

# **Agenda**

Meeting: Safety, Sustainability and

**Human Resources Panel** 

Date: Thursday 27 September 2018

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 Val Shawcross CBE

Copies of the papers and any attachments are available on <u>tfl.gov.uk How We Are</u> 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.

#### **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.

For media enquiries please contact the TfL Press Office; telephone: 0845 604 4141; email: PressOffice@tfl.gov.uk

Howard Carter, General Counsel Wednesday 19 September 2018

# Agenda Safety, Sustainability and Human Resources Panel Thursday 27 September 2018

## 1 Apologies for Absence and Chair's Announcements

#### 2 Declarations of Interests

**General Counsel** 

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

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

3 Minutes of the Meeting of the Panel held on 20 June 2018 (Pages 1 - 6)

**General Counsel** 

The Panel is asked to approve the minutes of the meeting of the Panel held on 20 June 2018 and authorise the Chair to sign them.

4 Matters Arising and Actions List (Pages 7 - 12)

General Counsel

The Panel is asked to note the updated actions list.

**Quarterly Health, Safety and Environment Performance Reports** (Pages 13 - 62)

Director of Health, Safety and Environment

The Panel is asked to note the report.

## **6 Vision Zero Update** (Pages 63 - 72)

Director of City Planning

The Panel is asked to note the paper.

## **7 Bus Safety Programme Update** (Pages 73 - 80)

Managing Director, Surface Transport

The Panel is asked to note the paper.

## 8 Bus Driver Facility Improvements (Pages 81 - 88)

Managing Director, Surface Transport

The Panel is asked to note the paper.

## 9 Safety at Roadworks (Pages 89 - 104)

Managing Director, Surface Transport

The Panel is asked to note the paper.

# 10 Reducing the Impact of Workplace Violence and Antisocial Behaviour on London Underground Staff (Pages 105 - 108)

Managing Director, London Underground

The Panel is asked to note the paper.

# **11 Safeguarding in TfL** (Pages 109 - 112)

Director of Diversity and Inclusion

The Board is asked to note the paper.

## **12** Human Resources Quarterly Report (Pages 113 - 132)

Chief People Officer

The Panel is asked to note the report.

## **13** Gender and Ethnicity Pay Gap Action Plans (Pages 133 - 140)

Director of Diversity and Inclusion

The Panel is asked to note the paper.

## **14** Transformation Update (Pages 141 - 142)

**Transformation Director** 

The Panel is asked to note the paper.

## **15** Air Quality Update (Pages 143 - 150)

Director of City Planning

The Panel is asked to note the paper.

# **Member Suggestions for Future Agenda Discussions** (Pages 151 - 154)

**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.

# 17 Any Other business the Chair Considers Urgent

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

## 18 Date of Next Meeting

Wednesday 5 December at 10.00am

## 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 20 June 2018

**Members** 

Michael Liebreich (in the Chair for the meeting)

Kay Carberry CBE (Chair)
Dr Nina Skorupska CBE (Vice Chair)

Baroness Grey-Thompson DBE

Dr Mee-Ling Ng OBE

In Attendance

Rachel Cary GLA Policy and Programmes Manager

**Executive Committee** 

Staynton Brown Director of Diversity and Inclusion

Howard Carter General Counsel

Vernon Everitt Managing Director, Customers,

Communication and Technology

Gareth Powell Managing Director, Surface Transport

Tricia Wright Chief People Officer

Present

Jill Collis Director of Health, Safety and Environment
Ben Graham Transformation Programme Manager

David Hughes Director of Strategy and Network Development,

London Underground

Sam Longman Policy Manager for Environment, Surface

Transport

Lilli Matson Director of Transport Strategy

Tim Rudin Senior Responsible Procurement Manager

Mike Shirbon Head of Integrated Assurance

Matthew Webb Senior Strategy Manager, Energy, Carbon &

Power

David Wylie Chief Procurement Officer

James Varley Secretariat Officer

# 27/06/18 Apologies for Absence and Chair's Announcements

Michael Liebreich informed Members that following the appointment of Kay Carberry CBE as Chair of the Panel, it had been agreed that he would chair this meeting as it was his last as a Member and that he had also had significant input into the agenda.

Kay Carberry CBE, on behalf of the Panel, expressed her thanks to Michael for the contribution he had made to the Panel, and its predecessors, and wished him well for the future.

The Panel also thanked Baroness Grey-Thompson DBE for her contribution to the Panel and its predecessors, as it was also her last meeting of the Panel as a Member of TfL.

Howard Carter informed Members that Val Shawcross CBE was remaining on the Board, having stood down as Deputy Chair. The Board would be asked to appoint her to the Panel at its next meeting on 25 July 2018.

An apology for absence had been received from Bronwen Handyside. Shirley Rodrigues was unable to attend and Rachel Cary was representing her for the meeting.

#### 28/06/18 Declarations of Interests

Members confirmed that their declarations of interests, as published on tfl.gov.uk, were up to date and there were no interests that related specifically to items on the agenda.

# 29/06/18 Minutes of the Meetings of the Safety, Sustainability and Human Resources Panel held on 28 February 2018

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

## 30/06/18 Matters Arising and Actions List

In response to a request from the Chair of the meeting, it was agreed that a note would be provided on the distribution of the TfL Fatigue Management Audit report.

[Action: Jill Collis]

Gareth Powell provided an update on the decommissioning payments made to taxi owners. Take-up of the scheme had been lower than expected, which was attributable to the fact that the value of taxis in the used vehicle market outside London was higher than the decommissioning payment available. As a result, taxi owners were choosing to sell their vehicles on the used market. The scheme was being reviewed and an update would be provided to a future meeting.

[Action: Gareth Powell]

The Panel noted the actions list.

# 31/06/18 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 4 2017/18 (10 December 2017 to 31 March 2018).

Road casualties in the quarter were below that of the same time last year, 29 fatalities compared to 44 in Quarter 4 2016/17.

Incidents of workplace violence were up in the quarter and work was taking place to identify more detailed interventions as well as continuing prosecutions. Frontline staff were subject to verbal and physical abuse and nightwork staff, such as those in the Major Projects directorate, were at risk of assaults and mugging. A range of initiatives were in place including training on de-escalation of situations and increased visibility of British Transport Police. A process existed for analysing and identifying hot spots and taking appropriate action to maintain the safety of staff. The Panel requested a paper on Workplace Violence.

[Action: Jill Collis]

Enforcement and compliance activities continued. British Telecom had been prosecuted for dangerous streetworks. Taxi and private hire had seen a recent increase in non-compliance, which was the result on an increase in the number of compliance officers in the business unit. Education of drivers was an effective tool in manging the issue. Good progress had been made with heavy goods vehicles, although a number of operators remained non-compliant and a targeted approach was being used focussing on major issues such as drivers' working hours.

Follow-up work from the Bus Safety Summit was well underway. A workshop has taken place with bus operators to enhance fatigue monitoring. CT Plus and BAE were collaborating on a project to mitigate unintended acceleration events, which was funded by the Bus Innovation Fund.

Bus safety data would be published on the TfL website in the summer, initially in the form of differential safety data, which would be followed by more detailed information when it became available.

Members welcomed the announcement by the Mayor that 68 zero-emission double decker buses would be added to London's bus fleet next year. The current target for a full zero emission fleet was 2037 and Members were informed this was set by the contractual obligations with the bus operator contracts, although officers were looking at ways of bringing the date forward.

The Panel noted the report.

# 32/06/18 Improving Cyclist Safety in London

Lilli Matson introduced the item, which provided an overview of recent trends in cyclist casualties in London and the work undertaken to improve safety.

TfL had made considerable progress in increasing the number of people cycling on London's roads, seeing a near three-fold increase since 2000. In response to a question from the Panel, the source of this modal shift would be provided to Members.

[Action: Lilli Matson]

Members noted that risk related to cycling has fallen in all London boroughs over the last three years, with the exception of Westminster.

The Panel noted the paper.

## 33/06/18 Human Resources Quarterly Report

Tricia Wright introduced the report, which provided an update on key Human Resources led activities and statistics from Quarter 4 2017/18 (10 December 2017 to 31 March 2018).

The apprenticeship schemes recruitment programme launched on 23 January 2018, with over 10,000 applications received. High value recruitment was also ongoing and applications were received from an increasingly diverse pool of candidates.

The Diversity and Inclusion dashboards have been introduced across the business. They encouraged dialogue between managers and the Human Resources directorate and gave a clearer sense of what was happening in the organisation. Members welcomed the level of clarity provided by the top level dashboard provided which identified areas for improvement. It was agreed that Staynton Brown would arrange a separate session for panel members to explain the dashboards in more detail.

It was agreed that the Panel would receive further updates on disability pay gap analysis in addition to gender pay gap and ethnicity pay gap reporting. It would also be provided with a breakdown of part time employees, gender and progression (within individual business units) and further information on the gender balance of leavers.

[Action: Staynton Brown]

The Panel noted the report.

## 34/06/18 Transformation Programme Update

Vernon Everitt and Ben Graham introduced the paper, which provided an overview of the programme.

A coordinated approach to change was being implemented to the four operating business (London Underground, Surface Transport, Commercial Development and Major Projects) and a rigorous assurance process was being used at each stage of change.

Cultural measures were being adopted to ensure changes to the organisation were sustainable and supported the delivery of the Mayor's Transport Strategy.

The Panel noted the report.

# 35/06/18 Energy Strategy

David Hughes, Sam Longman and Matthew Webb introduced the item, which presented the proposed integrated approach to the development of TfL's energy assets and how procurement would deliver financial benefits to TfL and support the Mayor's commitment towards a zero carbon London.

It was a pan TfL strategy that comprised 12 high level initiatives, which had been prioritised for further investigation. A governance structure was being created as the strategy moved towards resourcing and detailed planning. The Panel would be provided with further detail on the Energy Strategy.

[Action: Alex Williams]

The Panel welcomed the work to date and discussed the ability to bring forward the date of a zero carbon bus fleet to 2030. Members suggested that a robust plan should be created with detailed rationale incorporating factors such as reduced maintenance costs to demonstrate the benefits of early delivery.

To enable engagement with the energy industry, the strategy needed to include more information on the assumptions and constraints in the strategy, which would promote a productive dialogue with potential suppliers. It was also recognised that a cultural change was required within TfL to ensure zero carbon aspirations and targets were built into major projects. Innovative solutions could be developed through procurement related forums such as supplier conferences.

The Panel noted the report.

## 36/06/18 Responsible Procurement

David Wylie and Tim Rudin introduced the paper, which set out the Modern Slavery Statement and provided an update on activity to manage risk of modern slavery in the supply chain.

TfL was affiliated to Electronics Watch, an organisation which monitored global electronics supply chains, was increasing the number of directly employed cleaning staff from 80 per cent to 90 per cent and had increased its capacity for training staff in a range of responsible procurement disciplines.

A briefing on Responsible Procurement had been arranged and all Members had been invited to attend.

The Panel requested a further update on Responsible Procurement and its interface with safety related matters.

[Action: David Wylie]

The Panel noted the report.

# 37/06/18 Member Suggestions for Future Agenda Items

Howard Carter introduced the item. The forward plan would be updated to include the requests for the following additional items.

Responsible Procurement and Safety
Fatigue Management
Unsafe Roadworks
Suicide Prevention
Cycling Modal Shift
Healthy Streets
Energy and Electric Vehicle Strategy
Workplace Violence

The Panel noted the forward plan.

# 38/06/18 Any Other Business the Chair Considers Urgent

There was no urgent business.

# 39/06/18 Date of Next Meeting

The next scheduled meeting of the Panel would be held on Thursday 27 September 2018 at 10.00am.

## 40/06/18 Close of Meeting

The meeting closed at 1.00pm.

Chair: _	 		
Date:			

# Agenda Item 4



# Safety, Sustainability and Human Resources Panel

Date: 27 September 2018

Item: Actions List

## This paper will be considered in public

## 1 Summary

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

## 2 Recommendation

2.1 The Panel is asked to note the Actions List.

## List of appendices to this report:

Appendix 1: Actions List

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

Minutes of previous meetings of the Panel

Contact Officer: Howard Carter, General Counsel

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# Safety Sustainability and Human Resources Panel Actions List (reported to the meeting on 27 September 2018)

Minute No.	Description	Action By	Target Date	Status/note
29/06/18	Matters Arising and Actions List Provide a note on the distribution of the Fatigue Management Report.	Jill Collis	24 July 2018	Completed. A note was circulated to the TfL Board on 24 July 2018.
	Provide an update on the taxi decommissioning payments scheme.	Gareth Powell	27 September 2018	The delicensing scheme was established with the aim of removing the oldest, most polluting taxis from the fleet with a target of 10,000 taxis delicensed by 2020. As at 17 August 2018, we had made delicencing payments to a total of 117 vehicle owners. This amounted to payments totalling £297,600. There are various reasons that account for the lower than expected uptake of the delicencing scheme, which includes the remaining residual rental value of taxis within London alongside a reported declining resale value outside of the capital.  We fully support the Mayoral commitment to reduce NOx emissions from taxis by 45%. We are currently looking at a variety of measures to meet this target,

Minute No.	Description	Action By	Target Date	Status/note
				including changes to the delicensing scheme. Any changes will be discussed and agreed through the appropriate governance process.
30/06/18	Quarterly Health, Safety and Environment Performance Reports Provide a paper on Workplace Violence.	Jill Collis	27 September 2018	On agenda for this meeting.
32/06/18	Improving Cyclist Safety in London Provide a note on modal shift in cycling.	Lilli Matson	27 September 2018	Update to be given at this meeting.
33/06/18	Human Resources Quarterly Report Provide the Panel with updates on disability, gender and ethnicity pay gap.	Staynton Brown	27 September 2018	Gender and ethnicity pay gap update on agenda for this meeting, disability pay gap on agenda forward plan.
	Provide an analysis of part time employees looking at gender and progression and also the gender balance of leavers.	Staynton Brown	-	On agenda forward plan.
35/06/18	Energy Strategy Provide further detail on the 12 high level initiatives.	Alex Williams	27 September 2018	Update to be given at this meeting.
35/06/18	Responsible Procurement			
	Invite Members to briefing on 29 June 2018.	David Wylie	29 June 2018	Completed.

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Minute No.	Description	Action By	Target Date	Status/note
	Provide a further paper on Responsible Procurement and how it interfaces with safety matters.	David Wylie	5 December 2018	On agenda forward plan.

There were no outstanding actions from previous meetings.

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# Agenda Item 5

## Safety, Sustainability and Human Resources Panel



Date: 27 September 2018

Item: Quarterly Health, Safety and Environment Performance

Reports

## 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 1 April 23 June 2018 inclusive, referred to as Quarter 4.
- 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 1 – 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





# Safety and Environment report

Quarter one (I April 2018 – 23 June 2018)



# 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 per cent 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 (EAL). 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 IO per cent 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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# Introduction

Our vision at Transport for London is that everyone will go home safe and healthy every day. Performance in the first quarter of this year shows improvements compared to last year. The most significant improvements were fewer injuries at London Underground stations following our focus on improving customer safety on escalators, a significant reduction in major injuries across our bus network and fewer injuries to our construction workforce following a strong focus on safety leadership and personal behaviour.

We have set ambitious long term goals to further improve safety for our customers, users and workforce. In quarter I, we published our Vision Zero Action Plan which sets out actions we will take, in partnership with the Mayor of London and the Metropolitan Police, to achieve these goals. This includes plans to reduce road speed limits, improve road junctions and create a new Bus Safety Standard. Testing has been completed on the potential components of the Bus Safety Standard, including emergency automatic braking and measures to make bus interiors safer if passengers slip or fall. The outcome will be a safety specification that will be incorporated into contracts from January 2019 to ensure compliance among new buses entering our fleet.

We have provided funding to six bus operators through the TfL Bus Safety Innovation Funds and their safety trials continued in quarter I. The trials include fatigue detection devices and new methods of training drivers in safety. The results will be shared with TfL and our bus operators in autumn.

As part of our commitment to make the tram network safer following the tragedy at Sandilands in 2016, we continue to implement the recommendations from the Rail Accident Investigation Branch investigation report. During the quarter, we completed our revision of the London

Trams Network Risk Model. This review incorporated learning from relevant incidents world-wide, to provide a more comprehensive understanding of risk on the tram network. The design of the iTram performance monitoring system is nearly complete and we have started the tender process for a system to physically prevent speeding. We continue to support those who were affected by the tragedy through The Sarah Hope line, which provides help with counselling and other support.

Our focus on encouraging and supporting our staff to stay physically and mentally healthy continued during the quarter. As part of Mental Health Awareness Week in May, we held workshops and drop in sessions across TfL. We have launched an initiative to encourage our staff to join 'parkrun'. We also launched a range of activities to encourage people across London to get active, including 40 free guided walks for National Walking Month.

Our plans to improve air quality in London progressed in quarter I with the announcement that the Ultra Low Emission Zone will be expanded to the North Circular and South Circular boundary in 202I. This will provide healthier environments for over 100,000 people in London. Our bus retrofit programme has upgraded more than I,300 buses to date. Around one-third of the fleet is now bringing much lower emissions to large parts of London, directly benefiting the Mayor's programme to improve air quality.

During the quarter the The Office of Rail and Road (ORR) issued their authorisation for Rail for London Infrastructure (RFLI) to stand-up as Infrastructure Manager; a significant safety milestone for the new Elizabeth line.

Jill Collis Director of Health, Safety and Environment



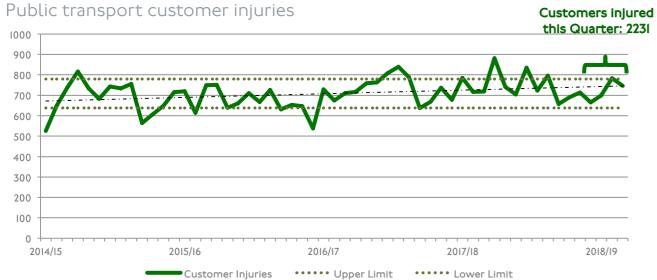
Health, Safety and Environment report

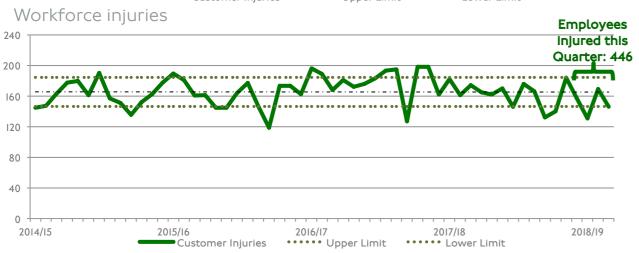
# Performance at a glance

## 2018/19 TfL Scorecard

Long Term Objectives	Term Objectives 2018/19 Scorecard		Year to date	
Outcome	Measure	Actual	Target	
Healthy Streets and He				
London's transport	Reduction in people killed or seriously injured on the roads from 2005-09 baseline (%)		38.1	
system will be safe and secure.	Reduction in people killed or seriously injured on the roads from 2005-09 baseline (incidents involving buses)(%)	72.6 ■	51.8	
	Injuries on the public transport network	2677 ■	2719	
London's streets will be clean and green.	Number of London's buses that are Euro VI compliant	4100	n/a	

## Customer and workforce injuries





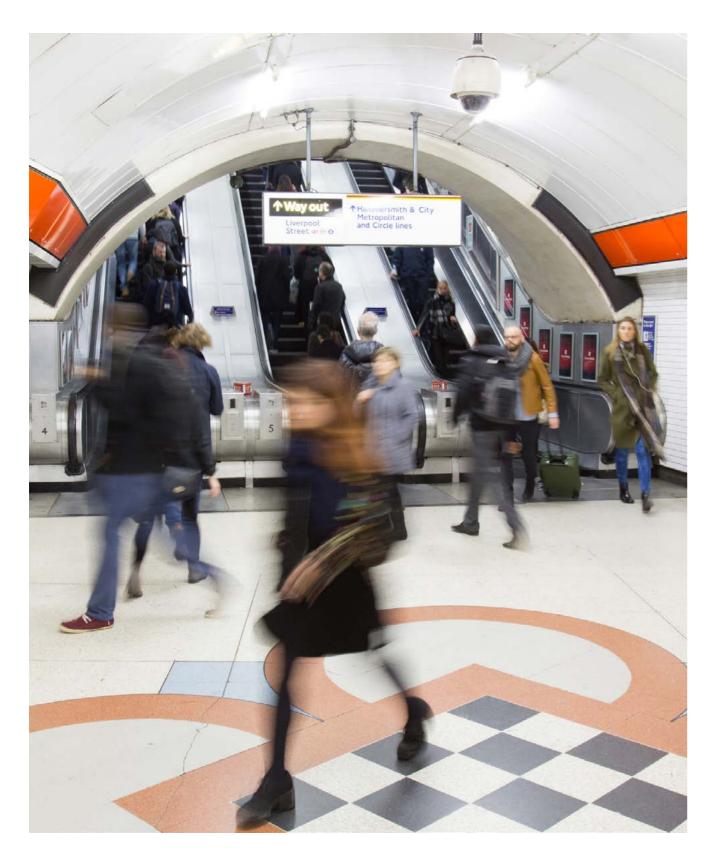


reduction in injuries achieved at LU stations with "Escalator Excellence" status

Number of Zero
Emission
Capable taxis
licensed in London

better junction schemes accelerated for delivery in 2020





# Mayor's Transport Strategy themes in this report

Our role is to deliver the Mayor's Transport Strategy in partnership with London's boroughs, businesses, local communities, consumer organisations and many others. The ambitious plan will increase the attractiveness of public transport and make cycling and walking easier and more convenient options.

We are providing more trains on our busiest services, and opening the Elizabeth line to connect our city. We are making local streets healthier and more pleasant places. Listening to, and acting on, the suggestions of our customers will enable us to make walking, cycling and public transport the first choice for the vast majority of trips. And we will continue to improve services to unlock the new jobs and housing our city needs.

This report looks at our performance in relation to the following themes from the Mayor's Transport Strategy:

# Healthy Streets and healthy people



### Scorecard measures

TfL uses a scorecard to measure its performance against the Mayor's Transport Strategy. In this report, the scorecard measures are marked like this.



Healthy
Streets and
healthy
people

# London's transport system will be safe

## Significant incidents

This section of the report covers the significant incidents that occurred on London's road and public transport networks in quarter I 2018/19.

Significant incidents are defined as any fatality, an incident resulting in 3 or more people requiring hospital treatment, or those resulting in a loss of more than  $\pounds I$  million.

### Significant incidents on London's Roads

Twenty-three people were killed on London's roads in quarter I, they include:

- eight pedestrians
- four cyclists
- nine motorcyclists
- one car occupant
- one dumper vehicle operative.

Police investigations are underway for these incidents.

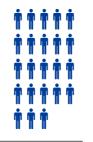
# Significant incidents arising from our public transport activities

The significant incidents arising from our public transport activities were:

- A pedestrian was fatally injured in a collision with a route 25 bus. This incident is included among the 23 road-related fatalities above.
- Five bus passengers, the bus driver and two van occupants sustained injuries in a multi casualty collision involving a route 166 bus on 15 June. Three of the injuried parties required hospital treatment for a wrist fracture, head injury and soft issue injuries.

23
Number of accidental fatalities

(8% ▼ against QI 2017/18)



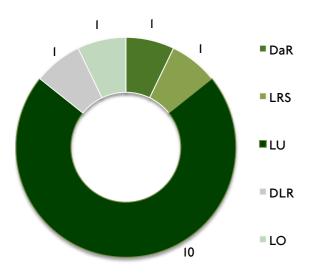


The Sarah Hope Line \* received I25 calls in quarter I, resulting in I8 new cases of people needing our help. These included cyclists (three), and those impacted by incidents involving London Underground (nine), buses (three) and London streets (three).

\*The Sarah Hope Line offers comprehensive help and support to anyone involved in, or affected by, a serious incident on our network. Our dedicated team, based within our Contact Centre Operations in North Greenwich, offers a range of services, from counselling to reimbursement of medical costs. We also work in partnership with organisations including Assist Trauma Care, The Samaritans and a range of private therapy clinics to provide further specialised support.

## Statutory reporting of customer and workforce injuries

Customer injuries

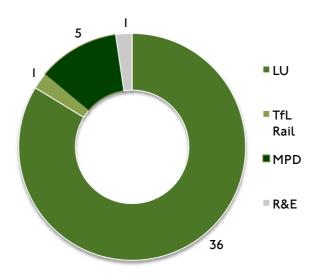


We are required to report certain categories of injuries to key statutory bodies. This includes certain serious workplace accidents, occupational diseases and specified dangerous occurrences (near misses).

Across our network, 57 incidents were reported to the Health and Safety Executive (HSE), the ORR and the Marine Accident Investigation Board (MAIB) in quarter I. Of the incidents, I4 involved injuries to our customers and 43 involved injuries to our workforce. These figures do not include statutory reports made by our bus operators, which will be incorporated into future reports.

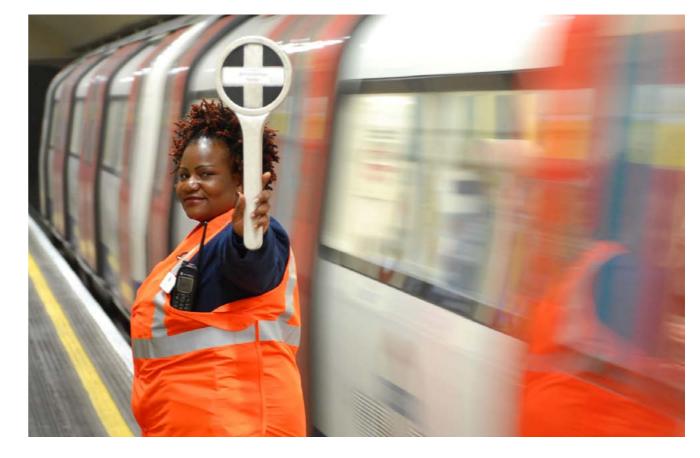
Slips, trips and falls accounted for I0 of the I4 customer incidents, nine within London Underground (LU) and one in Dial-a- Ride (DaR). On London Overground (LO), a passenger was struck by a train after falling into its path, sustaining serious injuries and on the Docklands Light Railway (DLR) and LU, passengers were injured when they were caught in the train's doors and a closing gate line respectively. The injury within London River Services (LRS) arose when a passenger's foot was caught between a boat and pier while disembarking resulting in significant leg injuries.

## Workforce injuries



The majority of workforce injuries reported to the HSE and ORR were minor. All but two injuries were triggered by the length of absence rather than the severity of the injury.

The two workforce major injuries were injuries to London Underground train operators. In April, a train operator on the Bakerloo line lost the tip of his finger when a train door shut on it and in May, a train operator fell between the train and the platform, fractured his collarbone and broke his arm. For both incidents, investigations were carried out and actions implemented. One of the train operators shared the story of his accident widely within LU to help prevent other similar incidents.

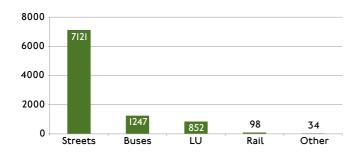


# London's transport system will be safe

# Injuries on London's road and public transport networks

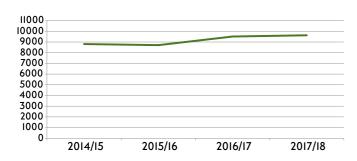
There were 7,121 injuries on London's roads during the quarter, including 23 fatalities, compared with 25 for the same quarter in 2017. Across our public transport networks, a total of 2,231 customers were injured, up 0.5 per cent against the same quarter of 2017/18.

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



## **Customer injuries**

Annual totals



2.7

Number of injuries per million passenger journeys (1.5% ▼ against QI 2017/18)

Number of injuries per million passenger

million passenge journeys on the bus network this quarter\*

(0.3% ▲ against QI)

Number of injuries per million passenger journeys within our rail division

this quarter (0% ▲ against QI 2017/18)

5.5

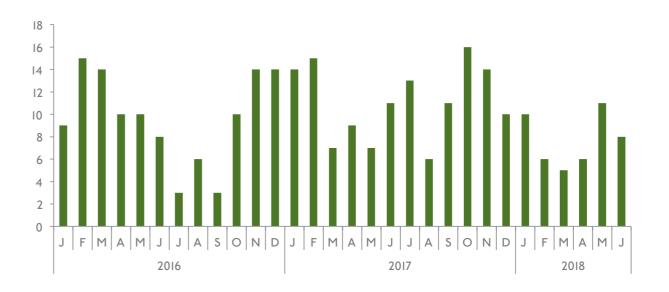
Number of injuries per million passenger journeys within our other operations this quarter (17.2% ▲ against QI 2017/18)

\* 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.

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#### Fatalities on London's roads

(2017 and 2018 figures are provisional)



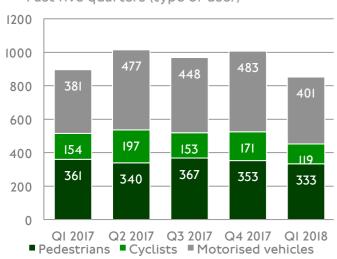
Road safety data is reported by calendar month. For the time period covered by this report, a total of 23 deaths were recorded on London's roads, compared with 25 for the same quarter in 2017. Seventeen of the 23 incidents were men. All incidents involved adults over the age of 18; four were 60 years of age or over. The individuals killed in these incidents included pedestrians (8), pedal cyclists (4), motorcyclists (9), a car occupant (I) and a dumper vehicle operative at a domestic property (I).

