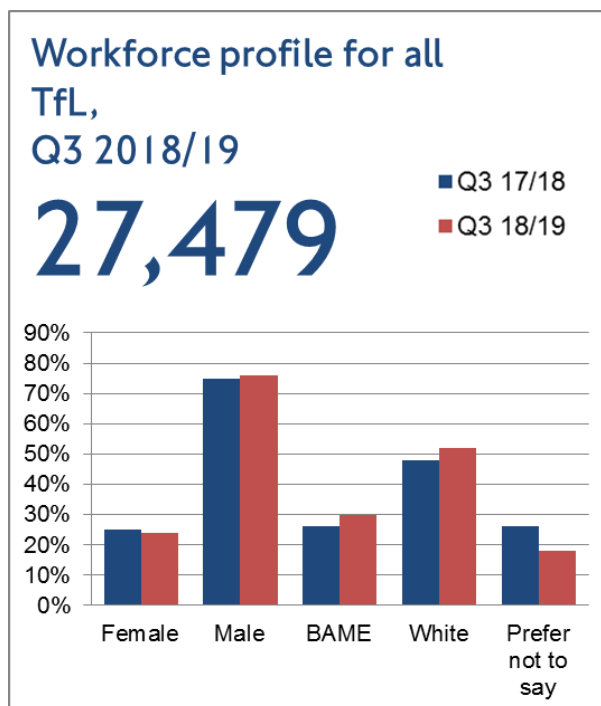
Data extracted from the HR System (SAP) excludes employees whose details have not yet transferred to SAP. The Total Headcount figure contains Crossrail employees but the workforce composition data does not, as this data is not held on SAP.

The following staff numbers represent both permanent TfL employees and temporary staff measured in full time equivalents (FTEs) which equate to one person working 35 hours per week.

### All TfL

Total FTEs in Q3 was 27,479. This is an increase from 27,177 recorded in Q2. The Q3 figure does now include the 522 employees at Crossrail to align our reporting with our Annual Report and Quarterly Performance Reports. Even with this additional headcount, this is down from 27,871 at the end of 2017/18.

The proportion of employees who declare their ethnicity as BAME has increased over the past year, from 26.37 per cent at the end of Q3 2017/18, to 30.34 per cent in Q3 2018/19. The proportion of employees who do not declare their ethnicity continues to fall.



The proportion of female employees fell from 24.76 per cent at the end of Q3 2017/18 to 23.80 per cent, slightly up from 23.73 per cent in Q2.

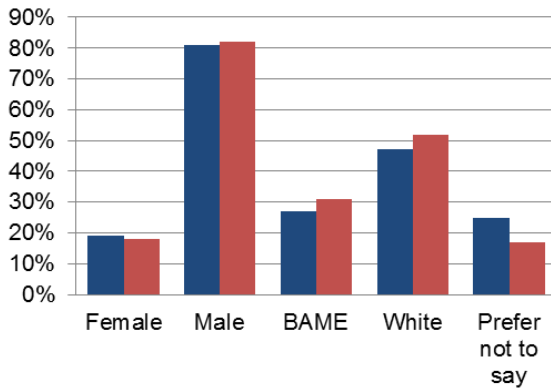
### London Underground

The total FTEs in London Underground have decreased from 19,436 at the end of 2017/18 to 18,832 in Q3. Changes to the diversity of London Underground employees mirrored that of TfL, with the proportion of employees declaring as BAME increasing from 27.33 at the end of Q3 2017/18, to 31.17 per cent. Those preferring not to declare their ethnicity continued to decline from 25.23 per cent to 16.72 per cent over the same period.

## Workforce profile for London Underground, Q3 2018/19

# 18,832

■ Q3 17/18  
■ Q3 18/19



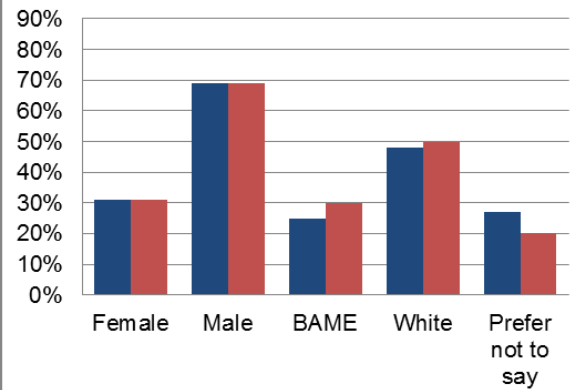
The proportion of LU employees that are female decreased from 18.82 per cent at the end of Q3 2017/18, to 18.01 per cent. This is up however from 17.87 per cent in Q2. Female recruitment in Q3 stood at 35.3 per cent, despite this the rate of turnover in Q3 was only 2.3 per cent, reducing the rate at which recruitment can change the wider employee population.