To ensure we understand the cases of fatalities and identity any actions we need to take on our network, we liaise regularly with collision investigators from the police to review the circumstances of each fatal collision. We work closely with Police Traffic Management Officers to ensure site visits carried out to identify any issues and instigate improvements to our network.

## People killed or seriously range injured\*



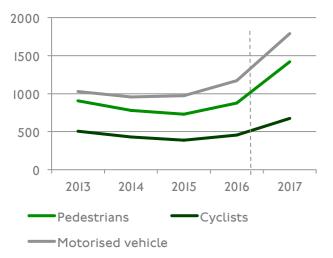
Past five quarters (type of user)



Total road casualty figures are reported using a calendar year, with quarter I covering January to March 2018. The provisional figures indicate that the number of people killed or seriously injured (KSIs) fell by 5 percent in quarter I of 2018 compared to the same quarter last year. Twenty-eight per cent of people killed or seriously injured were female and 72 per cent were male. The majority of people killed or seriously injured were aged 25-59 years, followed by those aged 16-24 years.

Fewer cyclists (23 per cent) and pedestrians (8 per cent) were killed or seriously injured in quarter I compared to quarter I last year. This improvement partly reflects exceptionally colder and wetter weather during quarter I of 2018, which results in changes to choice of transport mode.

## Annual totals



\*Streets KSI data is based on calendar quarters rather than financial quarters ie. QI is January to March and is the latest available processed provisional data. This is subject to change as this information is reviewed and managed by the Metropolitan Police Service.

\*\*Figures from the end of 2016 have been reported using new systems and should not be compared with previous years. Theses systems are more accurate, with more injuries being classified as serious rather than slight. The figures are provisional and we are undertaking further 'back estimation analisys' with the Transport Research Laboratory.

## Road danger reduction

Changes to the road network, including segregated cycle lanes and improving dangerous junctions, have led to a 45 per cent reduction in the number of deaths on London's roads over the past eight years. However, people are still being killed or injured on our roads.

Therefore, in partnership with the Mayor of London and the Metropolitan Police, during guarter I, we finalised the Vision Zero Action Plan to deliver further improvement. The plan was launched by the Mayor, along with the Metropolitan Police, emergency services and other road safety partners on 24 July 2018.



#### Vision Zero Action Plan

The Action Plan includes ambitious targets including the introduction of a new Lowering Speed Limits programme. The plan takes an internationally recognised approach to road danger reduction. The goal is to ensure that a collision doesn't happen in the first place, or, if it does occur, it is sufficiently controlled to not cause death or serious injury.

"Travelling enriches our life and enhances our health and wellbeing by being more active. This programme will complement the existing Safer Junctions and Liveable Neighbourhoods programmes to create safer, healthier and more accessible neighbourhoods for people, reducing danger from the road network for all users. Our Vision Zero Action Plan, aims to eliminate death and serious injury from London's roads and public transport systems by 2041."

Gareth Powell MD Surface Transport.



#### Safer Junctions

To further reduce incidents, during the quarter, construction started at two key locations on the Safer Junctions programme. At Charlie Brown's Roundabout in Redbridge the scheme will reduce road danger, and increase links for pedestrians and cyclists through the introduction of signalised crossings on all approaches to the roundabout. We also commenced works at Highbury Corner. A further five Safer Junction locations have been accelerated as part of the new cycle route between Camden and Tottenham Hale, which is planned to start construction in late 2019.

#### **Town Centres**

In Mitcham, safety enhancements for pedestrians and cyclists have been made through the town centre near Fair Green. On the Local Improvement Plan Corridors, Southwark has completed walking and cycle junction safety improvements at two roundabouts in Crystal Palace Parade with Fountain Drive and Sydenham Hill. This included a segregated bypass, parallel crossings, geometric changes to reduce speeds and asset renewal. Feasibility design is now underway for improvements to Peckham town centre. This will include an integrated package of measures to improve safety for pedestrians.

## Central London Cycling Grid

Construction of the original 85km of Central London Grid network has continued with 39km of the network now complete. This includes strategically important routes such as Quietway 13 (Broadway Market to Old Street) and Quietway I5 (Earls Court to Belgravia). An additional 5km of network is currently under construction including a segregated cycle track at Finsbury Square. These routes are due for completion by the end of 2018/19. A further 65km of potential Quietway routes have been identified and we have been working with Boroughs to define more detailed plans. This includes important routes such as the link between Cycle Superhighway 2 and 3 in Tower Hamlets, a link between Dalston and Bethnal Green via Queensbridge Road in Hackney and Kensington High Street to Notting Hill in Kensington and Chelsea.

## Cycling Quietways

Construction of the original 85km of Central London Grid network has continued with 39km of the network now complete. This includes strategically important routes such as Quietway I3 (Broadway Market to Old Street) and Quietway I5 (Earls Court to Belgravia). An additional 5km of network is currently under construction including a segregated cycle track at Finsbury Square. These routes are due for completion by the end of 2018/19.

Construction is complete or under way on II2km of a potential 250km network of routes. To date, we have launched Quietway I (Waterloo to Greenwich and Greenwich to Bexleyheath), Quietway 3 (Kilburn to Gladstone Park) and Quietway 5 (Oval to Clapham Old Town). Works are underway on a further I3 routes.

#### Mini-Hollands

Twenty-seven of the I03 Mini-Hollands schemes (98 infrastructure and five supporting measures) are complete.

Twenty-one further schemes are currently under construction, including the Kingston Station scheme, the Lea Bridge Road scheme in Waltham Forest and the AI0I0 South scheme in Enfield. Twenty-five schemes are currently going through design and consultation, including a number of Quietway Links and Quieter Neighbourhoods in Enfield.

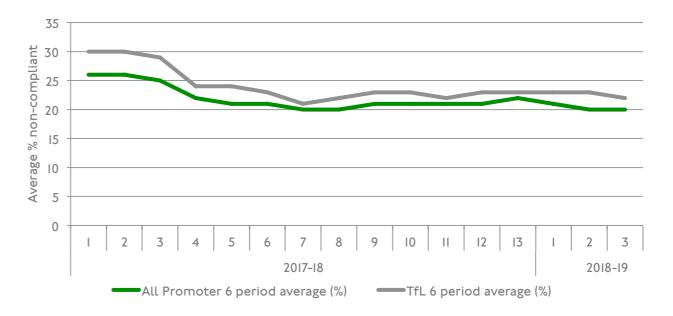
## Cycle Superhighways

With the core route of the East-West Cycle Superhighway (CS3) opened in full mid-December 2017, work on remaining parts of the route has continued. Re-surfacing works have been completed at Lancaster Gate and within St. James's Park and Green Park. Delivery of the North-South Cycle Superhighway (CS6) Phase 2 is nearing completion and will provide a continuous cycle route between Elephant & Castle and King's Cross, segregated from traffic on main roads.

Following the consultation for Cycle Superhighway 9 (Kensington Olympia to Brentford) and Cycle Superhighway 4 (Tower Bridge to Greenwich), designs are being updated in light of comments received during consultation. A response to issues raised is planned to be published in autumn for both routes. Designs are also being developed for a number of other routes, including Camden to Tottenham Hale, Hackney to Isle of Dogs and Acton to Hyde Park. Proposals are planned to be consulted on in early 2019. Construction of Cycle Superhighway II at Swiss Cottage was originally due to start in summer 2018 but was delayed due to submission of a Judicial Review by Westminster City Council (WCC). Following the Court's ruling in favour of WCC, we are currently exploring all options available to us to move forward with the scheme which will help to protect all road users and particularly those walking and cycling, whilst also significantly improving the area for residents.



## Safety at roadworks (Inspection failure rate)



Our Safety at Roadworks measure monitors the number of Signing, Lighting and Guarding (SLG) inadequacies at roadworks from safety inspections undertaken across six periods, (measured as an average over six preceding periods).

Through our active intervention the average work promoter non-compliance rate has fallen from a high of 27 per cent in October 2016 to 20 per cent at the end of quarter I, 2018/19. This has been achieved through the introduction of safety performance indicators for our highways contractors and an associated target of reducing the inspection failure rate to 20 per cent. Other measures introduced at this time include the use of tailored Action Plans for the poorest performing promoters and a safety focused prosecution campaign. An example of success is Openreach; their poor performance peaked at 27% in P8 2017/18, however following a

successful prosecution in March 2018 for safety offences and the implementation of an agreed action plan, safety failure rates have dropped to 14% in P3. TfL's performance has plateaued, so a new action plan is currently being agreed with the LoHAC contractors post contract changes, and Safety at Roadworks is the first agenda item at the next LoHAC Delivery Board meeting.

During quarter I we commenced work on a new Temporary Traffic Management Handbook, which we will publish in early 2019. This handbook will help those who work on our roads by providing detailed good practice guidance on how to manage roadworks such that they provide a safe environment for cyclists and pedestrains, suitable guarding and segregation of the works and the safe set-up and use of temporay traffic signals and signage.

## Plans for next quarter

During quarter 2 we will:

- Launch the Vision Zero Action Plan
- Start public consultation on proposals for Tooting town centre from September. The proposals will include improvements to pedestrian and cycling facilities and a reduction in vehicle speed limits
- Complete the concept designs for the construction work packages for Old Street. The works will transform the roundabout into a more pedestrian and cycle friendly environment
- Open Phase 2 of Cycle Superhighway 6 in September
- Publish full consultation reports for Cycle Superhighways 4 and 9 in autumn
- Continue work on the Temporary Traffic Management Handbook to promote good practice in managing roadworks.



# Customer Safety: Buses



## Overview: customer injuries in QI

Accidental	Major	All Injuries	Near
Fatalities	Injuries*		Misses**
1	236	1247	5534

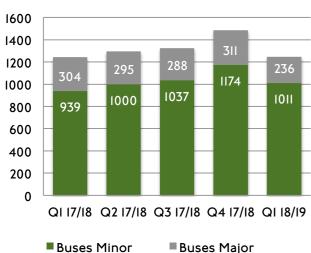
<sup>\*</sup> Injuries requiring hospital attendance

Over 7I million miles were operated by London's buses and over 521 million bus passenger journeys were completed in the quarter. There were 1,247 injuries in quarter 1, equating to 2.4 injuries per million passenger journeys. 19 per cent of these required hospital treatment and a pedestrian was fatally injured in a collision with a route 25 bus.

## Customer injuries five rolling quarters

### Customer injuries

Past five quarters



Customer injuries in the quarter represent a marginal rise of 0.3 per cent on quarter I 2017/18. However, the number of major injuries has shown a significant improvement; falling by 22 per cent. We have encouraged greater collaboration on safety matters both with and between bus operators and improvements have been made in the capture and sharing of learning from significant incidents across all bus operators.

An improving trend is observed for injuries sustained while boarding buses, while the trend for injuries while alighting remains static. Injuries while seated have also seen an improving trend. Injuries sustained while using stairs, falls within the aisle and injuries sustained by customers when struck by or against objects within buses, show a worsening trend. The predominant reason given for these incidents is sudden movement of the bus, including evasive actions such as hard braking to avoid collisions and deceleration (34 per cent).

## Top 4 causes of all bus customer injuries

Slip Trip Fall	Struck by/ against object	Trapped fingers/ limbs	Collision
56%	22%	10%	6%

Slips, trips and falls on buses were the predominant cause of injuries accounting for 56 per cent during the quarter, followed by passengers striking objects within buses (22 per cent) and entrapment of fingers and limbs, such as between doors (10 per cent). In respect of major injuries, slips, trips and falls on buses account for 62 per cent of major injuries. Of these, 39 per cent were elderly passengers. For this group of passengers, the proportion of their major injuries attributable to slips, trips and falls was much higher than other causes, at 75 per cent.

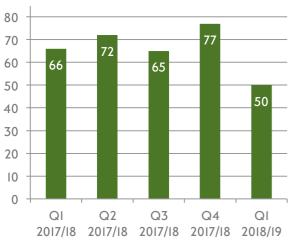
Bus operators have been coordinating large-scale safety campaigns at locations on the bus network where we have higher rates of collisions or near misses, to see if more can be done to reduce risk on busy highways and junctions. They have agreed a programme of quarterly campaigns with a different operator leading each one. On 29 May 2018 RATPDev held a safety blitz event in and around Oxford Street to enable officers from bus operators and TfL to engage with drivers on safety messages and to view the behaviour of bus drivers, cyclists, pedestrians and other vehicle users who entered this area.

<sup>\*\*</sup> All incidents where no injury or damage arose

# Killed or seriously injured in or by London buses (STATS 19)



#### Past five quarters

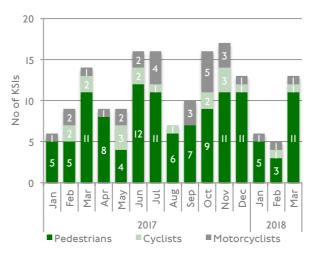


\*Buses KSI data is based on calendar quarters rather than financial quarters QI is January to March and is the latest available processed provisional data. This is subject to change as this information is reviewed and managed by the Metropolitan Police Service. Pre-2017 data includes coaches as well as buses.

In line with the overall reduction seen in all bus-related major injuries reported to TfL, the number of KSIs reported by, or to the police has reduced by 16.4 per cent in quarter I 2018, compared to the same period in 2017. Of the total for quarter I 2018, 25 (49 per cent) of the KSIs involved bus passengers, which is slightly better than the 29 in quarter I 2017.

Twenty four (47 per cent) of those killed or seriously injured by a bus were Vulnerable Road Users (VRUs), including one pedestrian who was fatally injured in a collision with a route 25 bus. Pedestrians continue to make up the largest proportion of VRU's killed or seriously injured by a bus, accounting for 80 per cent of all VRUs killed or seriously injured by a bus during quarter I.

## Vulnerable road user KSIs from collisions involving buses\*



\*Buses KSI data is based on calendar quarters rather than financial quarters QI is January to March and is the latest available processed provisional data. This is subject to change as this information is reviewed and managed by the Metropolitan Police Service, Pre-2017 data includes coaches as well as buses.

We are taking action to keep VRUs safe through our work on the new Bus Safety Standard, which includes the evaluation of autonomous emergency braking and ways to make it easier for other road users to see and hear buses. All tests have been completed and results are being evaluated to ensure we are prioritising the right measures.

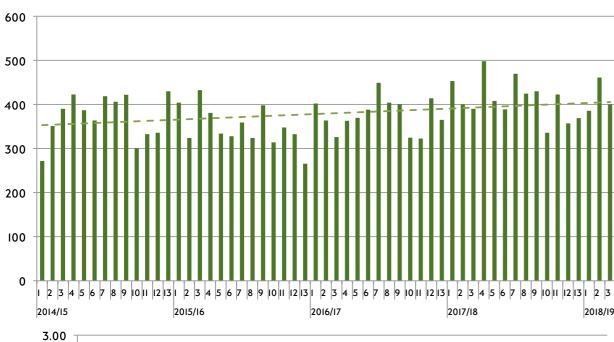
During quarter I we also continued to develop the specification for a new bus driver safety training course which will focus specifically on drivers' awareness of more vulnerable passengers and road users, as well as looking at how to reduce the number and severity of injuries that occur on board. Alertness is also key to drivers being responsive to hazards. For this reason, we have appointed Loughborough University, in partnership with the Swedish Road Safety Institute (VTI), to conduct independent research into bus driver fatigue. The research will enable us to understand the extent and nature of fatigue in London bus drivers and put forward evidencebased solutions to reduce fatigue. The research will conclude in spring 2019 but interim findings will be available in autumn 2018.

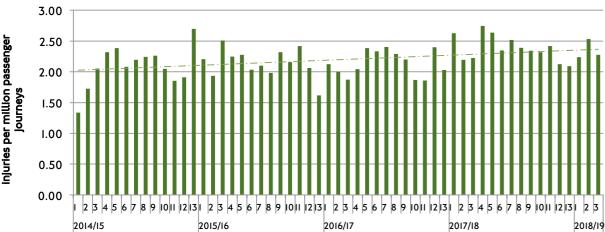
In parallel with the Bus Safety Standard, our bus operators are progressing trials of innovative safety equipment through our Bus Safety Innovation Fund. Eight innovation fund projects are underway, including trials of fatigue detection devices, acceleration limiters and new training apps.

These actions will help achieve our target to reduce the number of people killed, or seriously injured in, or by, London buses by 70 per cent by 2022 (against 2005-09 levels).



## Customer injuries five rolling years



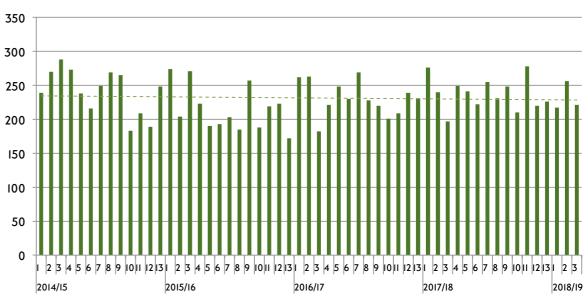


Over a five year period bus customer injuries have shown a rising trend; but there are signs of this slowing down over the last year and an improving trend is observed for major injuries over the last five years. This has been driven by a stronger focus on the investigation and sharing of learning from significant incidents by our bus operators. In the past two years, we have made a greater contribution to these investigations to ensure that contributory factors beyond the control of the bus operator are fully considered.

The more structured approach to the monitoring of bus operator performance and safety management introduced in 2017, including evaluating how they share learning and work with others to improve safety, is enabling better targeting of improvement activities at an operator and network level that will help drive further improvement.

Two key areas of focus have been falls on buses and collisions.

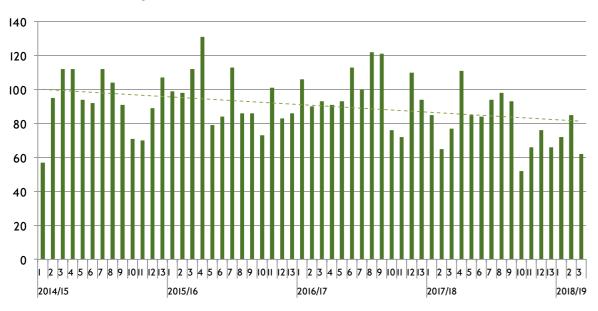
## Customer safety - slips, trips and falls on buses



There were 694 injuries to customers this quarter, from the I,I43 slips trips or falls that occurred on our buses. This equates to I.33 slip, trip and fall injuries per million journeys (an improvement on I.35 in quarter I 2017/I8). The long term trend for injuries due to falls on buses is static.

The majority of slips, trips and falls were on a level surface. Twenty per cent occurred during boarding or alighting and I4 per cent of falls occurred within the stairs areas. Of the falls in the quarter, I4I (I2 per cent) involved buggies/pushchairs and I7 involved wheelchair users (I per cent), resulting in a total of 74 injuries to these vulnerable customers.

## Customer safety - bus collisions



There were 219 injuries sustained in 5,976 collisions involving buses. This equates to 3.1 collision-related injuries for every million miles operated this quarter. The number of injuries has reduced by 4 per cent and the total volume of collisions has reduced 8 per cent compared to the same quarter last year. Of the total collisions, just over 3 per cent caused injuries in the quarter. Customer injuries due to collisions have been steadily falling over the last five years.

To further reduce incidents, we are in the process of rolling out Intelligent Speed Assistance (ISA) to the bus fleet. Bus routes 222 and 183 are currently using ISA in operations. Following the initial road trials for autonomous emergency braking in March, the Bus Safety Standard work is testing a range of other vehicle design and technology features for their ability to improve safety, which will be peer reviewed by international industry experts.

# Plans for next quarter

During quarter 2 we will:

- Carry out policy reviews and gather data from focus groups and interviews with drivers and managers across bus operators to understand the issues associated with bus driver fatigue.
- Add ISA to a third route in September.
- Conclude our work to inform our Bus Vehicle Specification.
- Receive interim findings from the Safety Innovation Fund trials.
- Support the bus operator safety campaign at Elephant and Castle in September 2018, led by Go-Ahead.
- Award the bus driver training contract in September.



# Customer Safety: London Underground 🖳



## Overview: customer accidental injuries in QI

Accidental Fatalities	Major Injuries	All Injuries	Near Misses
0	19	852	350

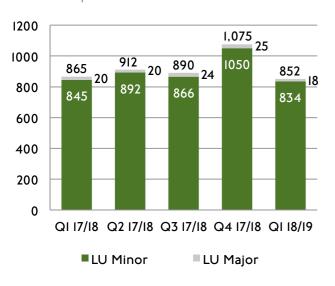
In quarter I 3I4 million passenger journeys were made and 852 customers were hurt when travelling on London Underground. Nineteen of those customer injuries (2.2 percent) were major injuries. This equates to 2.71 injuries per million passenger journeys, an improvement on the same quarter last year (2.77)

There were four cases where a passenger was fatally injured following a collision with a train. These await the outcome of the coroner's inquest.

## Customer injuries five rolling quarters

# **Customer injuries**

Past five quarters



We recognised there was an increase in the number of accidental injuries to our customers in 2017 and took action towards the end of 2017. Our actions focused on the key locations where accidents happen - on escalators (47 per cent), at the platform train interface (18 per cent) or on stairs (17 per cent). The majority of these accidents are when customers slip, trip or fall in these areas. The number of customer accidents on our stations in guarter I this year was the lowest for the past five quarters.

To improve safety on escalators, we introduced an 'Escalator Excellence Award' programme for the IO stations which have the most accidents. This programme set the standard for good escalator safety practices on LU stations, including new 'Hold the Handrail' signs on escalators, better local announcements, a new safety poster campaign. Our station staff are involving their families in communicating safety

## Top three causes LU customer injuries

Slip Trip Fall	Hit by doors, gates or other objects	Other
84%	14%	2%

"Managing safety is about more than hitting targets, it is about protecting real people – our customers and our workforce. Over the past six months, our escalators safety plans have had a real impact in improving customer safety on the Underground. Many of the ideas in the plan came from our front line teams and we are encouraging them to come to us with more ideas for improving safety in other areas – at the Platform Train Interface, on stairs and in their own working environment."

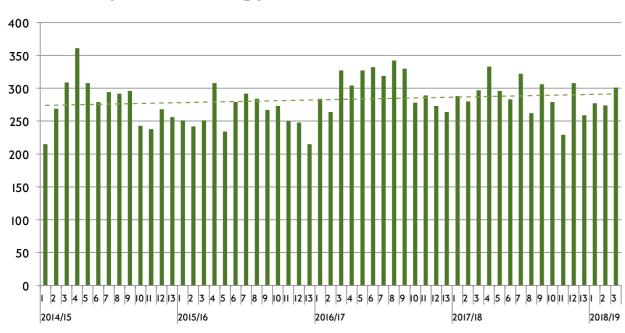
Mark Wild – MD London Underground

messages, including getting their children to record safety messages at our stations. This has had positive feedback from our customers. Our analysis of the "Escalator Excellence Award' showed that the number of accidents on escalators at these stations dropped by 29 per cent. We are now making these improvements in all LU stations which have escalators.

In quarter I, we also published our new LU Platform Train Interface (PTI) Plan. During this time, we produced, with input from our front line staff, a short film focused on reducing accidents at the PTI for train operators and station staff. We launched our new monthly PTI Day programmes - where senior and local managers talk to station staff and train operators about any issues or concerns.

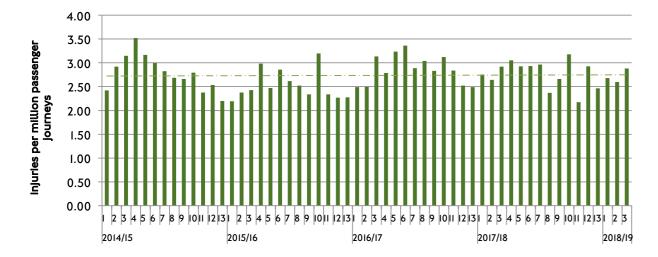
We made a number of infrastructure improvements in guarter I. We have moved the platform edge on 86 platforms on the Underground to reduce the gap between the train and the platform. We also improved the cameras on a number of platforms which will improve the view the train operator has of the platform when they are despatching a train. We plan to make improvements on 95 platforms between now and April 2021.

#### Customer injuries five rolling years



Reviewing the longer term trend for London Underground customer injuries, these increased by around 15 per cent between 2015/16 and 2016/17. The renewed focus on injury prevention, with a specific focus on slips, trips and falls in

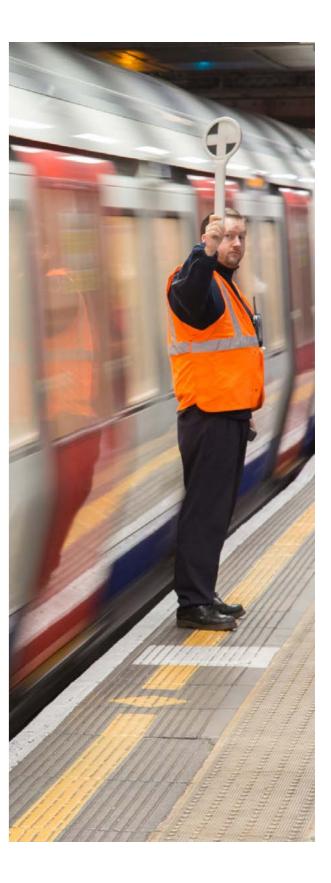
2017/18 halted and reversed that increase and the current quarter shows a further decrease from 2017/18. The five year trend when normalised by passenger numbers shows a stable trend.



#### Plans for next quarter

During quarter 2 we will:

- Complete the roll out of the Escalator Excellence programme to all LU stations which have escalators.
- Roll out "Stair Excellence" programme to the IO stations which have the most accidents.
- Use feedback from our monthly frontline PTI days to develop focused messages for staff and customers.
- Move nosing stones on the final six platforms to reduce the gap between the train and platform as part of our plan to reduce injuries when customers are boarding and alighting.
- Continue delivery of our Platform
   Camera Improvement project which will
   improve the train operators' view of the
   platform and make it safer for customers
   boarding and alighting our trains.



Healthy Streets and healthy people

Health, Safety and Environment report

## Customer Safety: Rail 💂 💂 💂







#### Customer injuries

Overview: customer accidental injuries in QI

Accidental Fatalities	Major Injuries	All Injuries	Near Misses*
0	5	98	n/a

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

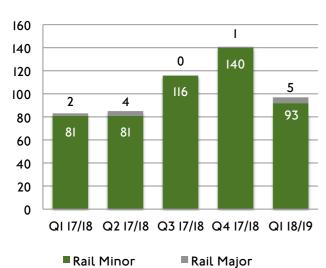
There were 89.8 million passenger journeys made across our rail networks during the quarter. A total of 98 customers were injured on our rail nework. This equates to 1.1 customer injuries per million passenger journeys; an increase from 0.9 at the same time last year.

Two customers were hit by trains at Crouch Hill Station (LO) and Stratford Station (TfL Rail). These are awaiting the outcome of Coroner inquests. Just under 5 per cent of the injuries were classified as major injuries. They occurred within TfL Rail (3), Docklands Light Railway (DLR) (I) and London Overground (LO) (I).

#### Customer injuries five rolling quarters

#### Customer injuries

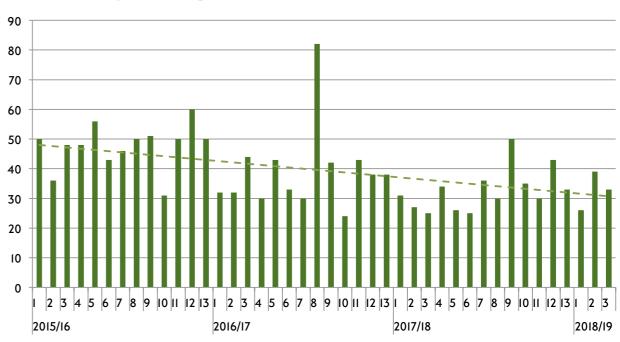
Past five quarters



The number of customer injuries increased by 18 per cent when compared with quarter I of 2017/18. A significant proportion of the increase in total injuries occurred within TfL Rail, where the number of injuries increased 57 per cent (23 up to 36) compared with quarter I 2017/18. Although statistically significant, the TfL Rail performance is against the backdrop of the takeover of II Great Western stations from quarter 3 of 2017/18.

Analysis of causes of customer injuries across the individual rail modes is being undertaken for inclusion in future reports.

#### Customer injuries long term trend



Despite the rise in the quarter, the I3 period trend shows an improvement. Although we're seeing a steady improvement in the long term trend for injuries, the tragic event at Sandilands junction on the tram network in November 2016 continues to drive our efforts to improve our understanding and control of risk across all our networks. Details of the actions being taken across our public transport networks are included in Appendix I.

Health, Safety and Environment report

#### Rail Customer Safety

During the quarter, we completed our revision of the London Trams Network Risk Model. This review incorporated learning from relevant incidents world-wide, to provide a more comprehensive understanding of risk. We will now use the model to guide monitoring activities to confim that the controls we have in place to keep our customers safe are working effectively. We also revised driver training following a review of our Route Risk Assessments. Our tram crossing risk assessments for Croydon town centre were updated and we are trialling additional mitigation to protect pedestrians, in the form of improved signage, crossing design and layout, and clearer segregation between authorised walking routes.

In May, we began the process to introduce an automatic braking system for the tram network which automatically brings a tram to a controlled stop; alerting the control centre if the speed limited at a location is exceeded. Potential suppliers will be asked to bid for the contract at the end of July. We are also assessing options for improving tunnel lighting and strengthening tram windows. The design of the ITram performance monitoring system is nearing completion and bids are being evaluated for improvements to tram emergency lighting.

To promote wider industry learning, we continue to work with the ORR, UK Tram, Department for Transport, and tram operators, owners and infrastructure managers, to establish and embed a new industry body to develop common standards and address risk review and identification. In June we also shared lessons learned and



actions we have taken after the Sandilands tragedy with the safety and risk professionals from across the railway and broader transport industry, at the Rail Safety and Standards Board's Risk Management Forum.

Full details of actions taken in response to the RAIB and our own recommendations following the incident at Sandilands in November 2016 are in Appendix I.

On our LO network, we introduced a new cutting edge simulator representing the driving cab and route that will be used by our new LO trains. The simulator allows drivers to experience and prepare for driving through all operational conditions including severe weather and trespassers on the track. We have also improved our standards for the management of fire precautions at stations where Rail for London is the Infrastructure Manager, and increased the frequency of inspections to ensure that controls remain effective.

In line with the approach taken to the management of the platform train interface across our other rail operations, 'Mind the Gap' announcements and platform signage have been introduced at DLR locations with larger stepping distances between the platform and train.

During the quarter the ORR issued their authorisation for Rail for London Infrastructure to stand-up as Infrastructure Manager; a significant safety milestone for the new Elizabeth line.

Healthy Streets and healthy people

Health, Safety and Environment report

#### Plans for next quarter

During quarter 2 we will:

- Continue to support the development of the tram industry body for safety and a UK-wide trams safety risk model.
- Issue the Invitation to Tender for the automatic braking system for the tram network.
- Engage with Original Equipment Manufacturers on the installation of ITram.
- Establish whether similar remote monitoring capabilities can be introduced on the Stadler tram vehicles as is now used on the Bombardier vehicles.
- Revise tram crossing risk assessments for the segregated sections of the tram network.
- Support the development of a fatigue management strategy by our LO operator and the trial of a "Readiband" fatigue monitoring system by our DLR operator.
- Assess the impact of a 3 second door chime to warn of door closure on the DLR.



## Other operations 🗐 ⇔ 🛱 🦑 💴 🖆









#### Customer injuries

#### Overview: customer accidental injuries in QI

Accidental	Major	All Injuries	Near
Fatalities	Injuries*		Misses**
0	11	34	117

<sup>\*</sup>Injuries requiring hospital attendance

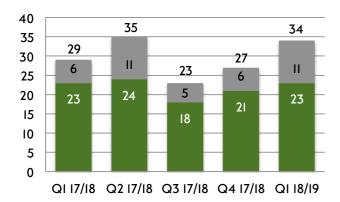
A total of 6.2 million passenger journeys were made acoss our other operations. Thirty four customers were injured. This equates to 5.4 customer injuries per million passenger journeys. This is worse than the same last year when it was 4.5 injuries per million passengers journeys.

Eleven of the injuries were classified as major within Santander Bikes (5), Dial-a-Ride (DaR) (3), Victoria Coach Station (VCS) (2) and London River Services (LRS) (I). A significant proportion of injuries occurred within DaR (35 per cent), unchanged compared with quarter I 2017/18. Santander Bikes and VCS each accounted for 2I per cent of the injuries with the remainder occurring within LRS and Emirates Air Line (EAL), both accounting for I2 per cent each.

#### Customer injuries five rolling quarters

#### Customer injuries

Past five quarters



- Other Operations Major
- Other Operations Minor

The number of injuries rose by 17 per cent compared with quarter I 2017/18.

Slips, trips and falls were the predominant cause of injuries in all areas except Santander Bikes, where collisions caused most injuries. These two causes of injuries were responsible for all II major injuries in the quarter. In respect of those due to collisions, four out of the five incidents involved Santander Bikes users, and the other involved a DaR customer.

#### Top 4 causes of injuries

Slip Trip Fall	Collision	Cut/ abrasion	Trapped fingers/ limbs
41%	18%	15%	6%



To reduce these incidents safety features are being built into the design of new assets and vehicles. This is key to achieving and sustaining risk reduction. The specification for new DaR vehicles issued during quarter I builds in safety features including low-floors, a reduced incline on ramps, as well as seats and aisles widths that ease movement.

To deliver improvements in safety on the river, we have gained support for the development of a River Safety Strategy from key stakeholders, including the Port of London Authority.

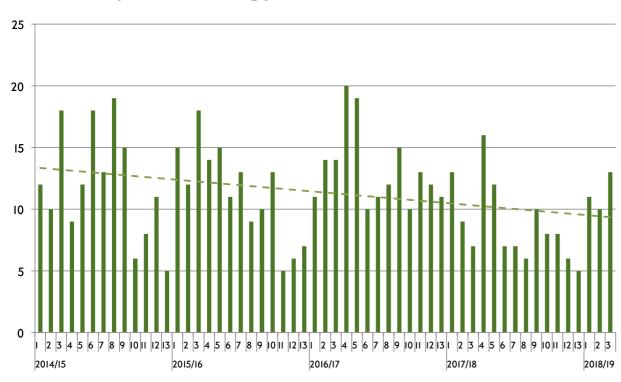
Our licensing and enforcement regimes also support risk reduction and the elimination of injury by ensuring that the assets used to provide services and the way in which they are operated remain safe. Our new powers to carry out road-side stops of taxi and private hire vehicles without police presence came into force, enhancing our ability to eliminate illegal and non-compliant activities.

Our I2 week consultation on a range of measures to improve safety and raise standards across the private hire industry through our licensing regime concluded at the end of quarter I. Responses are being evaluated.

Healthy Streets and healthy people Health, Safety and Environment report

<sup>\*\*</sup> All incidents where no injury or damage arose

#### Customer injuries five rolling years



The overall trend for other operational services shows a positive trend. Our work to introduce new vehicles and vessels and develop a new strategy for safety on the river will help improve safety and reduce injuries in these operations.

#### Plans for next quarter

During quarter 2 we will:

- Start work on the River Safety Strategy.
- Evaluate the response to the DaR vehicle specification.
- Evaluate the response to the private hire consultation.



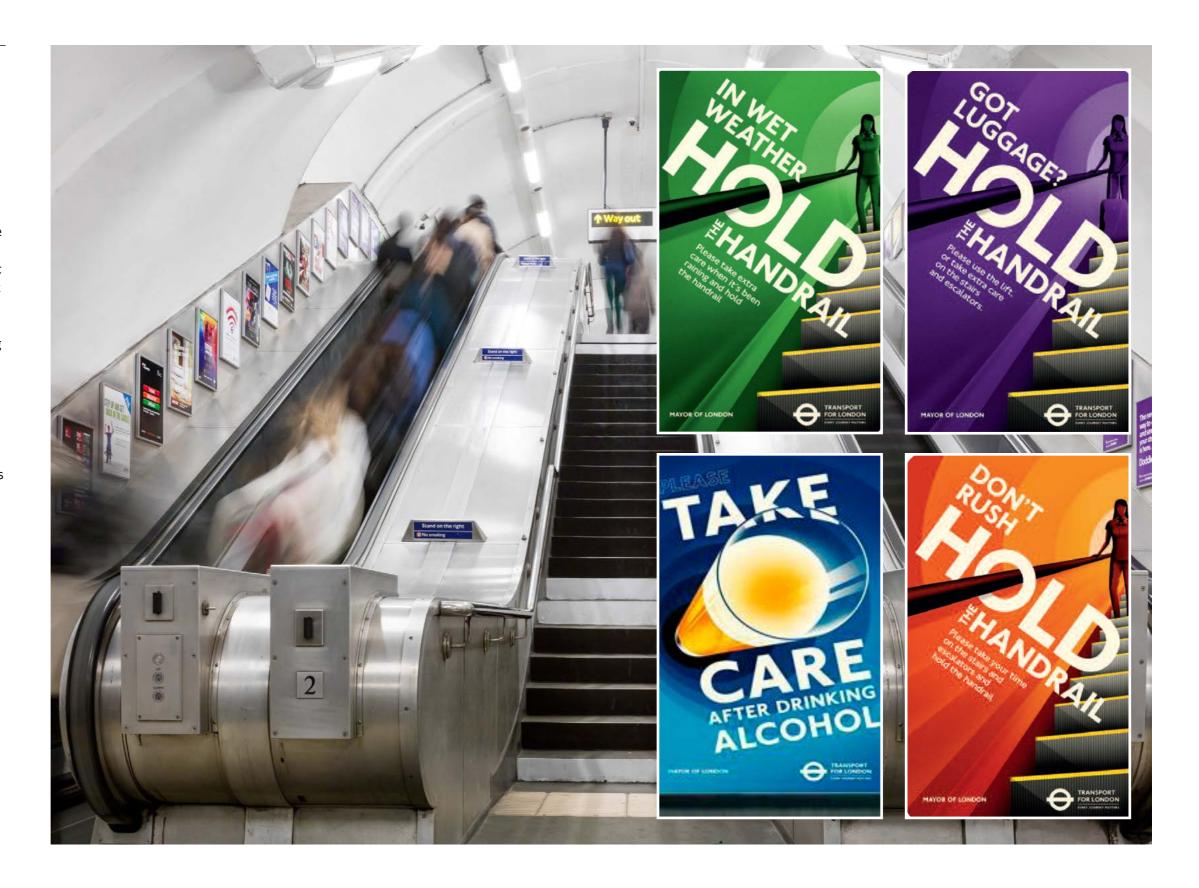
Healthy Streets and healthy people Health, Safety and Environment report

#### Customer marketing and behaviour change campaigns to improve health and safety

During the quarter the following campaigns were delivered to support safety and reduce injuries across our networks.

The Introduction of a Priority Seating Week campaign to make travelling easier for people who find it difficult to stand, included a campaign launched using our staff and public address systems to encourage people to look up and offer a seat to those who might need it. Local trials concluded on all modes of communication on public transport, focusing on communicating the key causes of slips, trips and more serious injuries, encouraging customers to take care when travelling.

In addition to our focus on the health and wellbeing of our own staff, we launched a range of activities to encourage people across London to get active. These included popup cycle docking stations at new locations and the funding of over 40 free guided walks during May as part of National Walking Month. The walks included the exploration of our urban tree trail and a sensory and dementia-friendly walk.



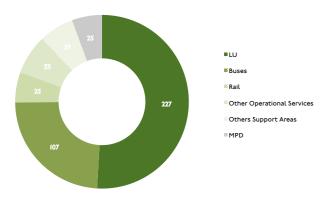
Healthy Streets and healthy people

Health, Safety and Environment report

# London's transport system will be safe

## Number of workforce injuries on the network (quarterly)

There were a total of 446 injuries to our workforce, a I4 per cent decrease on the same quarter in 2017/18.



227

Number of workforce injuries on the LU network this quarter (9% ▼ compared to QI 2017/18)



Number of workforce injuries on the Bus network this quarter (14% ▼ compared to QI 2017/18)

A2

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

### Workforce injuries

Overview: workforce accidental injuries in QI

Fatalities	RIDDORs*	All Injuries
0	43	446

<sup>\*</sup>Reporting arrangments for our bus suppliers being developed

Fewer members of staff and contractors were injured in quarter I compared with the same quarter last year (6 per cent improvement compared to the same quarter in 2017/18).

Of the 446 workforce injuries during the period, 43 were reported to regulatory authorities (information on page 15) and a further 2I were classified major in connection with bus driving, as they required hospital attendance. We held our first HS&E "workforce stand down" of the year across our construction projects, in response to the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) reportable injuries we experienced within our construction and project teams during the quarter. Whilst there was no common causation amongst these injuries, the stand down facilitated conversations with those on our sites and in our offices about what they can do to ensure the wellbeing, safety and health of themselves, their colleagues and our customers.

#### Workforce injuries five rolling quarters



#TfL Direct Employees #TfL Suppliers

Our direct employees accounted for 58 per cent of workforce injuries, with 83 per cent of these incidents occurring within LU (which has the greatest number of direct employees in TfL). Injuries to our supplier staff accounted for 42 per cent of our workforce injuries. The number of injuries reduced by 22 per cent compared with quarter I of 2017/18. Bus drivers were the group most affected, accounting for 51 per cent of supplier staff injuries. This is followed by our major project teams where 25 injuries (I3 per cent) were reported. Within our Rail modes, we recorded 24 injuries (12.8 per cent) and in other operational service we recorded 22 injuries (II.8 per cent). The remainder were reported within LU (I2 - 6 per cent) and other support areas (2 - I per cent).

continues through making safety personal to all. During the quarter, LU launched its first LU Safety Culture Plan. It includes Working together

We took action to improve the safety of our

improving safety leadership and culture in TfL

establishing safety charters

for all Heads of Customer

near-miss reporting to

During the quarter,

there was a strong

focus on improving our

of risk across the rail

our competence

understanding and control

networks and strengthening

management arrangements.

learning between different

of good practice between

underfloor wheel lathe at

LU and London Trams

on the safe use of the

our tram depot.

parts of TfL, such as sharing

We also aim to improve

cause injury.

address issues before they

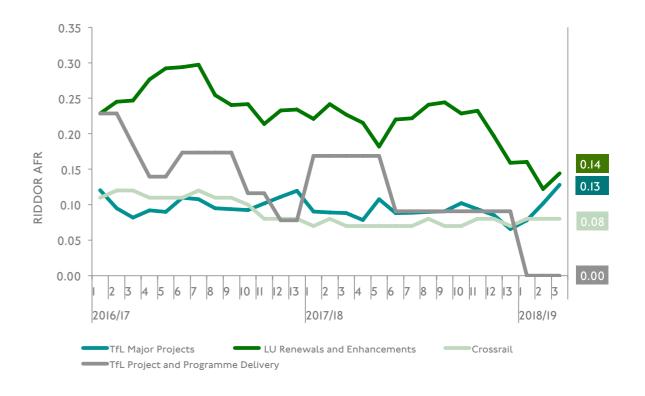
staff and contractors in a number of other areas in quarter I. Our ongoing focus on

Services, sharing their to look after our commitment to improving health and safety in their people areas, rolling out a Safety Conversation approach #showwecare in the maintenance team, and creating open forums for discussing safety issues. We have also included encouraging more



#makesafetypersonal **y**<

Construction workforce Accident Frequency Rate (AFR)



Our total construction workforce accounted for 42 accidental injuries in the quarter. This is a 14 per cent decrease on quarter I 2017/18. Six of the injuries in the quarter were reported under RIDDOR, though none of them were major injuries. In response, within major projects the focus has been on our key incident trend; an increase in injuries leading up to and during the summer holiday season. Campaigns have been launched reminding employees to maintain their focus on safety when returning from work following a holiday using simple techniques to improve hazard awareness. Through our Zero Harm community (a forum for working with our suppliers to improve safety across TfL) we are working to embed "back to work" campaigns as a part of work induction.

Taking the lead for construction across TfL, our major projects teams identified that whilst safe systems of work and processes were of an acceptable standard, they were not consistently followed. This quarter we began trialling a Behavioural-Based Safety (BBS) programme in MPD with supporting short films that forms part of a consistent HS&E induction pack. The focus of the BBS programme is on workers' behaviours and we will share this programme with other parts of TfL in quarters 2 and 3.

The chart above shows the RIDDOR Accident Frequency Rate (AFR) for all our construction teams including Crossrail.

#### Top 4 causes of injuries (all areas)

Slip Trip Fall	Machinery/ Equipment/ Powered Tools	Manual Handling	Collision
22	19	12	5

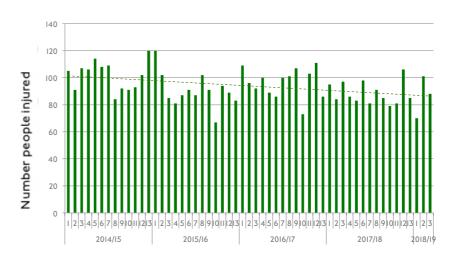
For our direct employees, slips, trips and falls were the main cause of injuries. Although the longer term trend for overall injuries is declining, within LU and Surface Transport, there has been an upwards trend for two years in respect of slips trips and falls. LU and Surface Transport have focused plans addressing slips, trips and falls. Actions include improving walkways and barriers where possible, clearing redundant material from track and working environments and ensuring that our staff remain alert and aware of their surroundings. Short films are

being produced which help staff understand the risk and the potential consequence of slip, trip and fall accidents.

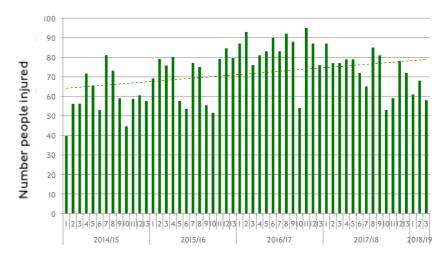
Manual handling injuries are a key theme across different parts of TfL, particularly London Underground, our Major Projects Directorate and Dial-a Ride. Enhanced training is being delivered to staff, and we have a number of projects aimed to reduce the amount of manual handling required. This training has already began to result in improvement within our construction teams. Capability assessments for those delivering services in DaR and VCS are being used to reduce manual handling injuries. Improved management of vehicle movements at VCS and introduction of a speed monitoring tool will target collision-related injuries.

#### Workforce injuries five rolling years





#### TfL supplier employee total injuries



The long term trend for total workforce injuries overall is stable. We are seeing an improving trend for injuries to TfL's own staff, but a worsening trend with our supplier staff within major projects and Santander Bikes.

Our Supplier Assessment Tool (SAT) provides our key leading measure for supplier performance within our major projects and other rail projects. This approach is being progressively rolled out across all construction and maintenance related supply chains. A similar approach has been introduced to provide a more holistic view of safety management maturity within our bus operators.

Taking the lead for construction across TfL, our major projects teams identified that whilst safe systems of work and processes were of an acceptable standard, they were not consistently followed. This quarter we began trialling a Behavioural-Based Safety (BBS) programme in MPD with supporting short films that forms part of a consistent HS&E induction pack. The focus of the BBS programme is on workers' behaviours and we will share this programme with other parts of TfL in quarters 2 and 3.

#### Plans for next quarter

During quarter 2 we will:

- Introduce new measures to improve the management of fatigue for tram infrastructure maintenance workers.
- Strengthen the training and competence assurance of those who work on the tramway and at the LO fleet maintenance facility.
- Launch the new HSE improvement programme in our Major Project Directorate, which will run from August 2018 to August 2019.
- Roll-out a new reporting application to make it easier for our construction workforce to report incidents and near misses.
- Deliver the first round of Safety Leadership and Culture conversations with senior managers as part of the LU Safety Culture Plan.
- Launch a workforce safety video for all LU functions, including sharing injury/ accident experiences.
- Extend the use of the Supplier Assessment Tool (SAT) across all TfL Capital Programmes, and revise our 'Beacon' HSE award scheme to apply across TfL.
- Launch HSE Roles and Responsibilities training for middle managers.
- Launch a new simplified risk assessment process across TfL.



## Workplace Violence

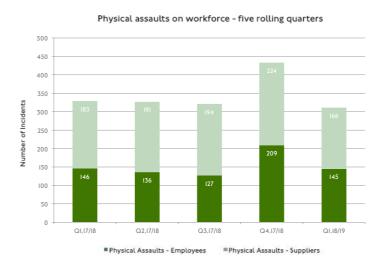
#### Overview: workplace violence in QI

Physical	Non-physical	Total
Assaults	Assaults	Assaults
311	754	1065

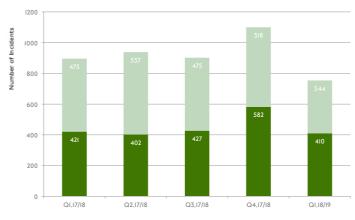
In the quarter, there were a total of 1,065 acts of violence towards our workforce, 29 per cent of which were physical assaults. Incidents tend to be connected with revenue collection, and temporary LU station closures as part of our congestion control plans. These incidents mainly result in verbal abuse. Road-rage also features as a cause for our road-based operations.

For our direct employees, there were a total of 555 acts of violence in the quarter, 26 per cent of which were physical assaults. For our suppliers, a total of 510 staff were affected by workplace violence in the quarter, 32 per cent of which were physical assualts. Seventy-five per cent of all acts of violence against our supplier's workforce were recorded on the bus network (our largest customer-facing supplier workforce). LO and DLR recorded 12 per cent and 8 per cent respectively. During the quarter MTR, the operator of the TfL Rail network, refreshed their conflict management training to address an increase in the number of staff assaults.

#### Workforce violence - five rolling quarters



#### Non-physical violence on workforce - five rolling quarters

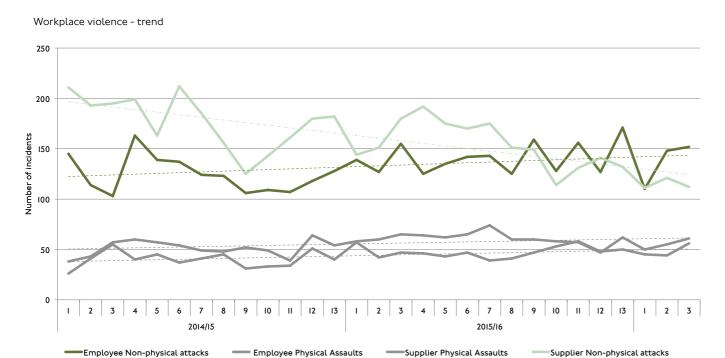


The total level of violence against our workforce in the quarter is a reduction of I3 per cent compared to quarter I 2017/I8, resulting from a two per cent reduction in assaults against direct employees and a 23 per cent reduction against our supplier workforce. There was a 6 per cent reduction in physical assaults and a I5 per cent reduction in non-physical aggression compared with quarter I of 2017/I8.

Through dedicated teams in our operational businesses, we support our workforce to take formal action through the police, against those who commit acts of violence. A total of 465 incidents of workplace violence were reported for police investigation. The workplace violence support teams worked closely with the police to assist their investigations. The British Transport Police (BTP) created a Staff Assaults Unit (SAU) from the end of May 2018. The SAU will include up to six police constables and one sergeant by the end of quarter 2. We also run regular workplace violence Interactive Sessions (i-Sessions) to enhance the support available to managers and employees dealing with workplace violence. The focus on these was re-doubled in the quarter, and as a result over 300 staff have now undertaken sessions across the network.

Incidences of workplace violence on Night Tube are very low. However, it was noted that the 26 incidents in quarter I was a reduction on the 4I reported at the same time last year. Of these 7 per cent were physical assaults. Alcohol is a common factor in these incidents. LU launched a new Workplace Violence reduction Plan in quarter I, which has actions focused on managing customers under the influence of alcohol or drugs. Actions aimed at improving customer safety and reducing workplace violence to staff (from customers under the influence) were trialled, with the support of the BTP) in May. Lessons learned from this trial have been incorporated in the LU Workplace Violence Reduction Plan.

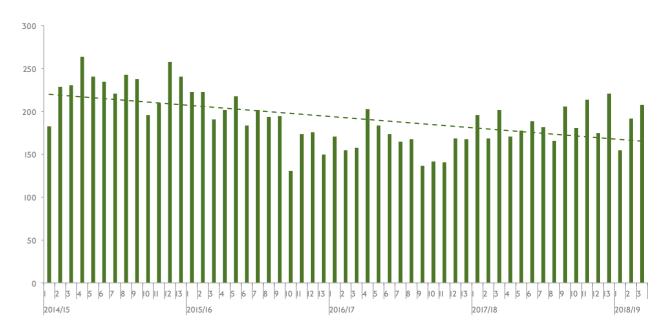
#### Workplace violence 5 rolling years



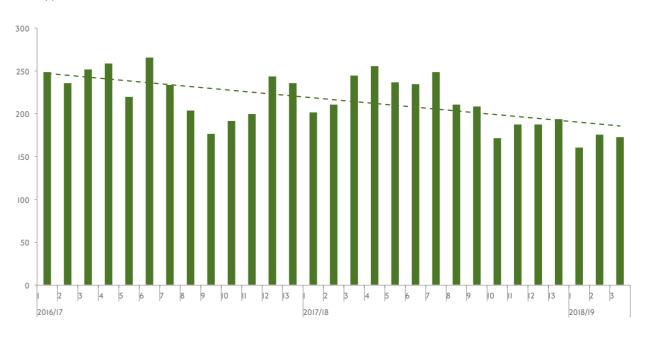
The trend for physical assaults on our workforce has remained relatively steady since 2016/17. However, non-physical violence towards our workforce is declining on our bus network, which is in turn contributing to an overall decline within our supplier workforce.

Our staff are encouraged to report all acts of aggression towards them, it is therefore accepted that higher levels of reported non-physical violence is a sign of positive culture, and enables effective deployment of enforcement personnel.

#### TfL direct employee work related violence incidents



#### TfL supplier work related violence incidents



#### Plans for next quarter

During quarter 2 we will:

- Continue to support staff experiencing violence in their workplace to take formal action through the police.
- Support the expansion of the BTP's Staff Assault Unit.
- Start to deliver the LU Workplace Violence Plan.



## Health & Wellbeing

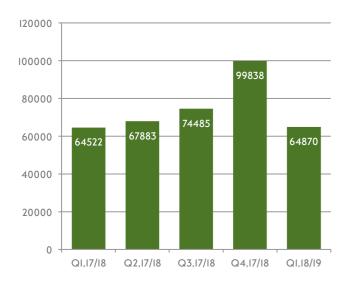
#### Workforce sickness absence

Working days lost to sickness	% working days lost to sickness
64870	4.45%

We employ over 27,500 staff in TfL. Within our direct employee workforce, a total of 64,870 working days were lost due to sickness in quarter I 82 per cent of the working days lost were within LU, and Surface Transport accounted for II per cent.

In respect of musculo-skeletal, mental health and accidents/assaults, the three causes of sickness absence where we currently implement work-related risk controls, 54 per cent of the days lost can be attributed to these causes.

#### Days lost to sickness absence – rolling 5 quarters



The total number of working days lost to sickness shows a small improvement (0.5 per cent) on the same quarter last year. The performance follows a rise during quarter 4 of last year. The average number of working days lost to sickness absence remained static compared with quarter I of 2018/19.

A higher percentage of working days were lost to coughs and colds than in 2017/18 following a worse flu season than the previous year. We also observed increases in the percentage of working days lost to Mental Health, Musculo-Skeletal, Gastrointestinal and Neurological issues, compared to the previous quarter I. The slight decrease in overall working days lost to sickness absence can therefore be attributed to a decrease in the other types of sickness absence.



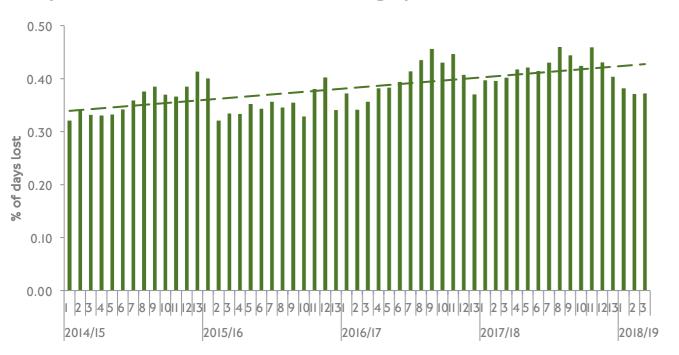
Our focus on encouraging and supporting our staff to stay physically and mentally healthy continued during the quarter. Mental Health Awareness Week, between I4-I8 May, was packed with activities around the business, organised through our network of Time to Change Agents. The TfL parkrun initiative saw 96 staff join the new TfL Running Club for parkrun and over I70 participants in the TfL Yammer group. Interviews to expand the Supporting Colleagues Network by I50 were concluded and 5 out of I2 two day training sessions were completed.

96
Number of staff joining the new TfL
Running Club



London's transport system will be safe



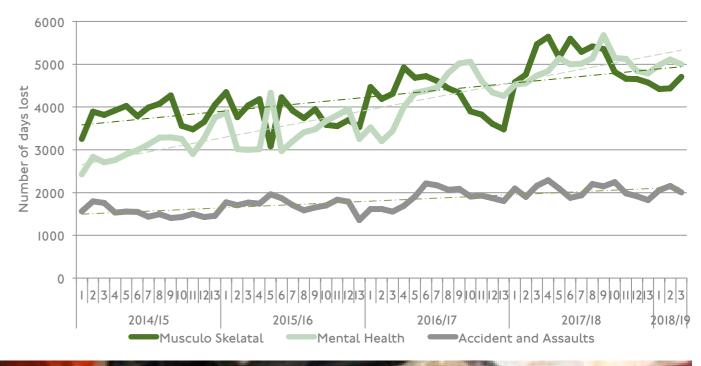


We observe a worsening trend in working days lost (when considered over 5 years), including when shown as a proportion of available working days.