### Surface Transport

Total FTEs in Surface have fallen from 3,465 at the end of 2017/18, to 3,097 at the end of Q3. This is a 10.6 per cent reduction in total headcount in the year to date.

## Workforce profile for Surface, Q3 2018/19

# 3,097



The proportion of BAME employees has increased from 25.85 per cent at the end of Q3 2017/18, to 30.04 per cent, continuing the upward trend seen in 2017/18. The proportion of female employees increased slightly, from 30.72 per cent at the end of Q3 2017/18, to 31.16 per cent this year.

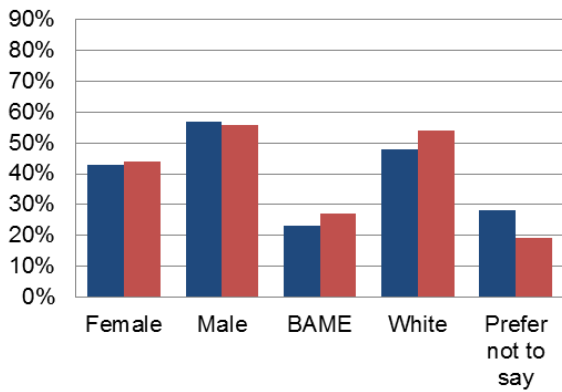
### Professional Services

Professional Services comprises functions including General Counsel, Finance, Human Resources, Commercial and Customers, Communication and Technology where services are provided on a shared basis across all delivery divisions.

## Workforce profile for Professional Services, Q3 2018/19

# 5,013

■ Q3 17/18  
■ Q3 18/19



Total FTEs in Professional Services has increased marginally, from 5,002 at the end of 2017/18, to 5,013 in Q3. There was an increase in the proportion of female employees over the past year, increasing from 43.17 per cent at the end of Q3 2017/18, to 43.87 per cent.

The proportion of BAME employees in Professional Services also increased from 25.85 per cent at the end of Q3 2017/18 to 27.07 per cent in Q3 this year. The proportion of employees who declared as White also increased during the same period, from 46.02 per cent, to 53.65 per cent. This illustrates that drives to increase declaration rates across the organisation can often lead to the majority group increasing disproportionately.

### TfL Senior Manager Staff Composition

The total number of senior managers has increased slightly from 1,206 in Q3 2017/18, to 1,243 at the end of Q3 2018/19.

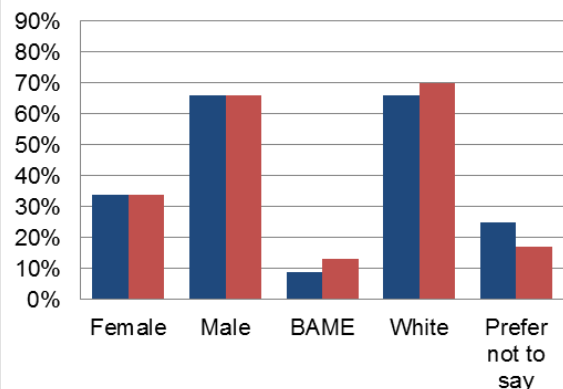
The proportion of female senior managers has decreased slightly from 35.38 per cent in Q3 2017/18 to 34.33 at the end of Q3.

The proportion of our senior managers declaring as BAME has increased over the previous year, from 9.99 per cent in Q3 2017/18, to 11.99 per cent in Q3 2018/19, with the absolute number of BAME senior managers increasing by over 17 per cent.

## Workforce Profile for Senior Managers, Q3 2018/19

# 1,243

■ Q3 17/18  
■ Q3 18/19



### TfL Operational Staff Composition

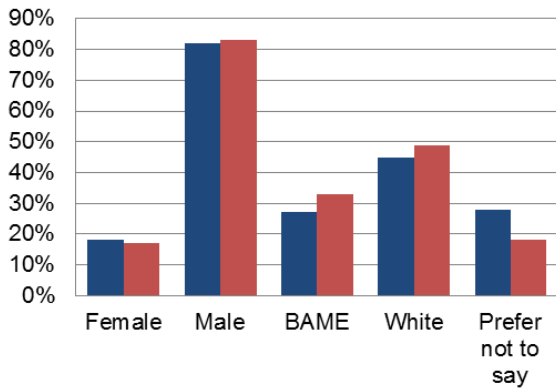
The number of operational employees decreased slightly in the previous quarter, from 14,446 to 14,374. Of these, the proportion of female operational employees decreased from 18.21 per cent to 16.89 per cent.