The long term trend for the number of working days lost to musculo-skeletal, mental health and accidents/assaults causes is worsening.

We currently implement specific work-related risk controls and interventions

and support for these three causes of sickness absence through our Occupational Health and workplace support teams, Employee Assistance Programme and Supporting Colleagues Network which provides peer support.





London's transport system will improve air quality and the environment

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#### Environment – London's streets will be clean and green

In support of the delivery of the Mayor's environmental objectives outlined in the Mayor's Transport Strategy and the London

Environment Strategy a number of key work programmes have been progressed during the quarter.



#### Ultra Low Emission Zone (ULEZ)

The Mayor announced the ULEZ will be expanded up to the North and South Circular boundary in 2021. The new ULEZ will cover an area 18 times larger than the Central London ULEZ and will affect large numbers of polluting vehicles that do not comply with strict emission standards. It is estimated that 100,000 cars, 35,000 vans and 3,000 lorries might be affected by the expanded zone and tighter standards every day.

Expanding the ULEZ beyond central London will result in more than 100,000 Londoners no longer living in areas exceeding legal air quality limits in 2021, a reduction of nearly 80 per cent. We estimate that expanding

the ULEZ will reduce road transport nitrous oxide emissions by a further 28 per cent across London.

Following extensive consultation, the Mayor will also tighten the standards for the most polluting heavy vehicles including buses, coaches and lorries across the whole of London, using the same boundary as the existing Low Emission Zone. From October 2020 all buses, coaches and Heavy Goods Vehicles (HGVs) in London will need to meet Euro VI emissions standards or pay up to £300 daily charge. From October 2021 the ULEZ will be expanded to the North and South Circular roads for all cars, vans and motorcycles.



#### Improving air quality on the tube

The Mayor is focused on reducing pollution from all London's transport network including the Tube, river transport and construction sites. We continue to monitor the air quality on the tube network and are trialing different cleaning regimes to minimise dust levels and ensure employees and passengers continue to breathe the cleanest air possible.

Previous independent scientific research funded by us in 2004, found that the composition of dust particles on the Tube was different from that above ground and concluded that the dust did not contain components at levels that are likely to pose a health risk. Last year we committed to reviewing this evidence and requested independent support and advice from the Department of Health's expert Committee on the Medical Effects of Air Pollutants. We expect to receive the outcome of this review next quarter, the findings of which will help inform actions to ensure that the Tube system remains as clean as possible.

#### Low Emission Buses

Around 45 per cent of our 9,000-strong bus fleet now meets the ultra-clean Euro VI standard following our programme to upgrade around half our vehicles and replace remaining vehicles. We are accelerating this transition through the introduction of Low Emission Bus Zones beyond the proposed ULEZ and are working with the Mayor's Office to launch further zones as soon as all routes along these corridors have been raised to the same ultra-clean level.

In the quarter, 7I per cent of the bus fleet entering London was compliant with ULEZ. There were 96 electric buses (same as last quarter). There were 4,100 buses London wide meeting Euro VI standards (ULEZ compliant).

Our bus retrofit programme has upgraded more than I,300 buses to date. Around one-third of the fleet is now bringing much lower emissions to large parts of London, directly benefiting the Mayor's programme to improve air quality. With every vehicle retrofitted air quality benefits are immediately brought to London as its proportion of nitrous oxides and particulates falls by up to 95 and 85 per cent respectively.

In addition to this, most new vehicles entering the fleet are fitted with hybrid systems which reduce CO2 by up to 30 per cent. A small but growing part of the fleet (around 100 vehicles) is made up of zero emission electric and hydrogen fuel-cell buses which emit no exhaust fumes at all.

To support the 3,000 hybrid and 95 electric bus milestones, a number of buses have been fully wrapped with advertising, supported by other communications to promote continued progress to improve the fleet.



#### Electric vehicles and charging infrastructure

To support the growing number of Zero Emission Capable taxis and the take-up of electric vehicles, we are building a network of rapid charge points across London. We have installed II5 to date, of which 58 are dedicated to taxis. This will increase to I50 by the end of December 2018, which is a major step towards our target of 300 rapid charge points by December 2020. At present, there are nearly 300 Zero Emission Capable taxis licensed in London – more than a 300 per cent increase since March 2018.

#### Electric Vehicle Infrastructure Task Force

The Mayor has launched a new taskforce dedicated to boosting the infrastructure needed to increase the take up of electric vehicles across the capital. Whilst the rapid charging infrastructure is leading the field internationally, it is currently delivered on land and roads managed by us. The taskforce has representatives from business, energy, infrastructure, government and London boroughs.

#### School Audits

On 24 May 2018, the Mayor released reports containing the findings of the Mayor's School Air Quality Audit Programme. The reports investigated how air pollution levels at 50 schools situated in some of the most polluted areas in London could be addressed. A dissemination session was held in the London

Living Room on 25 June 2018 which provided schools and borough officers with further information and support for implementing the audit recommendations. Together with the GLA we are continuing our support by arranging a series of meetings with boroughs and associated schools.



#### Green Infrastructure

We continue to review all schemes and delivery programmes to understand the opportunities for green infrastructure and sustainable drainage through our established processes such as environmental evaluation and healthy streets checks and early engagement with project sponsors. We have input from specialists in engineering such as arboriculture and drainage. As a result, our projects now building green roofs including Tottenham Hale station upgrade, Acton Trains Modification Unit and Four Lines Modernisation Signalling Equipment rooms.

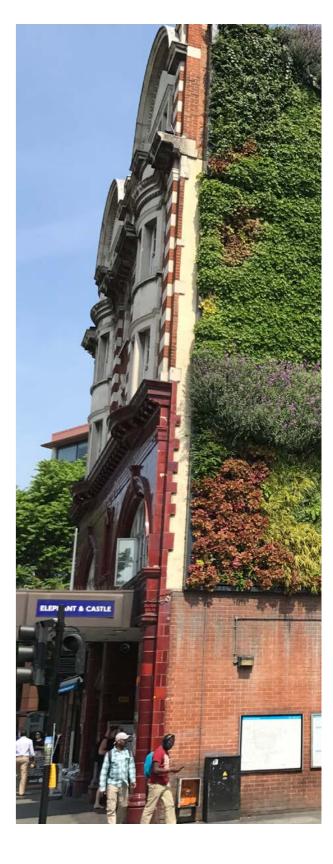
We have commissioned a tool for measuring and delivering a biodiversity baseline and net gain to support the Mayor's Transport Strategy and London Environment Strategy goals. This is currently being trialled on development of cycling schemes and the design of DLR Beckton depot before rolling out fully later in the year through training and inclusion in our project management process.



#### Plans for next quarter

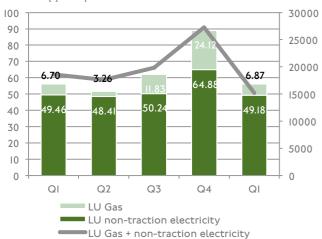
During quarter 2 we will:

- Meet with schools to support the implementation of the schools audit recommendations.
- Complete of the trials of the biodiversity base-lining tool.



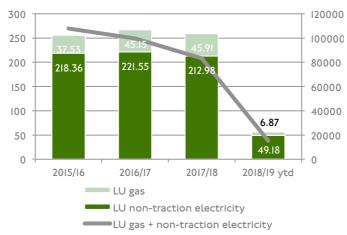
#### **Energy Usage and Emissions**

## Non-Traction Electricity Use rolling 5 quarters



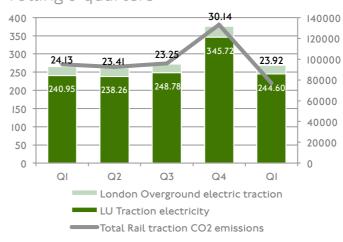
Within LU, we reduced our usage of non traction energy by 0.6 per cent with a total of 49.18 GWh used in the quarter. In respect of our gas usage, there was an increase of 2.5 per cent with 6.87 GWh used in the quarter.

## Non-Traction Electricity Use rolling 5 years



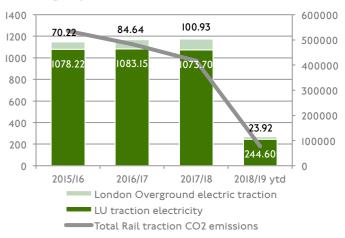
CO2 emissions from non-traction services decreased by I8.5 per cent in comparison to the equivalent quarter in 2017/I8 due to a reduction in the emissions intensity of grid electricity.

## Traction Electricity Use rolling 5 quarters



Within LO, we reduced the amount of traction energy used by 0.9 per cent compared with the same quarter last year, with a total of 23.9 GWh used in the quarter. For LU, our traction electricity usage rose slightly by I.5 per cent with a total of 244.6 GWh used. For LU this is very marginal. However, for LO, the change since 2015/16 has been significant (up 53 per cent on 2015/16), because we ran more services.

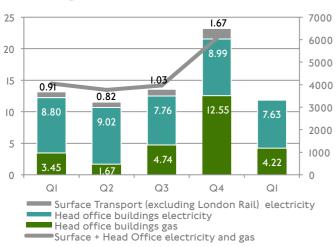
## Traction Electricity Use rolling 5 years



CO2 emissions from traction electricity decreased by I9.0 per cent in comparison to the equivalent quarter in 2017/18 due to a reduction in the emissions intensity of grid electricity.

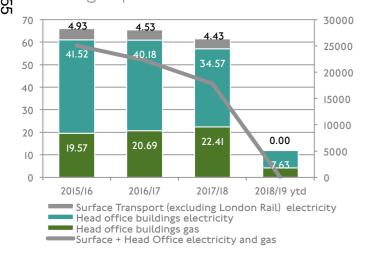


#### **Electricity and Gas Consumption** rolling 5 quarters



Within our Head Office buildings, we used 4.22 GWh of gas, this is up 22.1 per cent on a reduction of I3.4 per cent.

#### **Electricity and Gas Consumption** rolling 5 quarters

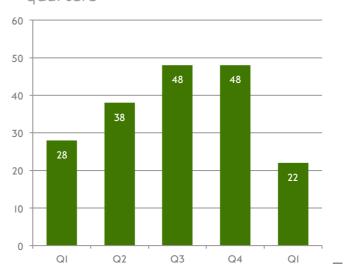


the same quarter 2017/18 and was due to the colder weather we experienced in the Spring. For electricity usage, we used less electricity,

#### Environmental incidents in quarter I

Streets	Buses	LU	Rail	Other	Total
0	0	17	0	6	23

Environmental incidents – rolling 5 quarters



Top 4 causes of environmental incidents

Waste	Pollution	Noise & Vibration	Other
48%	30%	13%	9%

We encourage reporting of environmental incidents that may occur on our operations, maintenance and construction sites, as part of our environmental management system.

The number of waste-related incidents has doubled compared with the same quarter last year. However, there has been a significant reduction in incidents relating to noise, vibration and pollution, resulting in an overall reduction of 18 per cent in environmental incidents.

The majority of environmental incidents reported are minor and relate to waste disposal. These are investigated locally and improvement measures implemented.

Page

#### Regulatory investigation and enforcement update

Progress of regulatory investigations and enforcement action

## Serious injury to a contractor at Whitechapel

LU is being prosecuted by the ORR in relation to an incident at Whitechapel station on 4 June 2016. A third party contractor was crushed between a road rail vehicle and the platform edge at Whitechapel station whilst undertaking track improvements and sustained serious injuries. LU appeared at Thames Magistrates' Court on 17 May 2018 and entered a guilty plea to an offence under Section 3 of the Health and Safety at Work Act 1974. The Magistrates' Court has referred the case to the Crown Court for sentencing on a date to be confirmed.

#### Breach of Environmental Protection (Disposal of Polychlorinated Biphenyls and other Dangerous Substances) (England and Wales) Regulations 2000

The Environment Agency (EA) is investigating LU for a breach under the The Environmental Protection (Disposal of Polychlorinated Biphenyls and other Dangerous Substances) (England and Wales) Regulations 2000 relating to the disposal of Polychlorinated Biphenyls (PCBs). The investigation is ongoing. The breach arises from the identification of additional PCB containing components. We have programmes in place to remove all such components by 2024 in accordance with the Stockholm Treaty, which seeks to eliminate persistent organic pollutants and support the transition to safer alternatives.

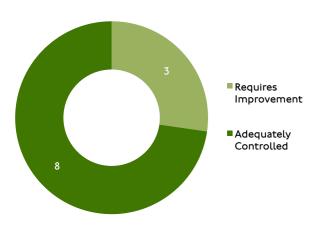
## Overturning of tram at Sandilands British Transport Police (BTP) and the ORR continue to investigate the tragic tram derailment at Sandilands which occurred on

9 November 2016.

Fatality of contractor at Pudding Mill Lane
The prosecution case by the HSE against
Clancy Docwra commences on the
12 September at Southwark Court.



#### Audit



We set clear standards for ourselves and our suppliers to ensure we manage our transport services and deliver improvements safely and in a way which protects health and the environment. We make sure that we, and our suppliers, meet these standards through regular audits on health, safety and environmental issues. Where any risk management is identified to be deficient of the required standard, a corrective action plan is implemented to ensure improvements are made.

A total of II health, safety or environmental related audits were conducted in quarter I. In the majority of audits, our independent audit team found that the risks were being managed effectively and the relevant teams were working to the standards we set. Five of the audits addressed the handover of assets from the Crossrail project to the Elizabeth line, all were concluded as 'Adequately Controlled' which gives us confidence that we are managing health, safety and environment issues appropriately.

Of the remaining audits undertaken across our commercial, operational and engineering functions. Three audits identified the arrangements audited as "Requiring Improvement":

- I. An audit of the Management of Occupational Noise concluded that more robust systems were required to ensure that noise assessors have been demonstrably assessed as competent and that the HSE Management System contains all the requirements of the regulations to ensure compliance. In response to the findings, revisions are being made to our Noise Assessment Form and records. Our Noise Risk Assessment Training Programme will be increased in length and introduce a practical exercise and assessment and additional written guidance introduced. A formal register of Noise Assessors will be established.
- 2. The mid-life refurbishment of the '96 Tube Stock project was audited for engineering assurance. Six priority two findings were raised regarding the application of good engineering principles, collectively they resulted in the 'Requires Improvement' conclusion. The project has agreed an action plan to address these and has introduced a Handover Pack for refurbished trains in conjunction with the fleet maintainers. It will be completed retrospectively for trains that were refurbished prior to the audit.
- 3. An audit of a supplier of traction motors to LU required the supplier to improve the quality of the work instructions provided to their staff. The supplier is addressing the actions required.



## 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.	TfL and London Trams (LT) 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.  LT and Tram Operations Ltd (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 will be further reviewed and revised in line with this approach. An industry risk model will be developed, starting Autumn 2018, via UK Tram and the Light Rail Safety and Standards Board.
[RAIB recommendation 2. Links with RAIB Recommendation I, I0, and TfL Recommendation 5]	TfL presented an overview and findings of Risk Model work to Rail Safety and Standards Board Risk Management Forum in June 2018.
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.	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, continues.  The initial evaluation of suppliers is underway. The Invitation to Tender was issued 3I July and the contract is due to be awarded by the end of the year. The ambition is that 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.  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 would also automatically alert the operations control centre.
[RAIB recommendation 3. Links with TfL recommendation 2]	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.
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.	Complete: 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.  An additional feature of the Guardian system is that it is programmed to alert drivers if the maximum speed goes above 70kph.  TOL were closely involved in the selection and implementation of this
[RAIB recommendation 4]	system and played the major role in securing driver support.  LT and TOL have already hosted several delegations, including UKTram and others, to demonstrate the technology in operation.

#### Recommendation

risk locations.

# 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

#### Progress to date

LT under took a comprehensive review of tram speeds and speed signage across its network.

As a result the following measures were put in place by September 2017. TOL are an active and engaged stakeholder on this initiative:

- The maximum tram speed on the network was reduced by I0kph, 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.
- 2. Additional step down speed signage was implemented in all locations where speeds reduced by more than 20kph, enhancing driver visual cueing and orientation.
- 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 a high visibility outer border as an additional visual cue to drivers of an approaching hazard.

#### iTram

Prior to the implementation of an automatic braking system, LT 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.

The software release design continues and installation resource has been established. A Human Factors specialist has reviewed tram drivers' task load. During August approval with be sought for the first ITram equipment installation and engagement with the original equipment manufacturers will commence.

#### Review of Visual Cueing

LT and TOL 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.

#### Tunnel Lighting

Post the Sandilands incident we installed additional temporary lighting on the approach to the Sandilands tunnel.

An updated specification and outline design has been issued by TfL highway engineers to implement a comprehensive improvement to the existing Sandilands tunnel lighting. 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 in early 2019.

### [RAIB recommendation 5. Links to TfL Recommendation I]

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 2018 and the feedback will be shared with the UK tram industry.

	Recommendation	Progress to date	Recommendation
	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 passenger	LT has 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.	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 II]
	containment provided by tram windows and doors.	LT have decided that mainline rail crash worthiness standard GM/RT2100 is more likely to offer protection against the conditions experienced during the Sandilands event. We are currently evaluating the results of the testing work conducted to date and will make a decision in the near future. The final glazing option selection will be assessed to ensure that any impact on passenger emergency egress is fully understood, and the results shared with UKTram to inform their work under RAIB Recommendation 8. TOL will	TOL should commission an external organisation to review, the way that it learns from operational experience.  [RAIB recommendation 12]
	[RAIB recommendation 6. Links to TfL Recommendation 8]		TOL and LT should review and improve the process for managing public and employee comments that indicate a possible safety risk.
	UK tram operators and owners should install (or modify	In conjunction with industry experts, LT have formulated a Technical Specification for the retrofitting emergency lighting to its fleet. The	[RAIB recommendation I3]
Page 59	existing) emergency lighting so that the lighting cannot be unintentionally switched off or disconnected during an emergency.  [RAIB recommendation 7]	system will be fully autonomous, and will operate independently of the trams battery system in the event of an emergency.  Additionally, LT are aware of the conditions resulting in the failure of its existing standby lighting system during the Sandilands incident, and are also investigating how the existing system may be modified in order to achieve the desired emergency lighting outcomes in a simpler and more cost effective manner.  TOL are an active and engaged stakeholder on this initiative.	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.
	UK tram operators and owners	We will work with tram operators and tram manufacturers to identify	[RAIB recommendation I4]
	should review options for enabling the rapid evacuation of a tram which is lying on its side after an accident.  [RAIB recommendation 8]	and evaluate options to achieve this objective.	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
	TOL and LT should commission an independent review of its process for assessing risk	The network risk model and route risk assessments have been reviewed and updated. They have been shared with the wider UK tram industry and TfL also presented an overview and findings of Risk Model work to	operational service.  [RAIB recommendation I5]
	associated with the operation of trams.	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.  A joint management process for the embedment of the models has	Review available driver cues in relation to braking points on approaching a curved section of the tramway.
		been developed.	Feet and the second sec
	[RAIB recommendation I0. Links with RAIB recommendation 2]	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.	[TfL recommendation I. Links to RAIB recommendation 5]

Recommendation	Progress to date
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 II]	TOL are implementing a safety improvement plan designed to address the intent of this recommendation through their own internal safety governance arrangements. An action plan is being developed for our next phase of action.
TOL should commission an external organisation to review, the way that it learns from operational experience.  [RAIB recommendation 12]	TOL have implemented a "Just Culture" Programme designed to address the intent of this recommendation through their own internal safety governance arrangements.
TOL and LT should review and improve the process for managing public and employee comments that indicate a possible safety risk.	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.
[RAIB recommendation I3]	
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]	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.  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. The review will be completed by September 2018.
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]	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.
Review available driver cues in relation to braking points on approaching a curved section of the tramway.	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.
[TfL recommendation I. Links to RAIB recommendation 5]	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.  Additional visibility signs have also been provided, which will heighten driver speed awareness in high risk areas.

Recommendation	Progress to date
Review of arrangements for the monitoring and management of speeding.	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.
[TfL recommendation 2. Links to RAIB recommendation 3]	
Review of traction brake controller (TBC) driver's safety device design.	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.
[TfL recommendation 3]	

Table 2 - Sandilands investigation recommendations lessons applied to Docklands Light Railway, London Underground and Emirates Airline

Sandilands Learning Point	Action
Network risk assessments did not look broadly enough across the tram industry and other relevant sectors to identify all credible accident scenarios	Docklands Light Railway (DLR) the network safety risks model is currently undergoing review to take into account this learning point. The approach to operational risk management is under review to ensure it matches the safety risk model and clear links are provided to precursors. Clear owners for key risk controls have been identified.  London Underground (LU) take account of external incidents in their risk
	assessments and risk reviews. With respect to this specific incident the maximum design speed for LU trains is well below the roll over limit. LU rolling stock and track standards are developed as a system to ensure compatibility.
	Emirates Airline have reviewed external incident reviews to identify any new risks not already captured on their risk register. Their Safety Risk Case is being updated to reflect the results of this review.
Route risk assessments did not adequately identify location specific hazards / mitigations, particularly those relating to design / maintenance of infrastructure	DLR is undertaking route specific risk assessments identifying specific locations where controls should be reviewed.
	LU has regular track inspections in place for each line. The regularity of these is determined by the condition of the track or areas where changes to wear are identified. Where new rolling stock is delivered or modifications take place that effect the gauge of the line, dynamic modelling is carried out to ensure the train remains within the operational gauge.
A number of risk factors existed in TOL's fatigue management arrangements which did not meet ORR good practice guidance	Reviews of fatigue management arrangements by DLR, Keolis Amey Docklands (KAD) and CGLR have all been completed. Procedures are in the process of being updated; minor changes to the DLR process. KAD have had an independent report produced which contains a number of recommendations which are now being worked through.
	LU undertook an audit of its arrangements for managing fatigue in 2017 and is implementing the recommendations from that audit.
	Mace Metro who operate the Emirates Airline is undertaking a fatigue management review as part of their 2018 safety improvement activity. This includes development of a fatigue management policy that takes into account the ORR's good practice guide on fatigue management. Assurance on fatigue management
	A pan TfL review of our fatigue management system compared to ORR's recommended system is underway. Recommendations for improvement are due November 2018.

Sandilands Learning Point	Action
In cab vigilance device introduced in Croydon tram fleet which needs to be actively considered by other transport undertakings.	A visit to Trams was undertaken on the 20 July 2018 by the LU Line Operations Director and HSE to better understand the use of Trams in-cab vigilance device. The decision on the value this would provide to LU is being considered by the Line Operations Director.  Not applicable for Emirates Airline and DLR.
Consider whether the glazing improvements being implemented on trams (laminated glass) also need to be adopted to improve containment functionality on other passenger vehicle fleets	DLR has reviewed the specification for new trains. The structural elements (including glazing) of the new trains will be built and designed in accordance GM/RT2I00, which as an industry standard for building trains.
	The LU standards for saloon windows require the saloon windows to retain passengers under normal operation since the control of speed mitigates the risk of over turning. LU standards require that the door and its glass shall retain passengers in a rollover situation, so no further action is required.
	Emirates Airline is reviewing the type of glass and whether it can be detached from the gondola.
Review the adequacy of the approach adopted locally to monitoring and responding to customer safety complaints	KAD and DLR are reviewing KADs customer complaints process against the revised TfL process to identify improvements.
	LU has completed a review of it's arrangements for managing customer safety compliants. Random sampling of responses to customer complaints is now underway.
	The Emirates Airlines process has been reviewed and is robust no further action required.
Review adequacy of on-train CCTV	KAD now reports on functioning CCTV each period.
	Emirates Airline is reviewing the in cabin CCTV and two way communication technology to ensure it remains fit for purpose.



## Agenda Item 6

#### Safety, Sustainability and Human Resources

**Panel** 

Date: 27 September 2018

Item: Vision Zero Update



#### This paper will be considered in public

#### 1 Summary

- 1.1 The purpose of this paper is to:
  - (a) Provide an update on the status of the 2017 casualty data;
  - (b) Provide an update on the launch of the Vision Zero Action Plan and engagement to promote it;
  - (c) Provide an update on the delivery of actions; and
  - (d) Prompt discussion on furthering the progress of Vision Zero aims.

#### 2 Recommendation

2.1 The Panel is asked to note the paper and provide feedback and direction on our Vision Zero approach.

#### 3 2017 casualty data analysis and publication

- 3.1 The Mayor's ambition is for no one to be killed in or by a London bus by 2030, and for all deaths and serious injuries from road collisions to be eliminated from London's streets by 2041.
- 3.2 Casualty figures for London are used to measure progress towards the Mayor's target of a 65 per cent reduction in killed or seriously injured (KSI) by 2022 against the 2005-09 baseline.
- 3.3 Data on personal injury road traffic collisions, occurring on the public highway and reported to or by the police, are collected in accordance with 'STATS 19' national reporting instructions.
- 3.4 The previously published full-year data relates to 2016, when the number of people killed and seriously injured on London's roads fell by 31 per cent against a 2005-09 baseline. The number of fatalities on London's roads fell to the lowest level on record, with car occupant fatalities halving when compared to 2015. More than 30,000 people were injured in road collisions in 2016. Of these, 116 people were killed, 2,385 were seriously injured and 27,769 were slightly injured.

- 3.5 Data for 2017 has been collected using new reporting systems which use injury-rather than severity-based injury assessment, as recommended by the Department for Transport (DfT). This records the type of injury which is then automatically assigned a level of severity ('slight' or 'serious')'. Previously, police officers recorded whether, in their judgement, an injury was 'slight' or 'serious'. The introduction of the new automated system has resulted in more injuries being assigned as 'serious' rather than 'slight'.
- 3.6 An online self-reporting tool has also been introduced for 2017 available here: https://www.met.police.uk/ro/report/rti/report-a-road-traffic-incident/. This has made it easier for members of the public to report collisions. As a result, the number of self-reported casualties has increased by 35 per cent in 2017, compared to 2016, and now makes up 21 per cent of all reported casualties.
- 3.7 Following the introduction of the new reporting systems by the Metropolitan Police Service (MPS), as described above, issues were identified in the location and detail of reported collisions. This resulted in a delay in the supply of data to the national dataset and to TfL, but we have now delivered fully validated 2017 data to the DfT and are awaiting agreement on these figures. We are working together with the DfT and MPS to improve the timeliness and quality of 2018 data.
- 3.8 The Transport Research Laboratory (TRL), in collaboration with the Office for National Statistics (ONS) and the DfT, is back-estimating the casualty data to allow comparison between the 2017 data and data collected under previous reporting systems. When complete, this will allow trends to be identified.
- 3.9 Finalised casualty figures for 2017 will be published on the TfL website at https://tfl.gov.uk/corporate/publications-and-reports/roadsafety on 27 September 2018, in line with the national publication. This will take the form of the end of year factsheet, supporting data tables and updates to the London Collision map at https://tfl.gov.uk/corporate/safety-and-security/road-safety/london-collision-map.

#### **Emerging trends and areas of interest**

- 3.10 Whilst the data is yet to be finalised and published, current analysis shows a mixed picture and indicates the final data will show the following emerging trends compared to 2016:
  - (a) There has been a fall in child fatalities to equal the lowest level on record;
  - (b) There have been reductions in motorcycle fatalities, but motorcyclists still represent a disproportionate number of fatalities compared to their share of traffic:
  - (c) Overall fatalities have fallen in inner London but increased in outer London;
  - (d) Of particular concern is the increase in the number of pedestrian fatalities; and
  - (e) The total number of casualties has increased, largely reflecting the increase in online self-reporting of collisions by members of the public. The MPS

have also changed the way that they measure injury severity in line with national guidance.

3.11 The 2017 data will be provided to the Panel at the meeting, in line with the 27 September publication date.

#### 4 Vision Zero Action Plan launch and supporting engagement

- 4.1 The Vision Zero Action Plan was published on 24 July 2018 and outlines a range of actions to be delivered in collaboration between TfL, the MPS, the London boroughs and other partners. It puts the elimination of road danger at the heart of the transport system and help realise the ambition in the Mayor's Transport Strategy that no-one will be killed or seriously injured on London's transport system by 2041. The Plan is based on a Safe Systems approach and sets out actions with respect to vehicle speed; street design; vehicle design and compliance; behaviours and post-collision learning. The Plan focuses primarily on the period to 2022/23, in line with TfL's Business Plan.
- 4.2 The Plan was launched by the Deputy Mayor for Transport, Heidi Alexander. It received significant and generally positive traditional and social media coverage as part of the launch, including front page coverage on the Evening Standard. The Deputy Mayor was interviewed by BBC London, ITV London and London Live at the launch, while the Director of Compliance, Policing and On-Street Operations, Steve Burton, gave an early morning radio interview with Petrie Hosken on BBC Radio London.
- 4.3 The Plan was well-received by many stakeholders and campaigners, including 20's Plenty for Us and RoadPeace in the UK and the Vision Zero Network in the US. However, London Cycling Campaign felt that more needs to be done and faster. We will collaborate with all our stakeholders to continue to develop the Plan's actions to go further.
- 4.4 Our focus in the lead up to, and immediately after the Plan's launch, has been on engaging key national and regional stakeholders in an advocacy capacity to help us raise public and political awareness of the Plan and our new approach to Road Danger Reduction, which is significantly different to traditional road safety.
- 4.5 We are now developing specific engagement programmes for stakeholder groups which will play an integral role in the delivery of the actions in the action plan. This includes boroughs, bus operators (within the context of the Bus Safety Programme), community groups, taxi, private hire and motorcycling sectors, as well as an engagement plan for reduced speed limits on the TLRN and how all levels of Government are engaged on Vision Zero.
- 4.6 We will hold a summit event in November which seeks to inspire senior leaders across London to take ownership and accountability for Vision Zero within their various organisations. It will enable networking across these organisations to build momentum and enable joint delivery of initiatives.