The proportion of BAME operational employees increased significantly, from 28.21 per cent, to 32.92 per cent.

### Workforce profile for Operational staff, Q3 2018/19

14,374

■ Q3 17/18  
■ Q3 18/19



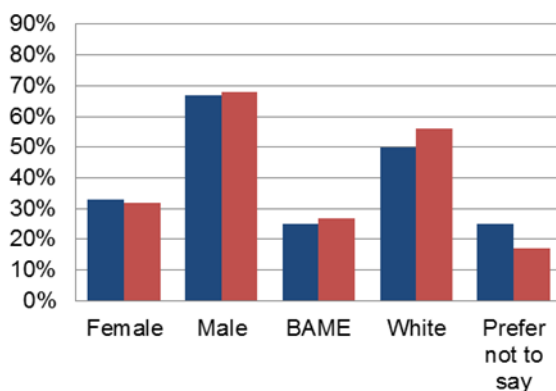
### TfL Non-Operational Staff Composition

The number of non operational employees has decreased from 11,264 to 11,152 in Q3.

### Workforce profile for non-operational staff, Q3 2018/19

11,152

■ Q3 17/18  
■ Q3 18/19



The proportion of BAME non operational employees has increased from 25.91 per cent

in Q3 2017/18 to 27.35 per cent in Q3. The proportion of female non operational employees has decreased slightly over the previous year, from 32.24 per cent to 31.80 per cent at the end of Q3.

### Non Permanent Labour

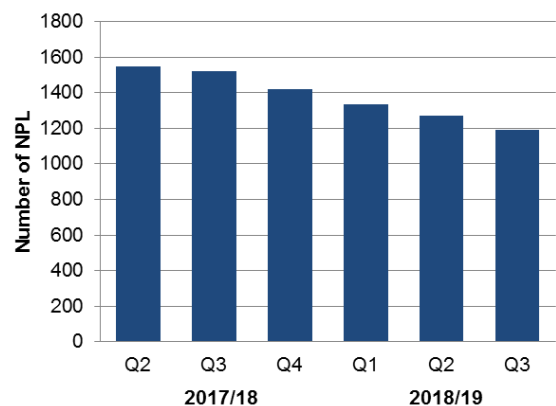
Non Permanent Labour (NPL) is defined as temporary staff engaged to complete project work or short term assignments.

The use of NPL has continued to decrease in Q3, from 1,271 to 1,191. This represents a 22 per cent reduction in the use of NPL since Q3 2017/18.

Total NPL use has decreased from 3,095 at the start of Q1 2016/17. This has reduced the cost of NPL across TfL by over £3.6m per week.

### Total Number of NPL Q2 2018/19

1,191



It is important that we continue to make use of the flexibility offered by NPL, particularly through this time of change and temporary peaks in demand, e.g. in recruitment resulting

from Transformation. It is equally important that we do not close off our ability to hire talent in scarce skills areas.

We will look to balance the cost and use of NPL with our ongoing commitment to our customers and our key role in keeping London moving and growing.





**Date:** 27 February 2019

**Item:** Improving Total Engagement

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### **1 Purpose**

- 1.1 To provide the Panel with an update on the progress on actions raised at the briefing held with Panel members on 23 January 2019 to discuss our 2018 Viewpoint Survey results.

### **2 Recommendation**

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

### **3 Background and further detail**

- 3.1 On Wednesday 23 January 2019, we briefed Panel members on the 2018 Viewpoint results. There was a wide-ranging discussion of themes and questions, and the briefing below covers our immediate response to them.
- 3.2 We will continue to build on our plans for addressing what Viewpoint has told us through 2019.

### **4 Strategic response**

- 4.1 We have identified seven critical levers for engagement that are being deployed together as part of our response.

#### **Gathering more evidence, centrally and locally**

- 4.2 We are gathering a more in-depth understanding of the factors that are driving these scores to avoid focusing effort on short term fixes or missing the real issues altogether. Both senior and local managers are being supported in gaining a clearer understanding of root causes.

#### **Demonstrate the visible commitment of our leadership team**

- 4.3 The TfL Executive Committee is making engagement a top priority, working together with a unity of purpose. It has committed to a level of personal accountability that is visible and robust. This will involve face to face communication, providing multiple opportunities to listen and to connect these scores with our purpose.

### **Line managers, empowered and supported.**

- 4.4 Historically, we had central initiatives such as Champion Networks to deal with or seek to improve engagement issues. This year we are empowering and supporting our line managers, giving them ownership and accountability. We are working with our line managers to help them explore their local issues and co-create action plans and solutions to address them.