#### 5 Delivery highlights

- 5.1 Following the launch of the Vision Zero Action Plan, we have begun to develop an actions tracker matrix, as requested by this Panel, which will bring together progress reports from across TfL and our delivery partners, including the MPS. We will present the actions tracker and our progress against all actions at the next quarterly update and each subsequent meeting.
- 5.2 The following paragraphs present a summary of our delivery highlights to date.
- 5.3 We will monitor the impact of these actions to understand how they are making a real difference to reducing road danger and making our streets feel safe.

  Understanding the impacts of our schemes will be vital to refining and enhancing our future action plans to continue to deliver reductions to road danger and achieve our Vision Zero ambition.

#### Safe speeds

- 5.4 Reducing speed will be fundamental to reducing road danger, as the speed at which a vehicle travelling increases the likelihood and severity of collisions.
  - Transport for London Road Network (TLRN) speed reduction programme
- 5.5 Our commitment to reducing the speed limits on approximately one third of the TLRN has been welcomed by many of our stakeholders. Locations for speed reduction have been identified using analysis of collision risk, but also take into account the current speed limits of surrounding borough-managed roads, the function of the roads, and the need to avoid displacing traffic from the TLRN to local streets.
- The first phase of the programme aims to reduce the speed limits to 20mph on all TLRN roads within the Congestion Charging Zone by May 2020. A detailed delivery programme is being developed and key delivery milestones will be shared with this Panel next quarter. A supporting marketing and engagement strategy is also currently being developed. Phase two, to be delivered over the period until 2024, will see speed limits reduced on other TLRN roads, including on the inner ring road.

#### Safe streets

5.7 Reducing danger at locations where the likelihood of injury is higher than in other places is key to making people feel safe on our streets. As our analysis shows that junctions are the most risky and dangerous locations and where cyclists and motorcyclists are particularly vulnerable, this is a key focus for our action, alongside delivering continued improvements for cyclists.

#### Safer Junctions

5.8 In April 2017 we published the Safer Junctions list, using three years of casualty figures to identify the junctions on the TfL road network with the highest vulnerable road user collision rates so that they can be targeted for improvements. The Safer Junctions list identified 73 junctions on the TLRN, some that have had work recently completed, some have work planned, and others that require new safety studies (please refer to the appendix for a map of these locations).

5.9 Of the 73, 24 have been completed to date. In Q1, construction started at two key locations in the Safer Junctions programme: Charlie Browns Roundabout in Redbridge and Highbury Corner in Islington. Construction to transform Old Street roundabout has been accelerated to begin in November. Feasibility design has commenced on the first of the 19 junctions where no prior investigations have taken place, and a further five Safer Junction locations have been accelerated for delivery by May 2020. Of the 73, 49 are due for completion by end of 2021/22.

#### Cycling Quietways

- 5.10 Construction on cycling Quietways is complete or underway on 110km from a potential 250km of routes. Wayfinding has been implemented across 17 kilometres of the network. To date we have launched Quietway 1 (Waterloo to Greenwich), Quietway 3 (Kilburn to Gladstone Park) and Quietway 5 (Oval to Clapham Old Town).
- 5.11 Construction is now underway on the following routes: a Quietway linking Barking Town Centre to Cycle Superhighway 3, Quietway 22 along Newham Greenway, and Quietway 23 (Ealing to Greenford, Greenwich to Bexleyheath and Greenwich to Kent House). Wayfinding signage is planned to be implemented on a further 45km during 2018.
- 5.12 On 29 August, the Walking and Cycling Commissioner publicly launched Quietway 2 (Bloomsbury to Waltham Forest and East Aston to Notting Hill). In late September, the Walking and Cycling Commissioner will also launch Quietway 14 (Blackfriars to Tower Bridge Road), Quietway 22 (Stratford High Street to Beckon High Street) and Quietway 6 (Wanstead Flats to Barkingside). Further routes will be launched in spring 2019.

#### Mini-Hollands

5.13 Twenty-six of the 103 Mini-Hollands schemes (98 infrastructure and five supporting measures) are complete. Six schemes started on site in Q1, including four Quieter Neighbourhood schemes in Enfield and two schemes connecting Kingston town centre. In total, 25 schemes are underway, including the Kingston Station scheme, the Lea Bridge Road scheme in Waltham Forest and the A1010 South scheme in Enfield. The Walking and Cycling Commissioner joined the London Borough of Enfield to launch the A105 Green Lanes scheme.

#### Cycle Superhighways

- 5.14 Work was completed on the St James' Park section of the East-West Cycle Superhighway (CS3) in December 2017, providing a segregated cycle facility between Tower Hill and Lancaster Gate. Following this we are continuing to work with The Royal Parks on designs for the side road on North Carriage Drive within Hyde Park.
- 5.15 Delivery of the extension to North-South Cycle Superhighway (CS6) between Farringdon and King's Cross is near completion, with the Mayor due to open the route in September. We are working with LB Camden to begin construction on the remaining section, which provides the crossing at Euston Road and connects the scheme to King's Cross.

- 5.16 We published the public consultation factual reports for Cycle Superhighway 9 (Kensington Olympia to Brentford) and Cycle Superhighway 4 (Tower Bridge to Greenwich) on 27 February and 23 March 2018 respectively. We are now reviewing the responses and plan to publish the full consultation reports for both routes in autumn 2018.
- 5.17 The High Court has blocked the planned construction at Swiss Cottage, the first section of Cycle Superhighway 11 (Swiss Cottage to the West End), in a decision announced on 13 September in support of Westminster Council's legal challenge. This follows an initial Judicial Review hearing on 26 July, after which an injunction was put in place preventing construction from starting, and a full Judicial Review hearing on 6 September. We will take the judge's findings into account while also urgently exploring all the options available to us to reduce danger around the Swiss Cottage gyratory, which includes considering appealing the decision.
- 5.18 Following the publication of the Strategic Cycling Analysis in June 2017 and the Mayor's announcement in January of our intention to proceed with six new cycle routes, the Deputy Mayor for Transport announced in August that construction will begin on two new routes for cyclists (Tottenham to Camden and Hackney to Isle of Dogs) within the Mayor's current term of office, subject to consultation.

#### Safe vehicles

5.19 Relative to their share of traffic, larger vehicles, such as HGVs and buses, present the greatest risk to people walking, cycling and riding motorcycles. We are taking action to reduce the danger posed by the vehicles through improving vehicle and operating standards.

#### **Bus Safety Standard**

- 5.20 The first phase of the Bus Safety Standard is nearing completion following the conclusion of tests on collision counter-measures. The research findings from these equipment trials will now feed into a cost-benefit analysis to ensure we prioritise the measures most effective at eliminating or mitigating casualties among vulnerable road users or bus passengers. In parallel with the Bus Safety Standard, our bus operators are progressing trials of innovative safety equipment through our Bus Safety Innovation Fund.
- 5.21 Loughborough University, in partnership with the Swedish Road Safety Institute (VTI), has been appointed to conduct independent research into bus driver fatigue. The lead researchers are world experts in driver fatigue and some of the few, if not only, academics to have experience in researching driver fatigue in the context of city buses. The research will enable us to understand the extent and nature of fatigue in London bus drivers and, where there might be issues, put forward evidence-based solutions to reduce fatigue. Oversight of this initiative will be assisted by representatives from several of our London-based bus operators.
- 5.22 We continue to develop a new bus driver safety training course which will be delivered through our operators to all 25,000 bus drivers and will focus specifically on drivers' awareness of more vulnerable passengers as well as looking at how to reduce the number and severity of injuries that occur on board.
- 5.23 We are holding further large-scale safety site meetings at locations on the bus network where we have higher rates of collisions to see if more can be done to

reduce risk on busy highways and junctions. Go Ahead are the latest operator to take the rotating lead role after selecting the new Elephant & Castle road layout as the new focus area to study this month. Previously, operator RATP organised a safety blitz event in and around Oxford Street on 29 May to enable officers from bus operators and TfL to scrutinise the behaviour of bus drivers, cyclists, pedestrians and other road users who entered this area.

#### **Direct Vision Standard**

- 5.24 The technical Direct Vision Standard (DVS) protocol pilot trial period has gone live. Vehicle manufacturers will apply the protocol to allow for real-world testing and feedback any comments during the trial period. Issues raised during the trial will be addressed between 1 November and 14 December 2018 and the finalised protocol will be published in early 2019.
- 5.25 The DVS Scheme involves the introduction of a new "technical regulation or other requirement" for HGVs over 12 tonnes which means notification to the European Commission is required. We have successfully gained the support of the UK Government which submitted the notification on our behalf on 5 September.
- 5.26 Work to introduce a London HGV Safety Permit Scheme as part of the DVS is on track, with permits for the scheme due to be issued in October 2019. Enforcement of the scheme will begin on 26 October 2020 to align with the strengthening of the Low Emission Zone for heavy vehicles.

#### Safe behaviours

5.27 Our action plan sets out how we will use marketing and communications to tackle the behaviours that create most risk on our streets, such as inappropriate speed, which is a factor in up to 37 per cent of collisions resulting in death or serious injury on London's streets. Whilst reducing road danger, we will also provide information to help people keep themselves safe.

#### Marketing and education

- 5.28 The new, hard-hitting 'Risk Up' campaign reminds drivers and motorcyclists of the dangers they pose when travelling at an inappropriate speed, and urges them to slow down. Drivers are told 'when your foot goes down, the risks go up', and motorcyclists 'when you throttle up, the risks go up.' Initially launched for nine weeks from 8 May, a second phase went live in September.
- 5.29 We are supporting the MPS Roads and Transport Policing Command's use of virtual reality technology for the Exchanging Places initiative, which allows cyclists and pedestrians to see the road from an HGV driver's cab. This technology allows us to reach more people and free up police resources, as 10 people can use it at once. Its portability means we can engage with the community without putting a HGV on the road. It was launched on 21 August with the first of a series of public events.

#### **Activity across the entire transport network**

5.30 As the Vision Zero ambition relates to the whole transport network, work is taking place to share learning across modes to reduce danger. Since launching the Vision Zero Action Plan, we have developed a new process for site visits to locations that have recently experienced fatal or serious traffic collisions, based

- on the equivalent process to investigate incidents on the London Underground network.
- 5.31 Once established, the 'Go, Look, See' process will instigate a light touch, practical process for site visits to help identify any quick precautionary actions that could be taken to reduce risk at that site or at similar locations. Work is also underway to share learnings from London Underground's suicide prevention programme in order to prevent suicide on the road network.

#### 6 Priorities for Quarter 3

- 6.1 All boroughs will be offered support in developing the Vision Zero elements of their Local Implementation Plan submissions through a programme of one-to-ones in September and October.
- 6.2 The Mayor is due to open the extension to North-South Cycle Superhighway (CS6) between Farringdon and King's Cross in early autumn 2018.
- 6.3 We will announce the outcome of the Bus Safety Standard work at our second Bus Safety Summit on 16 October. We will reveal safety design changes we will require to new buses as part of a revised Bus Vehicle Specification. Independent research has been commissioned into bus driver fatigue, to conclude in spring 2019, with interim findings available in autumn 2018. The contract for new bus driver training will be awarded at the end of September, with the first sessions to be held from April 2019.
- 6.4 The Fleet Operator Recognition Scheme (FORS) Concessionaire contract with AECOM ends in January 2020. We will be running a series of industry events to gain a wide spectrum of opinions on the FORS Procurement Strategy currently in development. The first event was held on 7 September.

# 7 Suggested questions for discussion

- 7.1 We would like to use this meeting to gather feedback from the Panel on the Vision Zero Action Plan and our actions to date. In particular, what should our priorities be for future and further action beyond the current Plan? This will help us to drive improvements in our work on delivering Vision Zero.
- 7.2 Success in achieving Vision Zero requires a shift in public opinion on the acceptability of road death and injury on London's roads, and collective action to reduce danger. How can we use our influence as an organisation to help shift perception and motivate collective action?
- 7.3 For future meetings, what aspects of Vision Zero delivery would be of most interest or most useful for discussion?

# List of appendices to this report

Appendix 1: Mapped locations of junctions in the Safer Junctions programme

# **List of Background Papers:**

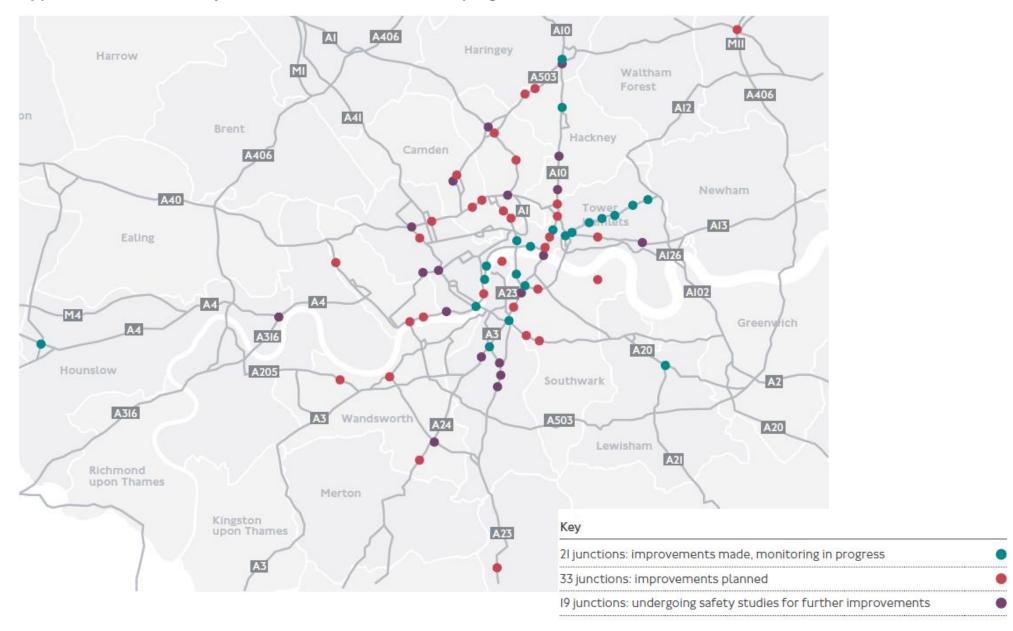
None

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Appendix 1: Locations of junctions in the Safer Junctions programme



# Agenda Item 7

# Safety, Sustainability and Human Resource Panel



Date: 27 September 2018

Item: Bus Safety Programme

#### This paper will be considered in public

#### 1 Summary

1.1 This paper provides an update on progress of the Bus Safety Programme and key future deliverables.

#### 2 Recommendation

2.1 The Panel is asked to note the paper.

#### 3 Bus Safety Programme Delivery Update

- 3.1 The Bus Safety Programme was launched on 1 February 2016, to reduce the number of people killed or seriously injured (KSI) on the bus network. The programme has a dedicated budget of just over £33m to fund specific interventions aimed at reducing collisions, as well as improvements to existing safety processes and data collection.
- 3.2 The Mayor and TfL have now adopted Vision Zero for London as set out in the Mayor's Transport Strategy, with a target of zero deaths or serious injuries by 2041.
- 3.3 For buses we have even more ambitious targets:
  - (a) 70 per cent reduction in the number of people killed or seriously injured in, or by, buses by 2022 (against 2005-09 baseline); and
  - (b) No one killed in, or by, a bus by 2030.
- 3.4 When the Bus Safety Programme was launched six key work streams were identified:
  - 1) Bus Collision Data Analysis;
  - 2) Transparency;
  - 3) Contract and Performance Management;
  - Vehicle Design;
  - 5) The Sarah Hope Line (Incident Support Service); and
  - 6) Bus Driver Training.
- 3.5 The Bus Safety Programme is constantly evolving to improve bus safety in London. Since the launch of the Bus Safety Programme, the following work-streams have been added to the programme:

- (a) Reducing Customer Injuries
- (b) Fatigue Management
- (c) Safety Innovation Fund
- (d) Working in Partnership
- 3.6 Progress on each item in the Bus Safety Programme is described in more detail below.

## 4 Bus Collision Data Analysis

- 4.1 We are committed to improving the quality, consistency and impact of bus collision investigations, and to using in depth analysis to learn from these and to ensure that all bus safety interventions are evidence led. The most significant areas of work have been:
  - (a) in October 2017 we completed an in-depth analysis of police collision files to establish how and where collisions take place and identify counter measures relating specifically to the vehicle. These were then taken forward to inform development of the Bus Safety Standard (see below); and
  - (b) we have also completed a detailed study of customer injury data (collected by the police and by bus operators) which has highlighted several areas for further focus including driver training and communications with passengers.
- 4.2 We continue to look for new ways of exploring the data available to us, and where needed commission additional research to further build our knowledge and to help identify opportunities for safety improvements.

# 5 Transparency

- 5.1 Following improvements in collision investigation and data analysis we have committed to publishing more data and outcomes of investigations where possible. The key achievements in this area are:
  - (a) publication of incident and injury data online in a dashboard format;
  - (b) publication of summary findings from fatal collision investigations; and
  - (c) improved quality and consistency of major incident reviews. We now require operators to provide more information about an incident and work with TfL to establish all root causes. We also have a closer role in overseeing operators carrying out their own investigations, including TfL senior staff carrying out site visits following a major incident.

# **6** Contract and Performance Management

6.1 We use a range of data as part of the assessment of an operator's ability to provide a safe service. In relation to contract management, we currently use a number of criteria to assess route tender bids including Driver Quality Monitoring and Engineering Quality Monitoring.

- 6.2 We have now moved away from an annual health and safety audit to more ongoing measures which assure operator safety maturity (that is, the development of a safety culture) and track progress. Two safety performance indicators were launched over the last year and have been very well received by operators:
  - (a) the Safety Performance Index (SPI), which looks at 41 metrics relating to safety performance; and
  - (b) the Assurance Programme, which continuously assesses the maturity (or safety culture development) of safety management and systems.
- 6.3 These two measures are used to assess the quality of the safety management arrangements and their effectiveness, identify areas for improvement and capture positive actions being undertaken by each operating company
- 6.4 The results from the SPI and Assurance Programmes are used as the basis for regular safety performance meetings and discussions with the bus operating companies.

## 7 Vehicle Design

- 7.1 Proposal 9 of the Mayor's Transport Strategy is the development of a new Bus Safety Standard by TfL. This world-leading development for the city's entire bus fleet will be incorporated into bus operator contracts for new buses from the end of 2018. The Standard includes:
  - (a) mandating the fitting of speed limiting technology (ISA) to all buses in TfL's fleet, starting with all new buses entering the fleet in 2019, to prevent buses from exceeding speed limits and in turn influencing the speed of following vehicles. Due to its early extensive trial in 2015/16, ISA will also be operating on around 500 vehicles by the end of 2018;
  - (b) trialling a range of technologies, such as Automated Emergency Braking (AEB) that allows the vehicle to detect other road users in its path and brake automatically;
  - (c) requiring new design in bus interiors to reduce the frequency and impact to passengers of slips, trips and falls;
  - (d) improving direct and indirect vision for drivers;
  - (e) redesigning the front of buses to help reduce the impact of a collision; and
  - (f) investigating the use of features such as lights or audible warnings to alert pedestrians and other road users to the presence of buses.
- 7.2 For some safety measures it will be possible to require them on new buses from 2019. Other safety measures will go into TfL's Bus Safety Standard Roadmap (currently in draft). The Roadmap is a document for the bus industry as a guide to future requirements; what safety functions do they need to develop and when. It should help to provide the bus industry with confidence that investment in safety features, particularly those with a long lead time or that are very costly, is being supported by TfL through our investment in research, independent testing and trials. Cost benefit assessments will be available to operators, illustrating the likely commercial return to

them, through reduced claims, of adopting these features. The initial roadmap was drafted based on input from the Delivery Partners (Wrightbus Ltd and Alexander Dennis Ltd) and has been updated based on input from bus operators, manufacturers and their supply chain.

7.3 The initial phase of the Bus Safety Standard doesn't incorporate the entirety of changes that we can make to buses to improve their safety for both vulnerable road users and occupants, but it does focus on those with the highest potential for effectiveness at reducing fatalities and serious injuries. Further changes will be explored and new technologies or innovations assessed or adopted in later phases of the project, and in line with the roadmap.

# 8 The Sarah Hope Line (Incident Support Service)

- 8.1 The Sarah Hope telephone helpline is now operational following its inception back in March 2016 and it provides an initial point of contact for victims, and their families following a serious/fatal incident.
- 8.2 Although we receive fewer than ten bus related contacts per year, the team provided considerable support to customers and relatives that were affected by the Sandilands incident in November 2016.

## 9 Bus Driver Training

- 9.1 We are in the process of procuring a supplier to design and oversee delivery of new and innovative safety training to all 25,000 bus drivers. The training will teach enhanced skills in hazard perception, but also help engage drivers in the Vision Zero concept and ensure that they are aware of their vital contribution in meeting the targets.
- 9.2 We have actively engaged with technology companies specialising in virtual reality film and it is likely that such technology will be used to make the training engaging and impactful. Five suppliers have passed the prequalification stage and have been invited to bid for the work. Most of these are training providers proposing to work in partnership with tech and/or road safety experts.
- 9.3 The training will focus on the safety of pedestrians, cyclists, motorcyclists and bus passengers. There will also be a strong focus on cultural change and in instilling in drivers an understanding of the safe system approach, and of their role in it.
- 9.4 We will review the final bids and supplier presentations in September with the supplier in place in autumn 2018 and with the expectation that the training will start in spring 2019.

# 10 Reducing Customer Injuries

10.1 Quarter 1 of 2018 has seen an increase in on board customer injuries and this has been an increasing trend over the last year. We are currently looking at a wide range of initiatives to reduce customer injuries across the network. We are also investigating the use of various datasets to ascertain possible reasons behind the increasing trend of customer injuries.

- 10.2 Several strands of the bus safety programme, including vehicle design and driver training, are intended to contribute to reducing customer injuries. In addition, in early 2018 we ran a trial of our 'hold on the bus is about to move' audio message on all our buses which concluded on the 9 February 2018. We have been analysing the suitability of this messaging and the impact it has had on customer injuries and we are planning follow up trials on targeted routes, where customer injuries are more prevalent.
- 10.3 We are currently in the process of finalising our customer marketing campaign around customer injuries inside the bus and this will be rolled out to support the trial throughout the year.

## 11 Fatigue Management

- 11.1 Although there is little evidence of bus driver fatigue contributing in the incident data, there is convincing anecdotal evidence from drivers and operators that it is underreported as a contributory factor in collisions, and we are therefore taking a proactive approach to addressing it.
- 11.2 Loughborough University, in partnership with the Swedish Road Safety Institute (VTI), has been appointed to conduct independent research into bus driver fatigue. The lead researchers are world experts in driver fatigue and some of the few, if not only, academics to have experience in researching driver fatigue in the context of city buses. The research will involve all London bus operators and will include driver interviews and surveys as well as on-road observations.
- 11.3 The research will enable us to understand the extent and nature of fatigue in London bus drivers and, where there might be issues, put forward evidence-based solutions to reduce fatigue. The research will conclude in spring 2019 but interim findings will be available this autumn.
- 11.4 Following a fatigue management workshop with all operators back in March 2018, representatives from the operators were chosen to be part of a working group to help oversee the research. The working group were invaluable in the procurement process, giving feedback on the draft Invitation to Tender as well as reviewing the submissions from three suppliers. The working group also attended the project inception meeting and have continued to advise the research team on a range of matters, such as appropriate incentives for driver participation in the research. The research will include focus groups and interviews, a driver survey and in-depth on-road trials and tests.
- 11.5 The drivers' union Unite has also been consulted and have expressed support for the research. Unite representatives will be interviewed as part of the research and have also agreed to assist with dissemination of the driver survey.
- 11.6 We launched the bus safety innovation fund (see below) in order to drive innovation in our joint objective with the bus operators to reduce the number of people killed or seriously injured on the bus network. Two of the winning bids were related to trialling fatigue detection systems on specific bus routes and we are expecting the results of the trials before the end of the year to support our research into driver fatigue.

## 12 Safety Innovation Fund

- 12.1 In August 2017, we launched the Bus Safety Innovation Fund and asked operators to consider how TfL funding could help them deliver innovative ideas to reduce the number of people seriously injured or killed on the network, including staff. It was open to all bus operators and we encouraged staff from management to bus drivers to share their ideas. Six operators were successful and shared £500,000 of funding for eight projects including:
  - (a) fatigue and distraction detection systems;
  - (b) a collision prevention system, which alerts the driver to the presence of cyclists and pedestrians;
  - (c) bus driver training including cycle training for drivers, as well as the development of safety apps and videos;
  - (d) audible and flashing alarms on buses on Oxford Street to alert pedestrians to approaching vehicles;
  - (e) working with an operator to explore pre-employment psychometric testing for potential drivers, to help ensure recruitment of candidates with an appropriate attitude toward risk; and
  - (f) research into the correlation between bus acceleration/deceleration rates and customer injuries.
- 12.2 All operators will provide a project closure report which will cover the results and lessons learnt. The operators will also be invited to present their methods and initial results at a 'market stall' at the upcoming bus safety summit on 16 October 2018.

# 13 Working in Partnership

- 13.1 Delivering Vision Zero for buses relies on us working in close partnership, obviously with operators, but also with a range of other local and national stakeholders.
- 13.2 As well as day-to-day engagement with bus operators, we hold operator forums every three months at TfL offices with a focus on safety and engineering. These meetings are well attended and provide an opportunity for us to update operators on progress in the Bus Safety Programme as well as to raise specific safety issues for discussion. For operators they are an opportunity to share information with each other and to feed into TfL's bus safety workstreams. For example, the recent Safety Bus Operators' Forum was used to gather views from the operators on mock up versions of the upcoming speed compliance tool, and this will feed directly into the design of the final tool.
- 13.3 TfL and the Met Police Service work together on a day-to-day basis to improve safety in London and we are working together on several bus safety initiatives:
  - (a) roll out of Exchanging Places across bus garages, where a truck is taken into the bus garage so that drivers can better understand how cyclists and HGVs interact, which helps build their awareness of potential safety issues on London's streets.

- (b) delivering the Space for Cyclists safety message at bus garages to address close passing.
- 13.4 We also continue to facilitate the promotion of the national Confidential Incident Reporting and Analysis Service (CIRAS) to bus drivers, as an alternative independent confidential reporting line for any safety concerns that they feel unable to raise directly with their employer. CIRAS holds twice-yearly London bus operator working group meetings where operators share best practice. CIRAS has also invited two London bus operators to join the CIRAS Board.
- 13.5 The second Bus Safety Summit will be held on 16 October 2018 at the Millbrook Proving Ground where TfL will be showcasing the results of our Bus Safety Standard technology and vehicle design tests. Live demonstrations of several technologies tested will be taking place as well as a 'market stall' for the remainder.
- 13.6 The first part of the day will be targeted at the London, national and trade press, with the main event targeted at Bus Operators and Bus Manufacturers, senior managers from other transport authorities in the UK, relevant charities and road safety campaign groups (e.g. Guide Dogs, Roadpeace), GLA Assembly Members and officers, Union representatives and technology providers.

#### List of appendices to this report:

None

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

Bus Safety Programme, Safety, Sustainability and Human Resource Panel, 23 January 2017 Bus Safety Programme, Safety, Accessibility and Sustainability Panel, 30 June 2016 Bus Safety Programme, Safety, Accessibility and Sustainability Panel, 10 March 2016

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# Agenda Item 8

## Safety, Sustainability and Human Resources Panel



Date: 27 September 2018

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.

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 Provision of toilet facilities is 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 within these arrangements, 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.
- 3.2 Those routes where toilets are not available at all times can be addressed by a mixture of permanent or temporary facilities, such as those shown in Appendix 1.

3.3 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.

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

#### 4 Current Status

- 4.1 On 13 February 2018, The Mayor of London, Sadiq Khan, 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.
- 4.2 The primary focus of TfL's forward programme will be the provision of facilities on 42 of the highest priority routes. Examples of locations where facilities will be provided are shown in Appendix 2.
- 4.3 The routes within scope were agreed with Unite the Union (Unite) and Bus Operating Companies who are regularly updated on progress. The table below summarises the distribution of the routes in scope and their priority.

Priority	Number of routes within scope
1	2
2	36
3	4

# 5 Progress and Forward Programme

5.1 Since the Mayoral announcement in February this year, good progress has been made, including the provision of facilities on ten of the priority routes, two of which are permanent. Our project team has worked well with the supply chain and

- Boroughs to achieve this excellent result as well as improve on delivery timescales.
- 5.2 A contractor has been appointed and initial surveys have been completed for all sites. Detailed survey work is ongoing and will be completed by October 2018.
- 5.3 The sites delivered by June 2018 were:
  - (a) Lakeside (route 370) permanent solution;
  - (b) Moorgate (routes 271 and 214) permanent solution;
  - (c) Harold Hill (route 174);
  - (d) Staines Bus Station (route 290);
  - (e) Kew retail park (route R68);
  - (f) Barking Hart Estate (route 368);
  - (g) Roehampton (route 430);
  - (h) Vulcan Way, New Addington (route 130); and
  - (i) Cogan Avenue, Waltham Forest (route W15).
- 5.4 We are working closely with the supply chain to expedite delivery of all forty two routes, including incentivising the contractor. We will ensure that all efforts are made to ensure the successful and quick delivery of these important facilities.
- 5.5 Improvements to the existing bus driver facility have been designed and agreed with the suppliers with a cost saving. These improvements include:

Improvement	Benefit
a. Solar power, in lieu of a permanent power supply	<ul><li>Environmentally friendly</li><li>Reduced cost and fewer utility connections</li></ul>
b. Shallower foundation	<ul> <li>Easier to install (less likely to clash with utilities)</li> </ul>
c. Permanent unit adapted for temporary use (i.e. prior to utility connections)	<ul> <li>Better facility for bus drivers</li> <li>Less visually obtrusive for general public</li> <li>No need for TfL to hire temporary facility</li> </ul>

- 5.6 We are targeting an accelerated programme which will deliver:
  - (a) a total of twenty routes to have a, permanent or temporary, facility by December 2018; and

(b) forty-two routes to have a permanent or temporary facility by July 2019 (eight months earlier than originally planned).

We are currently working towards a stretch target to deliver permanent facilities on all 42 routes by April 2020.

#### **6** Ongoing Work

- 6.1 TfL 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 to the highest priority routes.
- 6.2 TfL 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: Examples of driver facilities

Appendix 2: Examples of locations where facilities will be provided

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

SSHRP – Bus Driver Facility Improvements, 28 February 2018

Driven to Distraction, London Assembly report, July 2017

Driven to Distraction, TfL Response, late 2017

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Appendix 1: Examples of facilities which have been installed

New permanent facility at Molesworth St., Lewisham:



Temporary facility at Harts Estate, Barking:





# Appendix 2: Examples of locations where facilities will be provided

Route 42, Worship Street, City of London



Route 345, Cromwell Road





# Agenda Item 9

## Safety, Sustainability and Human Resources Panel

TRANSPORT FOR LONDON EVERY JOURNEY MATTERS

Date: 27 September 2018

Item: Safety at Roadworks

## This paper will be considered in public

## 1 Summary

1.1 This paper has been produced in response to a request from the Panel to provide analysis on the impact of roadworks as a contributory factor on injury rates to vulnerable road users, and in particular how we manage roadworks with these users in mind. The paper also highlights a number of proposed initiatives to drive further improvements in this area.

#### 2 Recommendation

2.1 The Panel is asked to note the paper.

#### 3 Background

- 3.1 Roadworks are inevitable, with over 34,000 taking place last year on Transport for London's Road Network (TLRN), and over 355,000 London wide. Utility companies have a statutory right to undertake works, and we, as the highway authority for the TLRN, must carry out the work necessary to keep our assets safe so Londoners and our visitors can maximise the enjoyment our City offers.
- 3.2 Safety for everyone is paramount in every aspect of work associated with Roadworks, and is a fundamental principle inherent to their operation because of the obvious risks roadworks pose.
- 3.3 The charts detailed in Appendix 1 show the proportion of vulnerable road users killed and seriously injured (KSI) where roadworks are taking place. It is not always the case that roadworks were a direct cause of the incident, and on that basis the statistics should be treated with caution. The following high-level observations are noted:
  - (a) on average roadworks only account for 0.85 per cent of all types of KSIs recorded – 336 out of 39,810 London wide and 99 out of 11,564 roadworks on the TLRN;
  - (b) the proportion of KSI's for vulnerable road users it at the highest level since 2005 – 71 per cent London wide and 78 per cent on the TLRN. This is an increase of 17 per cent and 30 per cent respectively when compared to all types of KSI's; and
  - (c) in 2017 KSI for pedestrians was higher than cyclists 66 per cent (110) London wide; and 59 per cent (24) on the TLRN.

- 3.4 While the proportion of roadworks related KSI's are relatively low, the Vision Zero action plan (and its scrutiny on road safety) is very much welcomed to help improve safety on our road network and reduce casualties arising from poorly executed roadworks, particularly for vulnerable road users.
- 3.5 We are responsible for the management of temporary interventions occurring on our streets, regardless of whether they are planned or unplanned; big or small; and regardless of the activity type, which could be roadworks, development related, a special event, or an unpredicted incident.
- 3.6 A real focus since the launch of the Healthy Streets approach is to ensure provisions for vulnerable road users are maintained despite interruptions which roadworks can sometimes cause to the daily landscape people are familiar with.
- 3.7 Roadworks are primarily governed under two Acts of Parliament the New Roads and Street Works Act 1991 (NRSWA), and the Traffic Management Act 2004 (TMA). We as a street authority, and those that operate on our network, are bound by this legislation.
- 3.8 The associated statutory "safety at streetworks and road works code of practice" sets out the criteria to ensure roadworks are executed in compliance with safety requirements set out in legislation, and they also make provision to control when and how planned works can take place.

## 4 Assessing Roadworks Proposals

- 4.1 Each year we receive approximately 70,000 applications for permits to undertake works on the TLRN. Before approving a permit application for planned works we assess the proposals to ensure that traffic management plans provide a safe passage for all forms of traffic, including bus passengers, pedestrians, cyclists and other vulnerable road users. We achieve this by looking into the challenges the various modes and users will face on the network from a variety of perspectives, for example by ensuring there is appropriate capacity, provision, identification of key desire lines, and seeking to ensure these are accommodated wherever possible. We will only allow the proposal to go ahead once we are satisfied that the appropriate operational balance has been achieved. Any agreements made during the planning stage become a condition of the granted permit.
- 4.2 Our permit scheme and the intrinsic assessment of the proposed traffic management to undertake the work, play a vital safety assurance role before works proceed to site. However, responsibility for safe traffic management ultimately rests with the work promoter and their contractor, and our role is to identify any obvious concerns with the proposals submitted for assessment.
- 4.3 In addition to planned works, there are over 10,000 emergency/urgent works (such as leaking gas/water mains) that occur each year, all of which can be notified after the works have begun. Where possible we discuss with the works promoter any risks and look to have these addressed before the unplanned works begin. We also hold site meetings with works promoters and key stakeholders where we deem the works to have a high impact to identify potential mitigation measures, including safety and adequate provisions for vulnerable road users.

#### 5 Roadworks Monitoring

- 5.1 Part of the NRSWA framework provides a regulatory process that empowers us, as a street authority for the TLRN, to undertake inspections of roadworks to ascertain if a statutory undertaker has complied with its duties.
- These inspections include checking if roadworks in progress are compliant with the technical standards prescribed within the Department for Transport's (DfT) Safety at Street Works and Road Works statutory code of practice (the Safety Code). Works are also inspected to assess if they are being undertaken with the approved permit conditions, if they are incurring Lane Rental charges or are overrunning their estimated end date. Examples can be seen in Appendix 2.
- 5.3 We also carry out inspections once the works are complete to assess whether the reinstated highway is compliant with the performance standards specified within the DfT's Specification for the Reinstatement of Openings in Highways (SROH). Over 40,000 inspections a year are carried out on roadworks, and we do so either by undertaking a site visit (35 per cent) or in the majority of cases using CCTV cameras (65 per cent). Video analytic technology is in place to monitor longer duration works, and this auto-detects whether activity is taking place on-site when expected. We also pull together a report to capture the most unsafe roadworks of the week.
- 5.4 Partnerships are in place with other business areas that have an on street contingent to supply observations on roadworks they encounter. These include the Metropolitan Police Community Support Officers, our own Road Traffic Enforcement Officers and night-time Bus Network Traffic Controllers. In total over 20,000 reports on roadworks are received a year from over 380 officers that frequently patrol the network. The reports are submitted through mobile software and transmitted to a back-office system where they are validated by specialist Roadworks Inspectors.
- 5.5 Alongside this, a further 7,700 reports are received from members of public reporting Roadworks problems through TfL's website, which are also validated for compliance. Our Network Traffic Management Control Centre also monitors the road network 24 hours a day, regularly identifying concerns it has observed with Roadworks.

#### 6 Enforcement

- 6.1 We take any breaches of safety standards seriously and deploy appropriate remedial interventions with the parties concerned, and will ultimately prosecute those where we consider this is the most appropriate course of action. The interventions at our disposal include:
  - (a) quarterly performance meetings with the main works promoters. These meetings are driven from performance data and focus on the central issues of safety and compliance with the regulations;
  - (b) performance metrics are shared periodically with all promoters to allow them to monitor their own performance, identify areas of good and bad performance and take action to address bad performing contractors/ areas;

- (c) operation of a Fixed Penalty Notice system, which provides TfL with the option of dealing with specified streetworks offences through the payment of a fine in lieu of prosecution;
- (d) prosecution commenced in the magistrates' courts where the use of FPNs is not considered appropriate or available, e.g. safety offences or where they have failed to discharge liability through the FPN scheme; and
- (e) more recently, where underperforming areas are identified within the performance data, action plans are agreed with the works promoter to address those specific areas, and these are then closely monitored with the promoter through enhanced reporting, regular meetings to review actions and progress and toolbox talks.

### 7 Outputs

- 7.1 The primary output from this comprehensive operation is to assure the safety of our customers, the travelling public, and also the people that carry out the works. Through our intervention the average work promoters' non-compliance rate (measured as an average over six preceding periods) has fallen from 27 per cent in October 2016 to 19 per cent in Q1 2018, as shown in the graphs in Appendix 3.
- 7.2 This reduction coincides with a paper taken to the Surface Transport Health and Safety Steering Group in October 2016 on 'Improving Traffic Management', which set-out a series of recommendations to improve the quality of roadworks. Other measures introduced at this time included the introduction of tailored action plans for the poorest performing promoters and a safety focussed prosecution campaign.
- 7.3 Other notable highlights since 2010 include:
  - (a) 129 offences prosecuted through the magistrates' court resulting in £275,315 in fines and £122,727 in recovered costs;
  - the change to the maximum fine level for safety offences in March 2015 resulted in the court leveraging a larger fine (£90,000) against BT Openreach in March 2018;
  - (c) 10,057 Fixed Penalty Notices were given to utility companies, totalling £1,354,400 in charges;
  - (d) 3,596 Fixed Penalty Notices issued to TfL contractors recovering £405,240 in charges;
  - (e) three action plans have introduced in the last 18 months against Thames Water, British Telecom and Cadent Gas;
  - (f) Thames Water turning around their safety performance within seven months reducing the safety failure rate from 21 per cent to 12 per cent;
  - (g) British Telecom also turning their performance around following two prosecutions reducing the safety record from 27 per cent to 13 per cent; and

(h) Cadent Gas has failed to respond positively to their Action Plan and their performance continues to deteriorate, this is being escalated within their organisation with further action, and is currently subject to prosecution in relation to recent failings.

#### 8 Creative Solutions

- 8.1 Supplementing the daily roadworks inspection regime is the implementation of other extemporary operations to protect vulnerable road users at roadworks.

  There are a wide range of initiatives, as pictured in Appendix 4, including:
  - (a) active traffic management experiences, undertaken both before and during works construction. These involve the delivery team engaging with public walking and cycling groups in order to better understand the challenges posed to vulnerable road users;
  - (b) extraordinary measures to reconfigure the existing road network layout during Roadworks, in order to provide a safe and uninterrupted facility for pedestrians and cyclists. This includes temporarily converting highways assets not originally intended for use by pedestrians or cyclists, e.g. converting a cycle lane into a footway for a segregated island into in to a cycle lane; and
  - (c) adopting adjacent land outside of the publicly maintainable highway boundary for use as a temporary measure.

## 9 Future Improvements

- 9.1 As the Healthy Streets approach is becoming more embedded within the operational side of the organisation, more creative thinking is coming into fruition.
- 9.2 It is noticeable that current national standards relating to safety at roadworks are unable to keep pace with the way our road network is evolving, to provide more demand for cyclists and pedestrians. For example, there are currently minimal criteria covering what to do when working in a segregated cycle lane.
- 9.3 By the end of the year we will be launching a Temporary Traffic Management Handbook, funded by the Lane Rental scheme. This will provide guidance on the design, planning and execution of roadworks, with particular focus given to the needs of vulnerable road users when navigating around temporary interventions. The advice provided in the handbook goes beyond national standards for providing a safe, accessible and intuitive passage and sets out guidance for traffic management designers and work promoters on: inclusive access; provision of temporary footways and diversion routes; safety and security considerations; signage; and the provision of portable crossing facilities. We are working with London boroughs, contractors and utility companies to encourage the approach in the handbook be adopted on all roads in London.
- 9.4 The Lane Rental scheme is also funding a number of other initiatives that will benefit vulnerable road users, including the development and trial of: a new accessible and shallow gradient kerb ramp for wheelchair and buggy users; and a

- new wide-cycle-bridge to span open excavations in cycle lanes to maintain facilities in the peak. Examples of this can be found in Appendix 5.
- 9.5 In looking at, and in furthering our understanding of the impact roadworks have on vulnerable road users, we have identified the need for the establishment of more granular metrics, including ones that cover:
  - (a) increased road network technology to detect how and when vulnerable road users are using the network where roadworks are present;
  - the number of days of disruption saved specific to vulnerable road users when mitigating impacts through the assessment of traffic management proposals; and
  - (c) recording roadworks inspection failure items specific to vulnerable road users, e.g. inadequate footway ramps, cycling provisions or footway width.
- 9.6 Other initiatives being assessed include introducing speed limit reductions for major Roadworks where narrow lane widths are implemented to prevent motor vehicles overtaking cyclists. These could either be advisory or mandatory depending on circumstances such as length and duration, with enforcement and other deterrents (e.g. rumble strips) considered where appropriate.
- 9.7 As part of an innovation challenge we are approaching innovation and start-up companies to develop products that enable us to provide better and more obvious segregation for vulnerable road users navigating around roadworks.

#### List of appendices to this report:

Appendix 1 – Proportion of vulnerable road users killed and seriously injured (KSI) where roadworks are taking place

Appendix 2 – Examples of roadwork sites

Appendix 3 – Work promoters' non-compliance rates

Appendix 4 – Measures to protect vulnerable users

Appendix 5 – Examples of future improvements

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

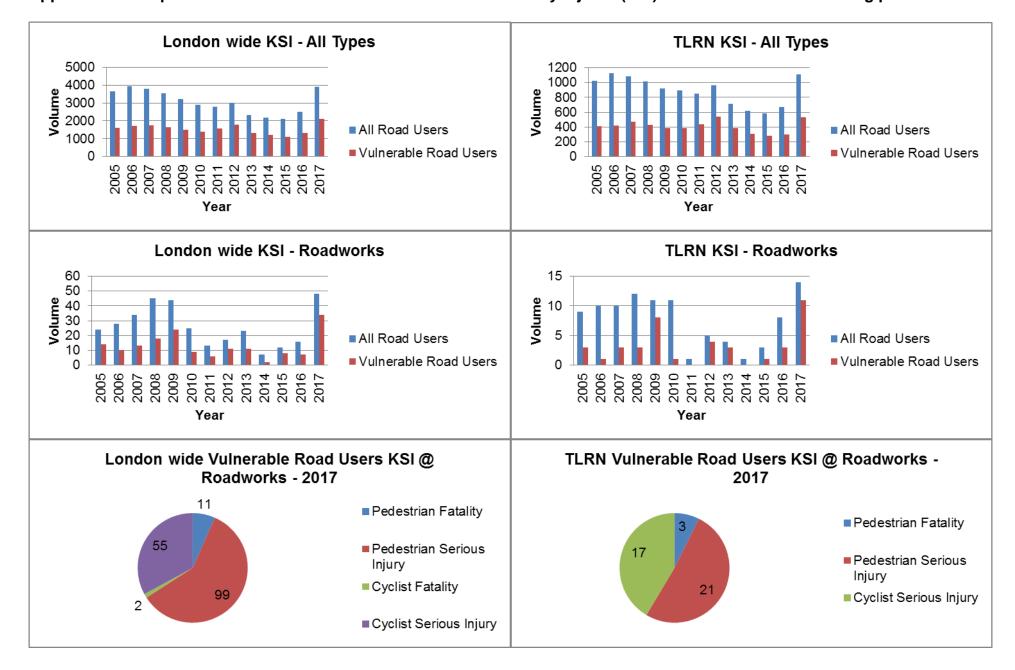
None.

Contact Officer: Glynn Barton, Director of Network Management, Surface Transport

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Appendix 1 – Proportion of vulnerable road users killed and seriously injured (KSI) where roadworks are taking place



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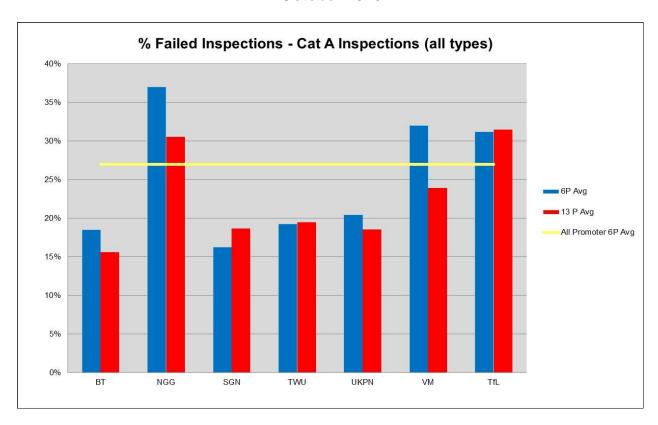
# Appendix 2 – Examples of roadwork sites



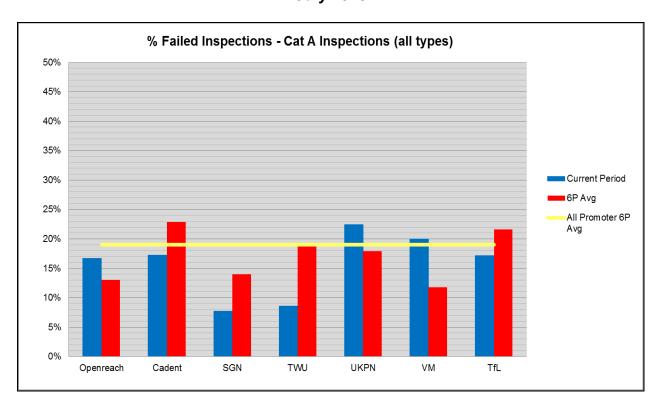
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Appendix 3 – Work promoters' non-compliance rates

October 2016



**July 2018** 





#### Appendix 4 – Measures to protect vulnerable users





Segregated island converted to a temporary cycle lane and the permanent cycle lane converted to a footway CS7



Recreational land converted to a temporary cycle lane with matting system to continue



Carriageway lane converted to a temporary cycle lane widened



Cycle lane narrowed to allow footway to be temporarily







Provision of dedicated construction vehicle holding areas removes 1000's of HGVs from travelling on the road network and compromising the safety of vulnerable road users.



#### **Appendix 5 – Examples of future improvements**



An example of an accessible and shallow gradient kerb ramp for wheelchair and buggy users that is being trialled.



An example of a wide cycle bridge to span over excavations in cycle lanes to maintain facilities at peak periods.



Other initiatives – speed limit reductions for major roadworks where narrow lane widths are implemented to prevent motor vehicles overtaking cyclists.



Other initiatives – use of other deterrents such as rumble strips.



# Safety, Sustainability and Human Resources Panel



Date: 27 September 2018

Item: Reducing the Impact of Workplace Violence and Antisocial

**Behaviour on London Underground Staff** 

# This paper will be considered in public

# 1 Summary

- 1.1 This paper and appendix sets out the plans for reducing instances of antisocial behaviour and workplace violence across the London Underground network. The paper focuses on the requirement for staff to feel supported, and a number of the key focus areas required to achieve this aim.
- 1.2 This is part of the glide path to our vision of everyone home safe and healthy everyday.

#### 2 Recommendation

2.1 The Panel is asked to note the paper and appendices

#### List of appendices to this report:

Appendix 1 – Workplace Violence – Reducing the Impact on our Staff

Contact Officer: Mark Wild, Managing Director, London Underground

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# WORK PLACE VIOLENCE – REDUCING THE IMPACT ON OUR STAFF

DEVELOPING A STRATEGIC APPROACH TO SUPPORT OUR STAFF:

Workplace Violence, Revenue Protection, Intoxicated Customers, Begging and Rough Sleeping, Trespassers

# **Key facts:**

#### What do we know about WPV & ASB? (Source: Q4 17-18 LU WPV Unit report):

- Increase in WPV in 17/18 (1149) compared to 16/17 (968)
- 91% of incidents are towards station staff (CSA, CSS & CSM)
- Majority of incidents (71%) take place in the Ticket Hall
- Approx. 25% are 'repeat' incidents, affecting same staff member
- Primary cause is Revenue disputes (44%), with alcohol a contributing factor in 30% of incidents.
- 7% of all incidents took place during Night Tube (which represents 3-4% of our service hours). Alcohol was contributing factor in 69% of NT incidents

#### Actions we will take:

- Supportive **Leadership** with a single point of accountability
- Simple and targeted **Guidance**
- Consistent and clear TfL & LU commitment, with clarity on what to expect and what to do
- Focused **Engagement** with staff and customers, local businesses and event organisers
  - Create environment for Collaboration between staff and BTP Clear and consistent **Enforcement**

# Actions we have taken:

- Intoxication trial undertaken over May Bank Holiday
- WAASB reporting changes
- Staff engagement workshops
- Assessment of all comments as part of Viewpoint
- Internal / external communications plans in place supported by change champions
- Aligned TfL & BTP data for better quality data / data analysis
- Initiated pan TfL approach-including TfL Engineering

# Action plan from now until December 2018

**SEPT** Targets to be in place by end of September

Building one team approach with BTP colleagues and embed performance measures

Review training & guidance associated with workstreams (WPV, Revenue Protection, rough sleepers)

TU engagement on approach planned

TfL's Compliance, Policing and On Street Teams & BTP developing improved ways of working, engagement and response

OCT Cross modal best practice sharing sessions – focussed on customer messaging

Body worn Video- planned approach

Investigation of other complimentary tools to ASB and WPV- including street pastors

NOV Increase customers awareness of bylaws, appreciation of the the risks of being unfit to travel and the consequences of being abusive towards staff

Development of a Network approach on dealing with rough sleepers & beggars – staff support, customer messaging, engagement with Streetlink

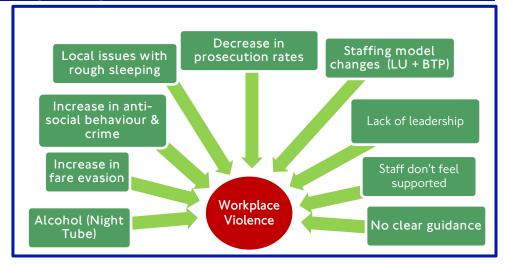
Focused customer messaging and staff support activity during the Christmas period



Supported

**Staff** 

Engagement



What our people will say:

What our customers will say:

I am confident engaging with intoxicated customers, and know when to step back

We work as one team with BTP

I feel empowered by my manager and know that action I take will be supported.

I feel safe travelling on the TfL network

> Staff should be treated with respect

to support and help me I understand

I know I can

count on staff

the risks of being unfit to travel

#### How will we measure success?

- Feedback from Staff on how confident and supported staff feel
- Reduced number of customer intoxicated incidents
- Reduced number of staff assaults and WPV incidents

Measurable targets to be in place September 2018

# Longer term plans

- > Strategic plan with BTP, businesses and event organisers and charities to reduce WPV in line with our "Supported Staff Strategy"
- Continuously monitor station incidents and C.I. approach to further action planning
- Scalable guidance for each station type Metro, Gateway, Destination & Local
- Ambience deterrents in place
- Better reporting tools- EIRF system review, follow up and portals
- Established as Business as Usual

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# Agenda Item 11

# Safety, Sustainability and Human Resources Panel

TRANSPORT FOR LONDON EVERY JOURNEY MATTERS

Date: 27 September 2018

Item: Safeguarding in TfL

# This paper will be considered in public

## 1 Purpose

1.1 To update the Safety, Sustainability and Human Resources Panel on the progress being made in raising awareness of safeguarding and embedding it into our ways of working.

### 2 Recommendation

2.1 The Panel is asked to note the paper.

# 3 Background

- 3.1 Every day, children and vulnerable adults travel on London's transport system, and our staff work hard to make our services accessible, safe and reliable for everyone. The range of activities we undertake can sometimes include working with vulnerable adults and children. Whatever the reason a child or vulnerable adult uses our services or has contact with our organisation, everyone who works for us has a critical safeguarding role to play.
- 3.2 All children are at risk because of their age (under 18 years old). By vulnerable adults we mean an adult with care and support needs who may be less able to protect themselves because of those needs.
- 3.3 Although in most cases we don't have a statutory safeguarding duty, we recognise we have an important role in safeguarding and supporting people. We are committed to putting the appropriate safeguards in place to protect vulnerable adults and children when they use or come into contact with us and our services.
- 3.4 Safeguarding is important for our staff, our customers, our suppliers and our reputation.
- 3.5 At it's meeting on 30 May, the Health and Safety meeting of TfL Executive Committee (ExCo) received a report on the safeguarding of children and vulnerable adults. The report summarised the findings of a review of safeguarding activity across TfL headed up by Michèle Dix, and made a series of recommendations. The review found that whilst there was safeguarding work being carried out in the business there was a lack of strategic accountability, governance and general coherence of the work.

- 3.6 As a result of the review, Staynton Brown was agreed as the TfL ExCo lead on safeguarding and charged with strengthening this area of work by:
  - (a) Reviewing and strengthening the references in relevant guidance to calling out inappropriate behaviour more broadly, which can lead to creation and abuse of vulnerability;
  - (b) More clearly reference business specific procedures where these exist and highlight where they don't exist and need developing; and
  - (c) Each Director was charged with reviewing local safeguarding risk and implementing mitigations as well as nominating a safeguarding lead

# 4 Progress so far

- 4.1 A statement of intent regarding safeguarding was been posted on our internal message board Source on 31 July 2018 see Appendix A.
- 4.2 An internal audit of Safeguarding is currently being planned, with the scope to be finalised by the end of the month and the audit to commence in November.
- 4.3 All Managing Directors were asked to nominate a Safeguarding Lead for their area; this has been done and a Safeguarding Summit of these leads took place on 6 September. This was the first time a pan-TfL group looking specifically at Safeguarding has been convened. The outputs of the summit are summarised as follows:
  - (a) The Terms of Reference (ToR) for the group were agreed with the additional accountability that the group would be the forum where any safeguarding incidents would be reviewed. The terms of reference of the Safeguarding Leads Group can be found at Appendix B;
  - (b) Fairly immediate comms to the wider business on safeguarding responsibilities in relation to work experience activities;
  - (c) A detailed work programme to be developed in October;
  - (d) Mapping of existing safeguarding related training across the business to be completed by the end of September with a view to then defining and assigning training relevant to job roles; and
  - (e) Conduct a full review of the onboarding process, with a view to understanding what the gaps and opportunities are.

## 5 Next Steps

5.1 The Safeguarding Leads Group will convene in October and continue to develop the work programme and a more detailed report will be brought back to this Panel at its December meeting.

# **Appendices:**

Appendix 1 – Statement of Intent

Appendix 2 – Terms of Reference

# **List of Background Papers:**

None

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# Agenda Item 12

## Safety, Sustainability and Human Resources Panel

Date: 27 September 2018

**Human Resources Quarterly Report** 



# This paper will be considered in public

# 1 Purpose

Item:

- 1.1 To provide the Safety, Sustainability and Human Resources Panel with an update on key Human Resources (HR) led activities and performance for Q1 2018/19.
- 2 Recommendation
- 2.1 The Panel is asked to note the report.
- 3 Background
- 3.1 This is the first 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.
  - 3.3 This paper includes information requested at the last Panel to provide analysis of part time employees, by gender and business area. Also included in this report is further information on employees leaving the organisation.

#### **Appendices:**

Appendix 1: HR Quarterly Report

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

None

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# HR Quarterly Report – 2018/19 Quarter I Update

# **Executive Summary**

This Human Resources (HR) Quarterly Report provides an overview of key developments that have taken place in the first quarter of the 2018/19 financial year, covering between 1 April 2018 and 23 June 2018 inclusive.