### **Culture check – what role is culture playing?**

- 4.5 Is our current culture helping or hindering engagement? We are exploring the extent to which our people are working with our current culture (ie the Behaviours) and the extent to which there's a different and unwritten culture that is helping or hindering our progress. Resolving this will enable us to clarify the culture we need to succeed.

### **Engage hearts and minds – focusing our people on our purpose and story**

- 4.6 Closely linked with point 4.5; we are working on reconnecting our people with the inspiring story of TfL with its responsibility to its customers and to Britain's capital city. The Story will remind our people of our Purpose once again and also bring clarity to our culture and how we need to work together. Whilst this starts with our Executive Committee, it does not stop there, all our line managers need to be able to explain how the story relates to their team and their roles.

### **Measurement**

- 4.7 We need to be able to measure, track and share our progress easily and frequently. We are putting in place a set of measures and a simple way of tracking and disseminating progress. This will help deliver real momentum as we share widely and frequently the improvements being made – both tactical and strategic.

### **People Plans – focused on line manager support and capability**

- 4.8 We are investing in building our management capability. Our People Plan and local people plan are focused on recruiting and promoting managers with the appropriate people skills (eg connecting with their teams, recognising good work and managing poor performance) ensuring the right learning is available and accessible and that our processes for managing performance are robust.

## **5 Next steps**

- 5.1 We propose providing updates on progress to the Panel throughout the year.

### **Appendices:**

Appendix 1 – Improving Total Engagement

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

None

Contact Officer: Tricia Wright, Chief People Officer  
Number: 020 3054 7265  
Email: [TriciaWright@tfl.gov.uk](mailto:TriciaWright@tfl.gov.uk)

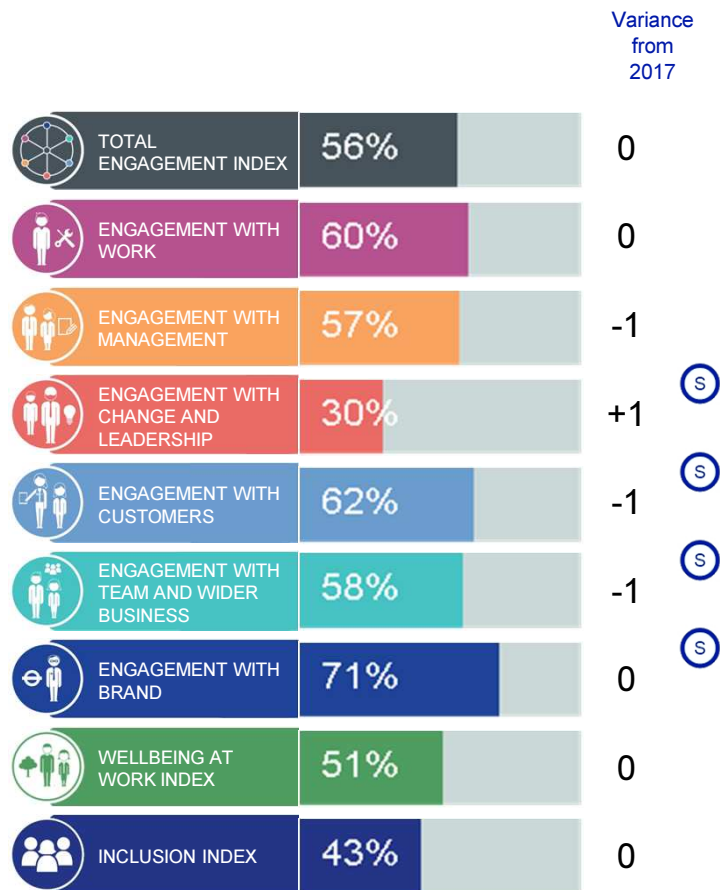
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# Improving Total Engagement – a follow up

27 February 2019



## 2 Reminder of this year's Viewpoint results



- Total Engagement (TE), Wellbeing and Inclusion indices have remained stable, halting two years of decline for TE and big drops last year in Wellbeing and Inclusion.
- Despite some movement, our engagement themes have stayed more stable this year than in previous years, an indication we may be settling down following a period of structural change.
- While it's positive to see Engagement with Change and Leadership increase by 1pp, we are coming from a very low base and still have a long way to go compared to other organisations (even those going through change also).
- Engagement with Management, Customer and Team and Wider Business have all seen declines. This is now the third consecutive year that Customer and Team themes have seen declines.
- However, pride in being part of our organisation remains high and provides strong foundations on which to build.

(S) Indicates significant difference



## Our strategic response

We have identified seven critical levers for engagement that are being deployed together as part of our response to the 2018 results.

### 1. Gathering more evidence, centrally and locally.

We are seeking a more in-depth understanding of the factors that are driving these scores to avoid focusing effort on short term fixes or missing the real issues altogether. Both senior and local managers are being supported to gain a clearer understanding of the root causes.