During this period we fell behind our target for improving our all staff representativeness scorecard measure. We are ahead of target for improving the representativeness of our senior managers. Our external recruitment activity is yielding our most diverse candidates to date, considerably more reflective of London. However, low turnover coupled with lower external recruitment is reducing our ability to drive significant improvements in the representativeness of our employees.

Preparations for the annual Viewpoint survey scheduled for October 2018 are taking place. This survey will provide our scorecard scores for Total Engagement and Inclusion for 2018/19.

# Report Content

#### Section 1 – TfL Scorecard – People Measures

- Workforce Representativeness
- Total Engagement
- Inclusion Index

### Section 2 - Our People

- Part-time Employees
- Recruitment
- Case Study Trains Manager Campaign
- Leavers

#### 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.

# Our 2018/19 TfL Scorecard – People Measures

The table below provides a summary of the four People measures included on the TfL Scorecard, including the 2018/19 targets.

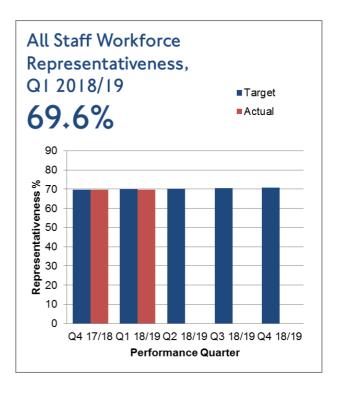
People	Target	
Foster a workforce representative of London		
Workforce Representativeness Index: All staff	70.7%	Q
Workforce Representativeness Index: Director/ Band 5	43.6%	Q
Engage our people		
Total Engagement Index	57%	Α
Build an Inclusive environment Inclusion Index	46%	Α

# 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 Q1 we fell short of the target of 69.9 per cent, with a total workforce representativeness score of 69.6 per cent. Some of the activities identified in this report, particularly around recruitment in section 2, are helping us to improve this scorecard with demonstrable successes in our external recruitment campaigns.

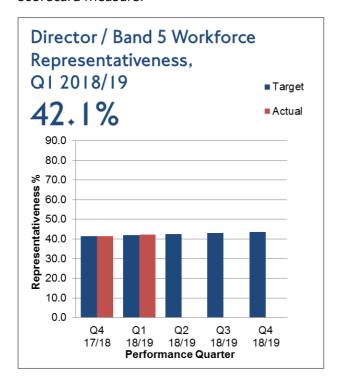


# Director / Band 5 Workforce Representativeness, Q2 2017/18

For the Director and Band 5 workforce representativeness scorecard measure, the 2018/19 target is 43.6 per cent. At the end of 2017/18 our scorecard outcome was 41.6 per cent.

The Q1 score of 42.1 per cent is ahead of target. Measures put in place in 2017/8 such as unconscious bias training and diverse interview panels are now established and

continue to drive improvements with this scorecard measure.



# Total Engagement

The Total Engagement scorecard measure is derived from the annual Viewpoint employee survey. The survey is scheduled to take place in October 2018 therefore an updated score for Q1 is not available. The 2018/19 target for Total Engagement is 57 per cent, a 1 per cent increase on last year's score.

Mid-way between the Viewpoint surveys, we carry out a Pulse survey, which samples approximately 25 per cent of our employees, enabling us to identify any progress made or areas for further focus. This allows TfL to monitor if actions taking place to improve total engagement are working.

The Pulse survey was carried out in June, with 19 teams selected to take part.



We are unable to provide a direct comparison with the TfL Wide engagement survey as the Pulse survey targeted individual teams and was not a representative sample.

The detailed results of the survey have been shared with the teams, and local action plans have been updated to drive further increases in Total Engagement.

#### Inclusion Index

The Inclusion Index is another measure from the annual Viewpoint survey. A summary of key events and activities to help improve our inclusive culture at TfL are provided in the following section.

#### **Carers Passport**

It is estimated that one in nine employees juggle caring responsibilities with work commitments, and this will grow over time. This can be difficult and we are passionate that carers have a valuable contribution to make to our workforce. Wherever possible we want to give them the flexibility and support they need to help achieve this. In June we launched our new Carers Passport which aims to help employees move roles whilst still maintaining any previously agreed flexibility and support to accommodate their caring responsibilities.



#### **Mentoring Partnerships**

In June, we successfully launched our first ever cross company mentoring scheme with Fujitsu. Seven members of our Tech & Data department, who are identified as talent, have been matched with mentors at Fujitsu to learn new ways of working from experts outside of TfL. An inaugural event was held on the 30 May, with employees from both companies sharing tips and best practice on how to get the most from the mentoring process.

#### **Mentor Matching**

We are also placing a strong focus on internal mentoring over the coming performance year. Mentor Matching has recently been set up to link potential mentees to a suitable mentor. Our leaders have a wealth of knowledge and experience to share - and perhaps even more importantly, understand the landscape, politics and idiosyncrasies of the business better than anyone. For mentees, this is a chance to explore individual personal goals and get a different perspective on careers and development opportunities across our organisation.

#### Inspire Engineering

To mark International Women in Engineering Day, on the 22 June, we held an Inspire Engineering event at London Transport Museum's Action Depot, attended by the Deputy Mayor for Education and Childcare,

Joanne McCartney. This event saw up to 60 female students and teachers attend from the Sarah Bonnell School in Newham and the Plumstead School in Greenwich. At this event the students took part in interactive sessions and career discussions with our own engineers with the aim of inspiring the next generation to consider a career in transport and engineering.

#### Best company for work/life balance

In June, we won the UK award for best work/life balance, as researched by the world's largest jobsite Indeed, beating companies like Google and Apple to the top spot. This accolade was all the more rewarding as it was based on reviews left by current and previous employees rather than a judging panel.

#### More Robust Diversity Data

In Q1 we saw improvements to the D&I data available, helping us create more targeted and effective D&I interventions.

We achieved this by using information collected from successful recruitment applications and transferred this to SAP to fill in 'unknown' characteristics. This has resulted in more accurate diversity data in Section 3 of this report.

#### **Anonymised Shortlisting**

In QI, we conducted an anonymised shortlisting pilot in Tech & Data. This removed any information on an employee's protected characteristics with the aim that people were shortlisted on capability alone. This trial resulted in 47 per cent of hires coming from a BAME background, and 32 per cent female, higher than the existing employee composition. This approach will

be rolled out in all future recruitment campaigns.

## **Increasing Disclosure Rates**

One of the key barriers to delivering targeted and effective D&I interventions is the number of our employees who disclose information on their protected characteristics.

A behavioural science focused campaign is about to take place with the aim of increasing disclosure rates. This work is in collaboration with the Behavioural Insights Team, the Government Equalities Office, and Harvard University.

# Section 2: Our People

# Part-time employees

In June the panel requested additional information on part time employees. The following section provides information on the composition of part time workers, where they are working across TfL and how they compare with full time employees in relation to promotional moves.

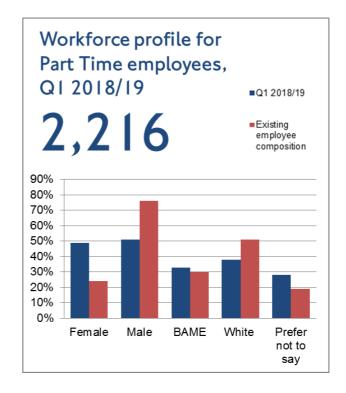
Given the varied landscape of our organisation we define a part time employee as someone working less than 35 hours per week.

In addition to part time roles, we also offer other flexible working arrangements for our employees. These vary by business area; however include condensed working hours, where employees work more hours for fewer days and flexible working hours, where employees can arrive later or leave later depending on their other commitments. We also offer non operational employees the ability to work from home.

These flexible working options complement part time working so that employees don't feel they have to make a choice between only part time and full time employment. These other flexible working arrangements are not included in this data.

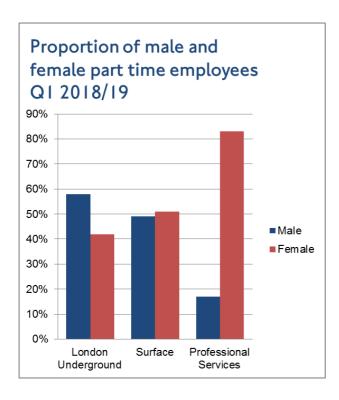
At the end of Q1, there were 2,216 part time employees across TfL. This includes 1,610 in London Underground accounting for 72 per cent of our part time employee population.

The proportion of employees that are part time is fairly consistent across the organisation, with eight per cent of employees in Professional Services and London Underground working part time, and 10 per cent of employees in Surface.

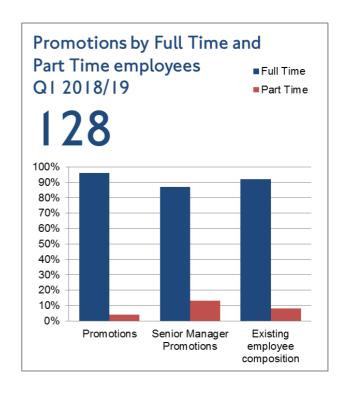


The proportion of female part time employees is higher than the wider employee population, with 49 per cent of part time workers being female. The proportion of white employees working part time is lower than the wider employee population; however the proportion of BAME part time employees is broadly reflective of the wider employee composition.

The split between male and female part time employees does change significantly by business area. In London Underground 58 per cent of part time employees were male, this reduces to only 18 per cent of part time workers in Professional Services.



Of the employees promoted in Q1, four per cent were part time employees. This increased to 12.5 per cent for promotions to senior manager positions.



# High Volume Recruitment Activity

In June we opened a recruitment campaign for the role of Trains Manager. This role is a senior operational role which manages our train operators.

This campaign focused on activity to increase the number of applications from underrepresented groups. This involved promoting positive role models in the recruitment material, promoting the recruitment campaign through our Staff Network Groups, along with roadshow events allowing potential candidates to speak with existing Train Managers.

This recruitment campaign was open to internal candidates and provided a key opportunity for internal progression within London Underground.

# Apply now to be our next Trains Manager

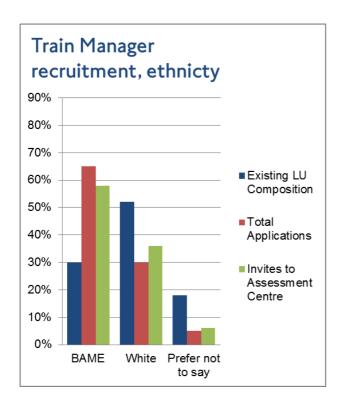
The Trains Manager role is now live





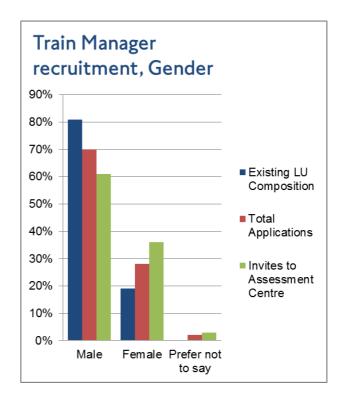
The three week application window resulted in 1,889 applications for the 25 positions available. The individuals that applied and those who made it to the assessment stages were more diverse than the existing employee composition for London Underground.

This resulted in 65 per cent of applications coming from a BAME background, this resulted in 58 per cent of applicants who reached the assessment centre stages of the recruitment process coming from a BAME background.



The gender split of applications for the Train Manager position was also higher than the existing London Underground employee composition, with nearly double the proportion of females making it through to the assessment stages.

The assessment stages are currently ongoing and a further update will be provided at the next Panel.



# Graduate & Apprentice Recruitment

On the 3 September and the 10 September, we welcomed our 2018 cohort of Apprentices and Graduates.

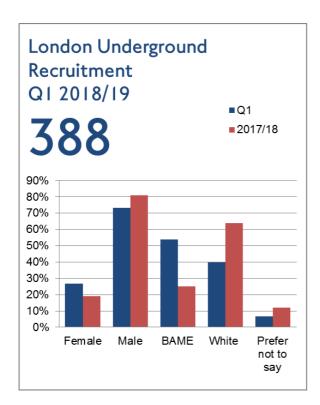
We are planning to provide a more detailed update on our Graduate and Apprentice schemes at the Panel in December.

# **Ongoing Recruitment Activity**

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

#### London Underground

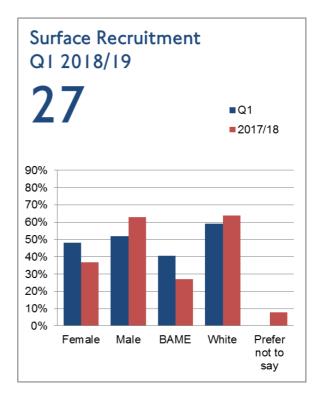
In London Underground female and BAME recruitment is significantly higher than the average achieved in 2017/18. BAME recruitment was in excess of 54 per cent for Q1. Female recruitment was 27 per cent, up from 19 per cent last year.



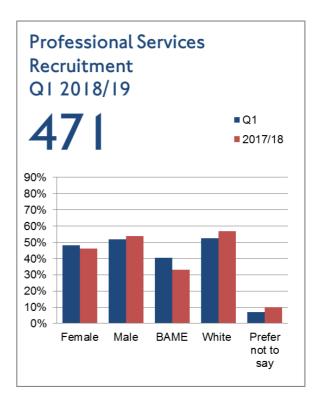
#### **Surface Transport**

Whilst the representativeness of those recruited in Q1 was higher than that in 2017/18, there were only 27 employees who started roles in Q1. This low level of recruitment is due to many areas of Surface

being in consultation during Q1 as part of Transformation.



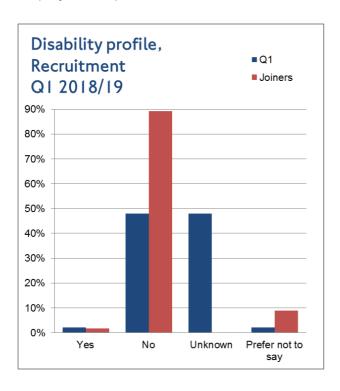
#### **Professional Services**



Recruitment in Professional Services again scored favourably in terms of female and BAME, when compared against the 2017/18 performance. The proportion of employees who were female at the end of Q1 was 44.07 per cent, and the proportion that were BAME 26.42 per cent.

#### Recruitment - Disability

The below graph shows the disability declaration rates of those recruited in QI, and how this compares with the existing TfL employee composition in QI.

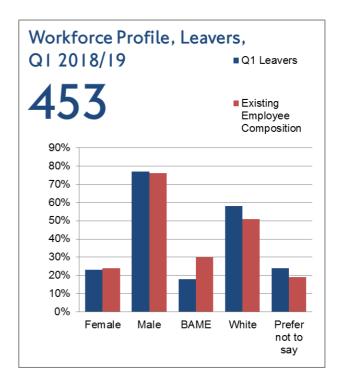


Those recruited declaring they have a disability is 1.71 per cent; this is comparable with the proportion of all TfL employees who have declared a disability at 2 per cent.

A significantly higher proportion of employees state that they do not have a disability during the recruitment process than the wider population. This is partly due to 'unknown' not being an option during the recruitment process.

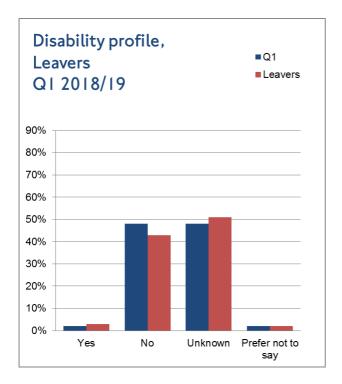
#### Leavers

In Q1 a total of 453 employees left the organisation, a turnover rate of 1.6 per cent. If consistent across the year, this would translate into a turnover rate of 6.6 per cent. 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 Q1 there were proportionally fewer females leaving the organisation than the existing workforce composition. The proportion of BAME employees leaving the organisation was significantly lower than the existing employee composition, with 18 per cent of leavers coming from a BAME background.

The graph below shows the disability declaration rates for employees leaving the organisation in Q1. The proportion of leavers who declared they had a disability was 2.73 per cent; this is higher than the 2 per cent of all employees who declared they had a disability.



# Section 3: Workforce Composition

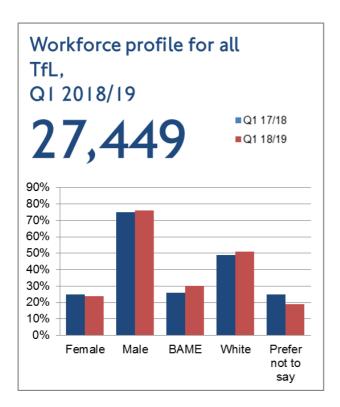
#### Permanent Headcount

Data extracted from the HR System (SAP) excludes Crossrail and other employees whose details have not yet transferred to 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 on SAP decreased in Q1, from 27,871 at the end of 2017/18, to 27,449, a 1.5 per cent decrease in total headcount.

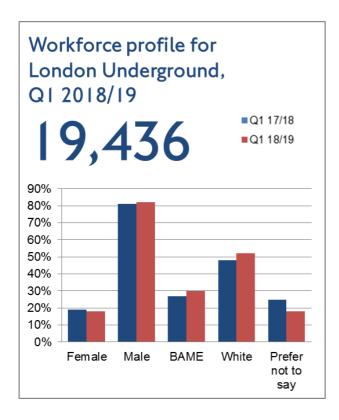


The proportion of employees who declare their ethnicity as BAME has increased in QI from 26 per cent to 30 per cent. This is due in part to higher declarations rates, which simultaneously saw those preferring not to declare their ethnicity dropping from 25 per cent to 19 per cent. Those identifying themselves as white also increased by 2 per cent in QI.

The proportion of female employees rose from 23.45 per cent at the end of 2017/18 to 23.58 per cent at the end of Q1; however this is below the 24.62 per cent proportion of employees who were female at the end of Q1 last year.

## London Underground

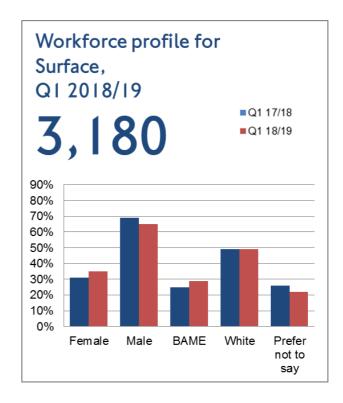
The total FTEs in London Underground increased from 19,190 at the end of Q4 to 19,436. Diversity information for London Underground mirrored that of TfL, with the proportion of employees declaring as BAME increasing from 27 per cent to 30 per cent, and those preferring not to say falling from 25 per cent to 18 per cent.



The proportion of LU employees that are female increased from 17.59 per cent at the end of Q4, to 18.14 per cent. This was still below 18.54 per cent recorded at the end of Q1 last year.

## **Surface Transport**

Total FTEs in Surface have fallen from 3,465 in Q4 to 3,180 at the end of Q1. This is down from 3,975 at the end of Q1 last year, a 20 per cent reduction in total headcount over the previous year.



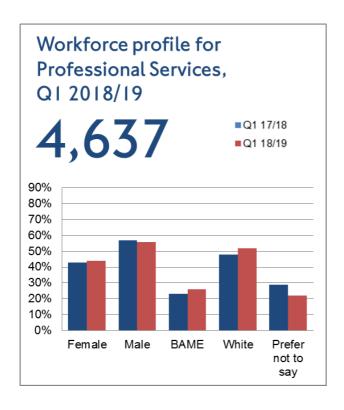
The proportion of BAME employees has increased from 26.28 per cent at the end of Q4 to 29.01 per cent, continuing the upward trend seen in 2017/18. The proportion of female employees increased from 30.33 per cent in Q4 to 30.80 per cent in Q1.

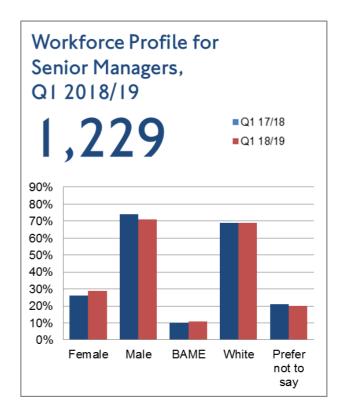
#### **Professional Services**

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.

Total FTEs in Professional Services decreased from 5,002 in Q4 to 4,637 in Q1, a 7.3 per cent reduction in total headcount during Q1. There was an increase in the proportion of female employees, from 43.30 in Q4 to 44.01 per cent in Q1.

The proportion of BAME employees in Professional Services increased from 23.89 per cent in Q4 to 26.42 per cent in Q1.





## TfL Senior Manager Staff Composition

The total number of senior managers has increased from 1,210 to 1,229 in Q1. This is still a six per cent decrease from 1,305 senior managers at the end of Q1 last year.

The proportion of female senior managers has increased from 28.84 to 29.37 per cent in Q1. This is also up from 26.60 per cent since Q1 2017/18.

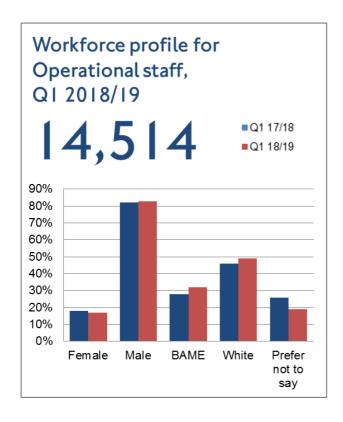
There was little change in the ethnicity of senior managers over the previous year, with the proportion of BAME senior managers increasing from 10.83 per cent at the end of Q4 to 11.07 per cent at the end of Q1.

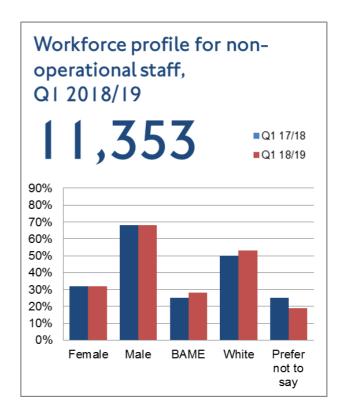
## TfL Operational Staff Composition

The number of operational employees decreased in Q1, from 14,664 to 14,514.

The proportion of female operational employees increased slightly from 16.80 per cent to 16.83 per cent. This is below the 17.68 per cent of operational employees who were female at the end of Q1 2017/18.

The proportion of BAME operational employees increased significantly, from 28.11 per cent, to 32.48 per cent. At the same time the number of operational employees who did not declare their ethnicity fell from 24.57 per cent to 18.68 per cent.





# TfL Non-Operational Staff Composition

The number of non operational employees has decreased from 11,500 in Q4 to 11,353 in Q1.

The proportion of BAME non operational employees has increased from 26.13 per cent to 27.79 per cent in Q1. This represents a 4.75 per cent increase in the number of non-operational employees who declare themselves as BAME.

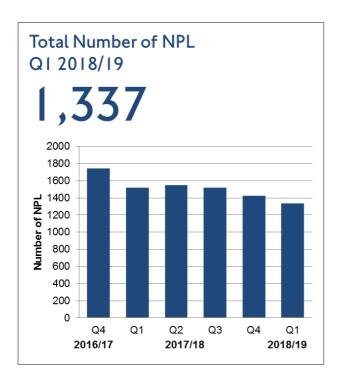
The proportion of female non operational employees has increased from 31.24 per cent to 31.57 per cent in Q1. This is down from 32.38 per cent at Q1 in 2017/18.

## Non Permanent Labour

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

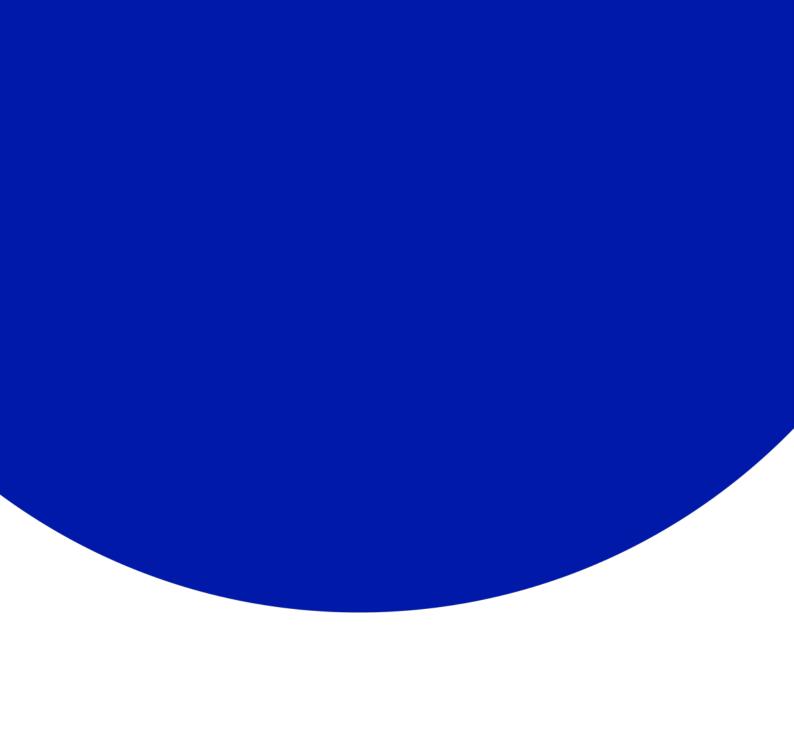
The use of NPL has continued to decrease in Q1, from 1,422 to 1,337. This represents a 12 per cent reduction in the use of NPL since Q1 2017/18.

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 £3.4m per week.



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.







# Agenda Item 13

# Safety, Sustainability and Human Resources Panel



Date: 27 September 2018

Item: Gender and Ethnicity Pay Gap Action Plans

## This paper will be considered in public

# 1 Summary

1.1 This paper provides an update on work and activities taking place to reduce our Gender and Ethnicity pay gaps.

#### 2 Recommendation

2.1 The Panel is asked to note the paper.

# 3 Background

- 3.1 In March 2018, we published our third annual Gender Pay Gap Report showing a median pay gap of 19.7 per cent, and a mean pay gap of 10.7 per cent. We have a detailed action plan to reduce this gap; this includes measures ranging from specific performance targets to anonymous job applications and development programmes. Combined with our innovative outreach programmes, which encourage more girls to consider STEM careers, these initiatives will renew our energy and focus on our work to tackle the gender pay gap.
- 3.2 Alongside other members of the GLA group, we published our first ethnicity pay gap in March 2018 showing a median pay gap of 9.8 per cent, and a mean pay gap of 10.2 per cent. We have a detailed action plan to reduce this gap including initiatives such as addressing any bias within the recruitment cycle and a bespoke leadership and development programme for some of our talented BAME staff.
- 3.3 The reports<sup>1</sup> highlight a range of causes for these pay gaps; these include the underrepresentation of women and BAME employees in senior levels and the larger proportion of BAME employees in lower paid operational roles.
- 3.4 Our focus on addressing both the gender and ethnicity pay gaps are part or our wider programme of work to increase the diversity of our staff at all levels and in all parts of the business and to cultivate a more inclusive workplace culture for everyone.

http://content.tfl.gov.uk/tfl-gender-pay-gap-summary-2017.pdf http://content.tfl.gov.uk/tfl-ethnicity-pay-gap-report-2017.pdf

Page 133

# 4 Addressing our pay gaps

4.1 Our new strategic approach will also help to align our approach to diversity and inclusion with the Mayor's Transport Strategy. At the heart of our new strategic approach will be an expectation to be more insight driven and data led. We will use behavioural and data sciences to better understand what works, and help set clearer priorities for the business.

# 5 Measuring progress

#### **Inclusion Index**

- 5.1 The TfL Scorecard demonstrates best practice by including three specific measures relating to Diversity and Inclusion (D&I). The first is an aggregate measure of the representativeness of our workforce (compared with London's economically active population) across a number of protected characteristics. The second is the same measure for the senior leaders in our organisation. Finally, we measure how included staff feel by using our Inclusion Index.
- 5.2 The Inclusion Index is an aggregation of the key questions<sup>2</sup> that indicate whether people feel included in the workplace. This index measures the extent to which our people feel that they work in an inclusive environment where their opinions matter, they feel safe to be themselves and are able to make a contribution.

#### Diversity and Inclusion (D&I) Dashboards

- 5.3 In April 2018, we launched the first version of our new D&I Dashboards, providing further data and insight to our senior managers. These data driven dashboards give a much richer and insightful picture of employee outcomes and experience across the entire employee life-cycle.
- 5.4 The dashboards allow us to focus our activity in the right areas and see how effective our actions are in different parts of our organisation. The measures included in the dashboards cover each stage in the employee lifecycle, for a number of characteristics covered by the Equality Act and will be reviewed on a quarterly basis going forward. The dashboards are successfully driving local accountability and actions whilst demonstrating our commitment to improving transparency.
- 5.5 Each dashboard includes areas of both high and low performance, triggering key lines of further enquiry. Thus further raising the levels of knowledge and enquiry regarding how to create an inclusive organisation. The D&I team have developed a 'One Stop Shop' of guidance and tools to support teams to drive progress against the areas of D&I now identified as needing action by the dashboards.
- 5.6 In order to improve the quality of data upon which our dashboards are based, we have launched a behavioural science focussed campaign to increase rates of disclosure.