### 2. Demonstrate the visible commitment of our leadership team.

The Executive Committee are making engagement a top priority, working together with a unity of purpose. They have committed to a level of personal accountability that is visible and robust. This will involve face to face communication, providing multiple opportunities to listen and to connect these scores with our purpose.

### 3. Line managers, empowered and supported.

Historically, we had central initiatives such as Champion Networks to deal with or seek to improve engagement issues. This year we are empowering and supporting our line managers giving them ownership and accountability. We are working with our line managers to help them explore their local issues and co-create action plans and solutions to address them.



## 4 **Our strategic response**

### **4. Culture check – what role is culture playing?**

Is our current culture helping or hindering engagement? We are exploring the extent to which our people are working with our current culture (ie the Behaviours) and the extent to which there's a different and unwritten culture that is helping or hindering our progress. Resolving this will enable us to clarify the culture we need to succeed.

### **5. Engage Hearts and Minds – focusing our people on our purpose and story.**

Closely linked with our Culture check, we are working on reconnecting our people with the inspiring story of TfL with its responsibility to its customers and to Britain's capital city. The Story will remind our people of our Purpose once again and also bring clarity to our culture and how we need to work together. While this starts with our leadership team, it does not stop there, all our line managers need to be able to explain how the story relates to their team and their roles.





## 5 **Our strategic response**

### **6. Measurement**

We need to be able to measure, track and share our progress easily and frequently.

We are putting in place a set of measures and a simple way of tracking and disseminating progress. This will help deliver real momentum as we share widely and frequently the improvements being made – both tactical and strategic.

### **7. People Plans – focused on line manager support and capability**

We are investing in building our management capability. Our People Plan and local people plan are focused on recruiting and promoting managers with the appropriate people skills (e.g., connecting with their teams, recognising good work and managing poor performance) ensuring the right learning is available and accessible and that our processes for managing performance are robust.



## 6 Key thematic concerns

The following were the key thematic concerns raised at our meeting, and some proposed actions to take to improve total engagement that are entirely consistent with the Strategic Responses required.

	The issue	Action
1	<b>Building engagement capability</b>	<ul style="list-style-type: none"> <li>Line managers to take accountability for engaging with their people with SMART objectives at all levels across the business</li> <li>Less reliance on champion networks (specifically in London Underground) and increased focus on improving line management capability</li> <li>Development of a leadership foundation and a values led culture</li> </ul>
2	<b>Sharing best practice</b>	<ul style="list-style-type: none"> <li>Actively connect people in peer-to-peer groups to share knowledge and learning</li> <li>Share best practice throughout the year through forums and all communications channels</li> </ul>
3	<b>Demonstrating that action will be taken</b>	<ul style="list-style-type: none"> <li>There will be an increased focus on communicating the actions we are taking – including working more closely with TU colleagues</li> </ul>
4	<b>Transparency</b>	<ul style="list-style-type: none"> <li>The results have been cascaded across all areas of the business and are available on a universally-accessible SharePoint site</li> </ul>



## 7 1. Building engagement capability

### Concern

- There is evidence of significant variation in the competency and ability of our line managers to improve engagement at a local level

### Our actions

- Leaders and senior managers to take greater accountability for engaging with their people including SMART objectives in all P&Ds, rather than allowing over-reliance on champions at a middle management level (specifically in London Underground). Engagement is a priority for all directorates' People Plans
- Review and refresh our engagement and communication approach on change to ensure that we have learned from mistakes and to benefit from sharing best practice
- Place greater emphasis on building momentum behind change through leadership conversations, thinking about change as a positive, normal business activity and supporting each other to show we understand and care about what is happening in all areas of the business and how that may feel for our colleagues. We must equip line managers to develop their own plans, taking ownership to improve engagement across their own team
- Executive sponsorship of a new Employee Health and Wellbeing strategy and programme, developing a leadership foundation and working to develop a more values-led organisation
- Continue work on pay parity



## 2. Sharing best practice

### Concern

- We need to share best practice from the areas identified as high-performing in engagement across the business and learn from areas that are not performing well

### Our actions

- Identify areas that are high-performing in engagement and share their best practice across the business. We'll also look to learn from areas that do not perform well
- Ensure regular communications through appropriate forums and our business as usual communications channels once individual areas have finished analysing their results and feeding into their people plans
- Share tips and best practice each month with local managers. We'll feature case studies from areas of excellence at the next area manager and train manager forums in LU
- Connect people more actively in peer-to-peer groups to share knowledge and learning



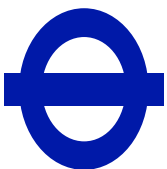
## 3. Demonstrating that action will be taken

### Concern

- We must communicate the actions we are taking to demonstrate we are listening while also involving our Union colleagues in this work

### Our actions

- Once again, the accountability for sharing actions must sit with local managers who are closest to their teams. We will be encouraging and supporting them to make this a priority throughout the year
- Reinforce local engagement through a multi-channel approach at corporate level, communicating results and sharing success stories / updates through printed, online and face-to-face channels including 'we said, we did' campaigns
- Part of our plan for 2019 is to work more closely with trade unions and we agreed at TfL Company Council that we'd involve them in discussions about VP results and actions at local consultative groups



## 10 4. Transparency

### Concern:

- We must ensure that the results have been widely and effectively shared

### Our response:

- There has been a wider and more complete cascade of results to this survey than ever before
- The results have been published via universally accessible SharePoint pages, making all 800 reports available to anyone in TfL
- We have publicised the availability of these reports across all of our channels, informal and formal
- Managers and leaders are actively engaging on Yammer about the reports and gathering further responses / feedback through these conversations

Type	Name	Modified
Folder	Apprentices	11/12/2018 11:20
Folder	Graduates	11/12/2018 11:20
Folder	London Underground	05/12/2018 10:58
Folder	Professional Services	08/11/2018 14:23
Folder	Surface Transport	05/12/2018 11:42
Folder	TfL Overall	17/12/2018 11:49

EVERY JOURNEY MATTERS



**Date:** 27 February 2019

**Item:** Transformation Programme Update

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

#### **1 Summary**

1.1 This paper provides an update on the Transformation Programme.

#### **2 Recommendation**

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

#### **3 Transformation Programme Background**

3.1 The changes we are making are reducing operating costs and increasing sources of revenue to enable delivery of the Business Plan. Transformation has already delivered very substantial, recurring savings. In the past two years we have reduced year-on-year, like-for-like operating costs, and are on track to come in ahead of our target for this year too.

3.2 To date, in 2018/19, operating costs are £189m lower than budget with £137m of this from additional cost savings across all areas of the business. We are expecting the full year net cost of operations to be at least £250m lower than budget.

3.3 We are continuing with this programme which includes further reducing back and middle office costs over the next three years by 30 per cent and building our capability to raise revenue. This is critical in helping manage the financial headwinds described in the Business Plan as we target a net operating surplus by 2022/23.

#### **4 Current Organisational Change Activity**

4.1 As part of the latest phase, organisational change launched on 30 January with staff and trade unions in respect of the Finance and Commercial Senior Management Teams.

4.2 Subject to consultation, this proposed change would further integrate finance and commercial areas as they have critical and complementary roles in controlling costs. It would also align these areas with our new Business Services function which is accountable for delivering efficient, core transactional services across the organisation.

4.3 This involves 34 senior manager roles. The estimated reduction in management posts is 20 per cent, subject to consultation, with an estimated recurring annual

saving of £1.2m. This would enable further work to be undertaken later in the year that would aim to deliver a function that reduces its overall costs by 30 per cent.

## **5 Adapting our Approach to Change**

- 5.1 We have reviewed our approach to managing change and are adapting it to learn from the past and mitigate future risks. This includes acting on feedback from staff, including results from the latest Viewpoint staff survey presented to the Board in January 2019.
- 5.2 To ensure we reduce the period of uncertainty and take our people with us, we are focussing on three priorities: how we improve the effectiveness of communication and engagement with staff; how we measure and manage the effect of change on diversity, inclusion, talent, health and wellbeing and management capability; and how we make better use of data to deliver and understand financial benefits.
- 5.3 We have produced a new toolkit that captures our people priorities and ensures we take a more focussed, holistic approach that will support our managers through transformation. This includes a new people impact assessment which will be used throughout the change process to ensure that decisions and conversations are fully informed by considerations of diversity, inclusion, staff wellbeing, talent retention, graduate and apprenticeship demand, and our priority to improve staff engagement.
- 5.4 We are developing a new TfL Leadership Foundation. This will include a new curriculum that will embed positive leadership behaviours that grow a values-based culture, make leadership more inclusive and create an environment that encourages both commerciality and innovation. It will also equip our leaders to deliver best practice in managing change. This will be run alongside more technical support over the next twelve months to effectively manage the process of change including leading meaningful consultation and effectively driving engagement with our people.
- 5.5 We are taking a more rigorous and structured approach to the control, management and reporting of people data and have revised our Equality Impact Assessment process to make it leaner, clarify accountabilities and responsibilities and improve the quality of decision making in line with our public sector equality duties.
- 5.6 Improving the effectiveness of communication and engagement with staff will be presented to the Panel in a separate update, 'Improving Total Engagement' (agenda item 9).

## **6 Smart Working**

- 6.1 There are significant benefits to moving towards Smart Working, primarily around providing staff with a modern and flexible working environment. It is also vital in supporting the consolidation of our office accommodation enabling a 30 per cent reduction in demand for desks by December 2019. Smart Working will also make us a more attractive employer and create improved work-life balance.



- 6.2 Smart Working pilots have been carried out in three areas, City Planning, Surface Projects and Programmes and Commercial Development, and a reduction in desk use of 30 per cent has been achieved. Staff have reported a change in working styles, the ability to work more flexibly and satisfaction with working patterns has improved.
- 6.3 We are also starting to see change across the wider organisation with increased home working and staff using flexible break out areas. Feedback from staff in the pilot areas is being incorporated into a wider implementation plan from April 2019.

## **7 Developing our Business Services Function**

- 7.1 This new function will achieve further cost reduction and revenue opportunities through simplification and structural integration 'across' end-to-end processes, subject to consultation.
- 7.2 We are conducting reviews of eight core business processes<sup>1</sup> that sit across multiple functions including HR, Commercial and Finance. Current processes are being assessed against industry benchmarks. Initial assessments will be complete by mid-February and action plans put in place for improvement.
- 7.3 Internal Audit is providing assurance as we develop new processes to ensure effective controls remain in place.

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

None

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

None

**Contact Officer:** Andrew Pollins, Transformation Director  
**Number:** 020 3054 8109  
**Email:** AndrewPollins@tfl.gov.uk

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<sup>1</sup> The core processes being reviewed include: Hire to Retire / Employee Payments, Master Data Management, Order to Cash, Source to Pay, Record to Account, Projects, Reporting, Service Management and Helpdesk

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**Date:** 27 February 2019

**Item:** Update on Strategic Risk Achieving Safety Outcomes (SR1)

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**This paper will be considered in public**

## **1 Summary**

- 1.1 At its meeting on 5 December 2018, the Panel received an update on TfL's new Enterprise Risk Management Framework, the Enterprise Risk Assessment Matrix and the TfL strategic risks, including the five risks that fell within the remit of this Panel and would be reported to it in future. This paper provides an update on how TfL manages its Strategic Risk Achieving Safety Outcomes (SR1).
- 1.2 In summary SR1 covers the consequences of not having an appropriate health, safety and environmental management (HSEM) system and associated procedures and policies in place; these not sufficiently identifying and managing risks or that the HSEM system is not followed.
- 1.3 A paper is included on Part 2 of the agenda, which contains exempt supplemental information pertaining to the strategic risk deep dive. 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 business and financial affairs of TfL that is commercially sensitive and likely to prejudice TfL's commercial position. Any discussion of that exempt information must take place after the press and public have been excluded from this meeting.

## **2 Recommendation**

- 2.1 **The Panel is asked to note the report and the exempt supplemental information provided on Part 2 of the agenda.**

## **3 SR1 - Causes, Consequences, Controls and Actions**

- 3.1 The potential causes that might result in the risk materialising if not properly controlled include:
  - (a) Insufficient investment and resources including a lack of people capability;
  - (b) The policies, priorities and resources allocation required to achieve health and safety outcomes do not sufficiently align;
  - (c) The legislative framework does not keep up with new technology, socioeconomic changes or allow for innovation;
  - (d) Poor data, analysis, reporting, benchmarking and systems.

- (e) Inadequate leadership, attitudes and behaviours, including a lack of, and inconsistent, communication;
- (f) Inadequate and inconsistent HSEM system, lack of legal compliance and HSEMS not followed; and
- (g) Action/delivery plans and improvement programmes are not sufficient to deliver the Mayor's Transport Strategy (MTS) goals with regard to health and safety.

3.2 The potential consequences as a result of these risks being realised include:

- (a) Disruption caused by the event and inability to run safe services;
- (b) Prosecution by enforcement authorities;
- (c) Personal injury or fatality;
- (d) Reputational damage;
- (e) Loss of productivity for example increase in staff sickness, suspension of works; and
- (f) People deterred from using sustainable transport modes.

3.3 There are however controls in place that aim to prevent the risk from occurring, which include:

- (a) TfL Health, Safety and Environment Management System (HSEMS) framework;
- (b) Audit and Assurance through "3 lines of defence";
- (c) Safety requirements in our contracts and regulations;
- (d) Policies and programmes that support safety outcomes;
- (e) Training and communications;
- (f) Data, Analysis and Reporting;
- (g) Business Plan assessed against MTS and subject to safety assurance;
- (h) Partnerships and stakeholder engagement;
- (i) New technology and innovation;
- (j) Benchmarking and sharing good practice; and
- (k) Enforcing authorities hold us to account and foster and share best practice.

- 3.4 If the risk does materialise, controls that aim to minimise the impact include:
- (a) Implementation of emergency procedures and response;
  - (b) Engineering/network management controls and maintenance regime to recover quickly and ensure the network is safe;
  - (c) Incident investigations and subsequent improvements to HSEMS and projects;
  - (d) Legal advice on how to respond in light of new incidents, legislative changes and the findings of reviews and investigations; and
  - (e) Business continuity planning.
- 3.5 In order to improve our controls, several actions are underway or planned including:
- (a) Improvements to HSEM System and increasing each business areas maturity in implementing it; working with our contractors to align with their HSEM Systems;
  - (b) Deliver Vision Zero Action Plan;
  - (c) Safety improvement plans for each business area, including developing Vision Zero action plans for non-road transport;
  - (d) Developing and implementing a revised HSE training strategy for TfL;
  - (e) Implement Sandilands recommendations and disseminate learning more widely;
  - (f) Enhance asset integration and handover processes between Operations and Projects;
  - (g) Improve reporting, data management and monitoring to provide better management insight into risk and controls; and
  - (h) Improve our approach to communicating health and safety messages.

**List of appendices to this report:**

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

**List of Background Papers:**

None

Contact Officer: Jill Collis, Director of Health, Safety and Environment  
Number: 020 3054 8158  
Email: [jill.collis@tube.tfl.gov.uk](mailto:jill.collis@tube.tfl.gov.uk)

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## Safety, Sustainability and Human Resources Panel



**Date:** 27 February 2019

**Item:** Members' Suggestions for Future Discussion Items

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

#### **1 Summary**

- 1.1 This paper presents the current forward programme for the Panel and explains how this is put together. Members are invited to suggest additional future discussion items.

#### **2 Recommendation**

- 2.1 **The Panel is asked to note the forward programme and invited to raise any suggestions for future discussion items.**

#### **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.

#### **4 Current Plan**

- 4.1 The current plan is attached as Appendix 1. Like all plans, it is a snapshot in time and items may be added, removed or deferred to a later date.

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

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

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

None

Contact Officer: Howard Carter, General Counsel  
Number: 020 3054 7832  
Email: [HowardCarter@tfl.gov.uk](mailto:HowardCarter@tfl.gov.uk)



## Safety, Sustainability and Human Resources Panel Forward Planner 2019/20

**Membership:** Kay Carberry CBE, Dr Nina Skorupska CBE (Vice Chair), Bronwen Handyside, Dr Mee Ling Ng OBE, Mark Phillips and Val Shawcross CBE.

10 July 2019		
Quarterly Health, Safety and Environment Performance Reports (to include resilience, assurance and compliance issues)	D HSE	To note.
Results of Loughborough University Fatigue Research	D HSE	To note,
Human Resources Quarterly Report	CPO	To note.
Sustainability in Major Events	MD ST / MD CCT	To note.
Safeguarding Update	D DIT	To note
Diversity and Inclusion Dashboard Update	D DIT	To note
Responsible Procurement	Head of Procurement	To note
Pedestrian Behaviour and Risk Management Research	D City Planning	To note.
Air Quality Update	MD ST	To note.
Transformation Update	D. Transformation	Standing Item
Informal Briefing: Transformation	D. Transformation	

<b>4 September 2019</b>		
Quarterly Health, Safety and Environment Performance Reports (to include resilience, assurance and compliance issues)	D HSE	To note.
Human Resources Quarterly Report	CPO	To note.
Review of CIRAS Report and Themes	D HSE	Annual review to note.
Promotion of Green GB Week	MD CCT	To note
Bus Driver Facility Improvements	MD ST	
Workplace Violence Update	D HSE	To note.
Transformation Update	D. Transformation	Standing Item
Informal Briefing: Transformation	D. Transformation	

<b>13 November 2019</b>		
Quarterly Health, Safety and Environment Performance Reports (to include resilience, assurance and compliance issues)	D HSE	To note.
Human Resources Quarterly Report	CPO	To note.
Transformation Update	D. Transformation	Standing Item
Informal Briefing: Transformation	D. Transformation	

<b>12 February 2020</b>		
Quarterly Health, Safety and Environment Performance Reports (to include resilience, assurance and compliance issues)	D HSE	To note.
Human Resources Quarterly Report	CPO	To note.
Bus Driver Facility Improvements	MD, ST	To note. (6 monthly standing item)
Transformation Update	D. Transformation	Standing Item
Informal Briefing: Transformation	D. Transformation	

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