<sup>&</sup>lt;sup>2</sup> Q) I feel involved in decisions that affect my work, Q) Senior managers are open and honest in their communications with me, Q) I think it is safe to challenge the way things are done where I work, Q) I believe that my workplace is free from bullying and harassment, and/or discrimination, Q) I am confident that if I raised an issue of bullying and harassment, and/or discrimination, it would be dealt with in an appropriate manner, Q) I believe actions will be taken on the results of this.

5.7 We will also be using our participation in the HR focused GLA Group Diversity and Inclusion Action standard to measure our performance and progress against other members of the GLA group.

# 6 Our Activity

#### **Leadership Development**

6.1 We have taken steps to ensure that suitably qualified Women and people from BAME communities are able to access senior, higher paid roles. We are already widening access to mentors and coaches and introducing targeted development programmes to identify the next generation of leaders from groups that are typically underrepresented. The successful outcome of these programmes will be a reduction in the gender and ethnicity pay gaps.

#### Mentoring

- 6.2 We are also placing a strong focus on internal mentoring over the coming performance year. Mentor Matching has recently been set up to link potential mentees to a suitable mentor. Our leaders have a wealth of knowledge and experience to share and perhaps even more importantly, understand the landscape, politics and idiosyncrasies of the business better than anyone. For mentees, this is a chance to explore individual personal goals and get a different perspective on careers and development opportunities in the organisation.
- 6.3 In June, we successfully launched our first ever cross company mentoring scheme with Fujitsu, for staff from BAME communities. Seven talented members of our Tech & Data department have been matched with mentors at Fujitsu to learn new ways of working from experts outside of TfL, and to develop those individuals who have been identified as high potential. An inaugural event was held on the 30 May 2018, with employees from both companies sharing tips and best practice on how to get the most from the mentoring process.

### Creating an Inclusive Culture within London Underground.

- 6.4 We are ensuring there is visibility and understanding of the secondment culture in London Underground Operations by mapping formal and informal secondments, including their original recruitment process and duration. By embedding good practice and identifying tactics and guidance for improvement, we will ensure we promote a truly meritocratic culture with clear links to recruitment.
- 6.5 Thus far the team have identified that within Network Operations 53 per cent were selected through an open recruitment campaign, 20 per cent were directly appointed due to business need or to provide development opportunities, and we have not been able to identify the process behind 27 per cent.
- 6.6 The team are now conducting a similar analysis within Renewals and Enhancement and Asset Operations.
- 6.7 As a result of the data and analysis conducted by the team, a new secondment controls process has been agreed with the D&I Subcommittee of the London Underground Executive Committee, chaired by the Managing Director of London Underground.

6.8 Going forward all secondments over 26 weeks will be openly advertised and tighter controls will be placed on the secondment extension process.

#### **Our Time**

- 6.9 We are leading supporters and partners of the Our Time initiative, coordinated by the GLA. The initiative will pair high potential women with senior female and male employees from across the GLA family, for a minimum of six months. Both the Commissioner and Chief People Officer attended the launch event led by the Mayor.
- 6.10 We will create our own criteria for selecting high potential women and senior staff will also be engaged to ensure they participate. This will ensure the initiative helps to develop the necessary diverse pipeline of well-prepared, confident and ambitious women that is essential to achieving gender parity in the workplace.
- 6.11 There will also be a training programme for both our mentors and mentees; along with a network they can access to support them through the process.
- 6.12 The GLA will be benchmarking and monitoring progress across the GLA family, as well as rolling out a toolkit and set of formal tools, guidance and learning materials. Each organisation across the GLA group have different issues, therefore TfL will adapt the toolkit to meet our own specific challenges.
- 6.13 Whilst the initiative will begin by focusing on women, over time we plan to use the methodology to focus on other groups that face barriers to progression and therefore experience pay inequality.

#### Work placement

- 6.14 We are launching our second Women in Construction work placement programme which gives more women the chance to realise the opportunities that the transport industry can offer them. More than fifteen women took part in the pilot programme, which was run in partnership with charity Gingerbread a not-for-profit organisation which supports single parents. The women come from a range of backgrounds some are single parents and others are looking to gain experience that they can then use to gain employment in the transport sector. We are also currently running a programme to encourage more women into Train Operator roles.
- 6.15 We are working in partnership with the Behavioural Insights Team, the Government Equalities Office and Harvard University. The partnership will use TfL data and the BIT's behavioural science expertise to understand how we can best tackle our gender pay gap. The project will see the Behavioural Insights Team:
  - (a) undertake background research to understand potential behavioural factors relevant to the Project;
  - (b) analyse our data to understand gender differences across the talent management process. This will review employee salary and bonus, pay grades, recruitment, promotion and retention data, demographic data, employee tenure and other relevant data;
  - (c) review our existing research and undertake additional qualitative research;

- (d) develop a behavioural interventions that seek to achieve the goals outlined in the discovery phase, where possible involving academic partners from Harvard: and
- (e) design a randomised controlled trial (RCT) to test the effectiveness of one or more interventions.

#### Recruitment

- 6.16 In June 2018, TfL opened a high volume recruitment campaign for the role of Trains Manager. This role is a senior operational role which manages our train operators.
- 6.17 Underpinning this campaign was activity to promote the number of applications for this position from underrepresented groups. This involved promoting positive role models in the recruitment material, promoting the recruitment campaign through our Staff Network Groups, along with roadshow events allowing potential candidates to speak with existing Train Managers.
- 6.18 This recruitment campaign was open to internal candidates, and provided a key opportunity for internal progression within London Underground.
- 6.19 The three week application window resulted in 1,889 applications for the 25 positions available. Both the applications and those who made it to the assessment stages were more diverse than the existing employee composition for London Underground.
- 6.20 This was especially prevalent for the attraction of BAME candidates, with 65 per cent of applications from BAME employees. This high proportion was maintained through to the assessment stages with 58 per cent of those who made it through to the assessment stages coming from a BAME background.
- 6.21 The gender split of applications for the Train Manager position was also higher than the existing London Underground employee composition, with nearly double the proportion of women making it through to the assessment stages.
- 6.22 The London Underground D&I team have been working with Recruitment colleague to develop a consistent approach across all campaigns. These include developing a template and accompanying guidance for all future campaigns.

#### **Anonymised CVs**

- 6.23 In Tech and Data an anonymised shortlisting pilot took place. As a result the percentage of women and BAME hires have increased: out of 332 people who were hired, 32 per cent were women, 47 per cent were from BAME communities and 3 per cent identified as disabled.
- 6.24 Finance also conducted a pilot, and out of 54 people appointed, 35 per cent are women, 34 per cent BAME and of Senior Manager appointments, 53 per cent are women. The majority of BAME hires came from internal populations promoting internal career progression for this underrepresented group. The majority of the diverse hires came from external sources increasing overall number of both women and BAME staff in TfL.

6.25 We have now chosen a supplier and from 2018/19 all recruitment will be anonymised.

#### **Awards**

- 6.26 In March 2018, we won the Recruitment Team of the Year award at the FIRM Awards for work including the Women on the Front-Line campaign. This programme helped to increase female participation in front line roles through station open days and job adverts which highlight positive female role models.
- 6.27 We were also commended for the outreach programme, 'Moving Forward'; this initiative targets deprived boroughs and girls' schools and aims to increase social mobility and attract more girls into apprenticeships involving science, technology, engineering and mathematics.
- 6.28 In June, we won the UK award for best work/life balance, as researched by the world's largest jobsite, Indeed, beating companies like Google and Apple to the top spot. This accolade was all the more rewarding as it was down to reviews left by current and previous employees rather than a judging panel. This award recognised that we offer more than just a salary, and seek to offer a good work/life balance through a good holiday allocation, flexible working hours and support offered by our Staff Network Groups. This allows our employees to feel supported and to deliver their best performance for our customers.

#### #BehindEveryGreatCity

- 6.29 As part of the Mayor's #BehindEveryGreatCity campaign, on the 21 March 2018, we launched a competition to encourage more children to think about the many ways women play an integral role in helping people travel around London.
- 6.30 Our WSNG has more than 1000 members, and have been passionate advocates of #BehindEveryGreatCity. They provide leadership and a forum for employees to meet fellow colleagues, giving them the opportunity to talk to each other, be supported and share advice. They also run a number of activities from tech masterclasses, speed mentoring and sessions on gender bias. There are a number of spin off groups, including Women in Tech, Females in Transport Engineering, and Male Allies.

#### Further activity in 2018/19

- 6.31 The creation of a mental health and emotional wellbeing strategy
- 6.32 A flexible working campaign that supports teams to learn from areas of TfL where this is done really well to balance the needs of staff and the business. Flexible working is a well established initiative that helps to retain talented staff, particularly women who are disproportionately likely to have family and caring responsibilities.
- 6.33 We are also focussed on identifying solutions for areas which may be more complex and challenging to incorporate flexible working, such as operational areas governed by rosters.
- 6.34 The piloting of a number of smaller projects designed to meet the needs of our diverse workforce, for example a Carer's passport, an Allies campaign to support our LGBT colleagues.

# List of appendices to this report:

None

# **List of Background Papers:**

None

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# Safety, Sustainability and Human Resources Panel

TRANSPORT FOR LONDON EVERY JOURNEY MATTERS

Date: 27 September 2018

Item: Transformation Programme Update

### 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 TfL is undertaking the largest ever review of our organisation to reduce costs and increase revenue. We are making good progress in turning an operating deficit into a surplus as set out in the TfL Business Plan.

# 4 Financial Update

- 4.1 We have already delivered more than £500m per annum of recurring, net operating savings and are on track to deliver £630m this financial year. This is part of our strategy to eliminate our deficit and deliver an operating surplus of £78m in 2021/22, rising to £153m by 2022/23:
  - (a) in 2016/17 we reduced our operating costs by £153m, the first such reduction in our history;
  - (b) in 2017/18 we reduced our like-for-like costs again by £215m;
  - (c) by the end of 2018/19, we are on track to deliver over £630m a year in operating costs; and
  - (d) over the course of our Business Plan (by 2021/22) this will have increased to £1.2bn a year.

# 5 Organisational Change Activity

5.1 Last year we launched consultation with staff and Trade Unions in three phases, covering 30 areas and 10,000 roles. All these business areas have now closed formal consultation and are live with their new structures. As a result, we have reduced senior management in these business areas by 25 per cent and reduced the total number of management and support roles by 1,770. Among other major structural changes, we have created a single Engineering Directorate and a single Major Projects Directorate.

# 6 Ongoing Transformation Activity

- 6.1 Following the completion this wave of Transformation activity, we will develop a continuing programme to ensure we maintain momentum in delivering our Business Plan. This includes reviewing our end-to-end processes.
- 6.2 Business areas are continually reviewing the way they work. Three further areas, including Human Resources leadership, Information Governance and Network Delivery launched consultation in July 2018. The proposed changes in Human Resources and Network Delivery will enable design work which may result in further organisational change at a later date.

#### List of appendices to this report:

None

**List of Background Papers:** 

None

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# Agenda Item 15

## Safety, Sustainability and Human Resources Panel

Date: 27 September 2018

Item: Update on Air Quality



# This paper will be considered public

# 1 Summary

- 1.1 This paper updates the panel on TfL's implemented and forthcoming key proposals to improve air quality.
- 1.2 It follows a previous update to the Panel on 28 February 2018.
- 1.3 This paper covers the following subjects:
  - (a) **Emission control zones**: Overview of the operation of the T-Charge, the planned Ultra Low Emission Zones (ULEZ) and changes to the Londonwide Low Emission Zone (LEZ)
  - (b) **Buses**: Update on the improvements to the bus fleet, including the roll out of the Low Emission Bus Zones (LEBZs)
  - (c) Charging infrastructure and Zero Emissions Capable (ZEC) taxis:
    Update on the rapid charging network, EV Infrastructure Taskforce and ZEC Taxis.
- 1.4 This is in addition to smaller scale and other initiatives not covered by this paper, such as the Mayor's Air Quality Fund (which funds borough behaviour change programmes and local traffic schemes) and TfL programmes to reduce car use (which benefit air quality).

#### 2 Recommendation

2.1 The Panel is asked to note the paper.

#### 3 Emission Control Zones

#### T-Charge

- 3.1 The T-Charge was launched on 23 October 2017, in response to the Mayor's commitment to immediately tackle the worst polluting vehicles in London. It operates as an add-on to the congestion charge. As a result of the T-Charge, within the Congestion Charging Zone all vehicles need to meet Euro 4 emissions standards or pay an additional £10 on top of any congestion charges.
- 3.2 Discounts and exemptions are the same as those for the Congestion Charge, except that non-compliant 9+ seater vehicles need to pay the T-Charge, and there is an additional exemption for historic vehicles from the T-Charge.

- Residents of the Congestion Charging zone receive a 90 per cent discount on the charge.
- 3.3 Since the Mayor confirmed the T-charge on 17 February 2017, there has been a steady fall in the number of non-compliant vehicles in the Congestion Charging Zone.
- 3.4 There are now, on average, around 1,300 fewer non-compliant vehicles entering the Congestion Charging zone every day when compared to the week prior to the T-Charge implementation. Over 95 per cent of vehicles now meet the emissions standards.
- 3.5 Approximately 1,300 vehicles per day pay the daily charge. Approximately 230 Penalty Charge Notices (PCNs) per day are issued. This is approximately the same number of PCNs issued to pre-Euro 4 vehicles for non-payment of Congestion Charge prior to the implementation of the T-Charge.

#### The Ultra Low Emission Zone (ULEZ)

- 3.6 The ULEZ will commence operation in April 2019, initially covering the same area as the original Congestion Charging zone.
- 3.7 The ULEZ will apply 24 hours a day, every day of the year, and will require all vehicles to meet emissions standards or pay a daily charge.
- 3.8 The required standards are:
  - (a) Euro 4 for petrol vehicles;
  - (b) Euro 6 for diesel vehicles; and
  - (c) Euro 3 for motorcycles, scooters and similar vehicles.
- 3.9 The charge levels for vehicles which do not meet these standards is:
  - (a) £12.50 for cars, vans, motorcycles and similar vehicles; and
  - (b) £100 for buses, coaches and heavy goods vehicles.
- 3.10 Discounts and exemptions are highly limited and in line with the Low Emission Zone. They include taxis, plant machinery, military vehicles and historic vehicles.
- 3.11 Residents will not be permanently exempt, but will receive a time limited sunset period, to allow additional time to comply with the scheme.
- 3.12 The ULEZ will supersede the T-Charge when implemented, except for residents, who will continue to pay the charge at a discounted rate until the end of the sunset period.
- 3.13 As a result of introducing ULEZ in central London in April 2019, instead of September 2020 (as originally planned), there is expected to be an additional 20 per cent reduction in NOx emission from road transport in central London in 2019. This is over and above the emission savings that were already expected in 2019 as a result of the people switching to cleaner vehicles or changing their travel behaviour to get ready for the original September 2020 start date.

#### **Supporting activity**

- 3.14 In order to raise awareness of the forthcoming scheme and to help Londoners' prepare for the scheme, a range of activity is underway. The ULEZ marketing and communications campaign commenced on 21 May. It is a comprehensive multi media campaign using channels such as:
  - (a) Large format roadside posters
  - (b) Posters at bus stops
  - (c) Video on demand (i.e. ITV and Channel 4 catch up)
  - (d) Digital display on third party websites
  - (e) Social media and emails using the TfL database
  - (f) Press ads in London media
  - (g) National press and specialist press targeting commercial vehicle owners
- 3.15 We are undertaking extensive stakeholder engagement, including messaging and information as part of regular engagement work and targeted stakeholder engagement. Detailed information and advice on how Londoners can prepare is also provided on the TfL website, including a tool to enable vehicle owners to check their vehicles compliance status.
- 3.16 To support the implementation of the central London ULEZ we are deploying a multifaceted communications strategy to explain to Londoners the action we are taking and why it is important.

#### **Expansion of the ULEZ standards**

- 3.17 On 6 June 2018 the Mayor announced the following changes to the LEZ and ULEZ
  - (a) a strengthening of the LEZ standard so that from October 2020 all Buses, Coaches and HGVs will need to meet the Euro VI standard London-wide or pay a £100 daily charge;
  - (b) an extension the ULEZ for cars, vans and motorcycles out to an area roughly bounded by the North and South Circular Roads from October 2021 so that all these vehicle types will need to meet the ULEZ emission standards or pay a daily charge of £12.50;
  - (c) bringing forward the end of sunset period for residents of the Congestion Charging zone to October 2021, so that all residents of the inner zone are subject to the ULEZ charge; and
  - (d) increasing the PCN for non-payment of the ULEZ for light vehicles from £130 to £160 in line with the PCN for non-payment of the Congestion Charge.
- 3.18 There were over 37,500 responses to the consultation, the most responses of any consultation since the formation of TfL. A summary of levels of support and opposition to the proposals is set out below:

Question	Support /	Oppose /	Other
	Strongly Support	Strongly Oppose	
Principle of strengthening	73%	21%	6%
LEZ standards			
Principle of expanding the	56%	40%	4%
ULEZ			
Reduction in sunset period	51%	38%	12%
Increase in PCN	46%	42%	12%

- 3.19 In response to the consultation, additional sunset periods (time limited 100 per cent discounts from the daily charge) have been introduced to reduce the impact on some user groups. These are as follows:
  - (a) an extension in the sunset period for disabled tax class vehicles until October 2025:
  - (b) introduction of a sunset period for wheelchair accessible private hire vehicles until October 2025; and
  - introduction of a sunset period for minibuses operated under section 19 or section 22 permits by not for profit organisations from October 2021 until October 2023
- 3.20 The independent integrated impact assessment of the ULEZ/LEZ scheme also highlighted potential negative impacts due to the scale of the expanded scheme. These additional sunset periods help to mitigate these impacts.
- 3.21 As a result of the proposals to expand ULEZ and tighten LEZ, in 2021 there will be:
  - (a) Over 100,000 fewer people living in areas exceeding legal NO<sub>2</sub> limits London-wide
  - (b) 77 per cent reduction London-wide, 96 per cent reduction in Outer London
  - (c) 71 per cent fewer schools in areas exceeding legal limits

#### **Zero Emission Zones / Ultra Low Emission Vehicle streets**

- 3.22 The Mayor has set an ambition of aim of London becoming a "Zero Carbon City by 2050". To support this, the Mayor's Transport Strategy (MTS) includes a road map to zero emission road transport. A key element of this road map is the creation of Zero Emission Zones (ZEZ), starting with smaller local zones (a few streets) from 2020, with larger zones being rolled out across London, until by 2050 the whole of London is effectively a ZEZ.
- 3.23 Alongside other measures, such as providing charging infrastructure and Government action to incentivise Ultra Low Emission Vehicles (ULEVs)1 and Zero Emission Vehicles (ZEVs), ZEZs are expected to play a key role in accelerating new ULEVs/ZEVs being brought to market and their adoption by those that drive in London. Whilst it is not their primary intended objective.

<sup>&</sup>lt;sup>1</sup> Vehicle with reduced emissions of air pollutants and CO<sub>2</sub>, including battery electric, hydrogen fuel cell electric, plug-in hybrid and range-extended electric vehicles.

- ZEZ can also be used to encourage more walking and cycling and improve air quality.
- 3.24 The London Borough of Hackney has recently introduced a "ULEV streets" scheme. This is a few streets in Shoreditch that are closed to motorised traffic during peak times, except for ULEVs. It is funded through the Mayors Air Quality Fund.
- 3.25 TfL will be issuing guidance for boroughs introducing similar schemes that in early 2019 to enable them to develop and implement such schemes via their Local Implementation Plans.
- 3.26 TfL will also be exploring the feasibility of a larger scale zero emission zone in central London from 2025, subjected to detailed assessment and consultation.

#### 4 Buses

4.1 We are undertaking an ambitious programme to reduce tailpipe emissions from the bus fleet. TfL buses are responsible for approximately 20 per of road transport NOx emissions Londonwide2.

#### **Buses and the ULEZ**

- 4.2 The Mayor has confirmed that all TfL buses should meet the same Euro VI requirement in central London as other heavy vehicles and private buses from April 2019.
- 4.3 Euro VI buses have shown a significant reduction in oxides of nitrogen (NOx) in real world test conditions of around 80-90 per cent compared an equivalent Euro V bus.
- 4.4 Over 75 per cent of the bus fleet serving central London is now ULEZ compliant. All double decker buses serving central London will be hybrid and meet Euro VI engine emissions from April 2019, and all single decker serving central London will be zero-emission at tailpipe by 2020. This will be achieved through a combination of introducing new vehicles on new contracts, or by retrofitting buses to this higher standard.
- 4.5 TfL is also ensuring that the entire bus fleet meets the wider ULEZ and LEZ requirements by October 2020 at the latest. Over 5,000 of London's 9,000 buses currently meet the latest Euro VI emissions standard.

#### **Low Emission Bus Zones**

4.6 Another initiative to tackle the worst pollution hotspots by prioritising cleaner buses on the higher emission corridors, are Low Emission Bus Zones (LEBZs). These are being introduced ahead of the entire fleet meeting the ULEZ standard by October 2020.

<sup>&</sup>lt;sup>2</sup> Source: LAEI2013

- 4.7 All buses travelling along these zones will meet Euro VI emissions, either through the introduction of new vehicles on new contracts, or through retrofitting older mid-life buses.
- 4.8 Where possible and cost effective, bus priority will be delivered to keep buses flowing as effectively as possible to help maximise the benefits of the cleaner vehicles as well as cut journey time for bus passengers.
- 4.9 Current proposals are to introduce 12 LEBZs to drive down oxides of nitrogen and particulate matter along specific zones outside the central London ULEZ. These represent the most extensive network of clean buses zones of any major world city.
- 4.10 In addition, the benefits of operating low emission buses will be felt across the capital as the buses operate beyond the zones, along the full length of their routes. The changes are expected to reduce the most harmful bus emissions across the 12 zones by around 80 per cent.
- 4.11 Last year, two LEBZs were launched along Putney High Street and between Brixton to Streatham. Since then both areas have seen marked reductions in harmful emissions and positive borough publicity.
- 4.12 Initial results for Putney High Street between 2016 and 2017 show:
  - (a) Around a 90% reduction in hourly mean exceedances (NO<sub>2</sub>), and;
  - (b) Around a 40% reduction in annual mean exceedances (NO<sub>2</sub>).
- 4.13 Further monitoring and detailed assessments are ongoing.
- 4.14 The remaining 10 LEBZs are:
  - (a) Lewisham to Catford from Bromley Road, along Lewisham High Street to Lewisham Road;
  - (b) A12 Eastern Avenue from Homerton High Street along Homerton Road, Warren Road, Gainsborough Road, Cambridge Park Road to Eastern Avenue:
  - (c) Stratford from Mile End Road to Romford Road;
  - (d) Haringey from High Road to Green Lanes;
  - (e) Camberwell to New Cross from Camberwell New Road, along Peckham High Street to New Cross Road;
  - (f) Wandsworth to St John's Hill from Lavender Hill to Wandsworth Road;
  - (g) Edgware Road (Kilburn to Maida Vale) from Cricklewood Broadway via Shoot-Up Hill to Kilburn High Road;
  - (h) Edmonton to Seven Sisters from Hertford Road High Street via Fore Street to Seven Sisters Road;
  - (i) Uxbridge Road to Shepherds Bush from Uxbridge Road via Ealing Broadway, The Vale to Uxbridge Road; and
  - (j) Chiswick High Road to Kensington from Chiswick High Road via Hammersmith Broadway to Kensington High Street
- 4.15 These will be delivered in phases before October 2020.

#### The future

- 4.16 The Mayor's overall ambition is to transition the bus fleet away from fossil fuels altogether and move to a zero-emission tailpipe fleet by 2037 at the latest.
- 4.17 TfL continues to introduce progressively zero-emission vehicles into the fleet as technology, principally pure-electric and hydrogen fuel-cell, becomes available and becomes more cost effective.
- 4.18 London already boasts one of the largest electric bus fleets in Europe.

  Currently there are 91 all-electric single deck buses in the fleet and five double deck buses. By the end of the year, we will be introducing over 30 pure electric single deck buses into the fleet, taking the total number to well over 100 pure electric buses in the fleet, which is a significant achievement. There are also 10 hydrogen fuel cell buses operating in London.
- 4.19 Sixty eight electric double deck buses are on order for two routes (43 and 134), which will join the bus fleet in summer 2019. With this landmark order it means the largest pure electric double-deck bus fleet in Europe will help reduce emissions across the capital next year.
- 4.20 During this transition from diesel to pure electric, the fleet is increasingly becoming hybrid with the diesel engine combining with an electric motor powered partly by regenerative braking. Over 3,000 buses in the fleet use this technology to help cut CO2 emissions by up to a quarter and reduce the impacts of climate change.

# 5 Charging Infrastructure and ZEC Taxis

- 5.1 Emissions from taxis are being addressed through revised licencing requirements. Since the start of the year, all newly licensed taxis have to meet Zero Emission Capable (ZEC) requirements, meaning that they need to have a minimum electric range of 30 miles (although the new ZEC taxis available now can achieve 70 miles), emit <50g of CO2 per km and the combustion part of any engine must not be powered by diesel. As of 18 September 2018, there are 522 licenced ZEC taxis.
- 5.2 To support the uptake of these vehicles, TfL is rolling out a network of rapid charge points. As of August 2018, TfL has supported the installation of 116 rapid charge points in London, with 57 dedicated to taxis. There are a further 55 publicly available rapid charge points funded and operated by third parties.
- 5.3 Six points have been delivered on borough land, 32 at private sites and the remainder on TfL land or highway.
- 5.4 We are on course to deliver 150 TfL funded rapid charge points by the end of 2018 and 300 by the end of 2020. We are now seeking to identify the best deployment strategy for the remaining rapid charge point funding.
- 5.5 London boroughs have been slow to identify sites for rapid charge points, and there is inconsistency in how rapid charge point planning and policies are dealt with across boroughs. A London Councils Transport and Environment

Committee (TEC) sub-group has recently been formed to respond to these issues.

- 5.6 To address the wider questions of how many more charge points we will need in London, of which type, and where to put them by when, the Mayor launched the EV Infrastructure Taskforce on 31 May 2018. The Taskforce is chaired by the Deputy Mayor for Environment and Energy and is supported by TfL.
- 5.7 The Taskforce will oversee the development of an EV Infrastructure Delivery Plan, which will be informed by a series of workshops with a wide range of stakeholders, including boroughs, major landowners, EV charge point providers and energy infrastructure operators. The Delivery Plan will propose solutions for the major barriers to additional charging infrastructure, as well as indicating the scale of infrastructure London will need by 2025. The shared Delivery Plan will be published in spring 2019.

#### 6 Conclusions

- 6.1 Tackling dangerous air quality if one of the biggest challenges London faces, which is why it is a top priority for the Mayor. The action underway to address this, particularly the transport measures being implemented by TfL, are arguable the most ambitious of any world city facing similar challenges.
- 6.2 However, despite the action undertaken, further reductions in NOx emissions are needed for London to achieve compliance with legal limit values as quickly as possible.
- 6.3 It is not possible for the Mayor and TfL to tackle this problem alone, which is why we must continue to lobby others, particularly Government, to act and provide the financial support needed to fully clean up London's air and tackle climate change.

#### List of appendices to this report:

None

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

None

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# Safety, Sustainabiliy and Human Resources Panel

Date: 20 June 2018



Item: Members' Suggestions for Future Discussion Items

# 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

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# Safety, Sustainability and Human Resources Panel Forward Planner 2018/19

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

27 September 2018				
Quarterly Health, Safety and Environment Performance Reports (to include resilience, assurance and compliance issues)	D HSE	To note.		
Vision Zero Update	D City Planning	To note		
Bus Safety Programme Update	MD ST	To note.		
Safety at Roadworks	MD ST	To note (addresses Board action on impact on vulnerable road users)		
Workplace Violence	D HSE	To note.		
Safeguarding	D D&I	To note		
Human Resources Quarterly Report	СРО	To note.		
Air Quality Update	MD ST	To note.		
Transformation Update	D. Transformation	Standing Item		

5 December 2018				
Quarterly Health, Safety and Environment Performance Reports (to include resilience, assurance and compliance issues)	D HSE	To note.		
Human Resources Quarterly Report	СРО	To note.		
Graduate and Apprentice Update	СРО	To note.		
HSE Annual Report	D HSE	To review prior to submission to Board		
Fatigue Management Update	D HSE			

# SSHRP Forward Planner 2018/19

River Safety Strategy	D HSE	To note.
Review of CIRAS Report and Themes	D HSE	Annual review to note.
Crime Statistics (including hate crime)	D HSE	To note
Responsible Procurement and Safety	Chief Procurement Officer	To note.
The Green Estate	D City Planning	To note
Transformation Update	D. Transformation	Standing Item
Informal Briefing: Transformation	D. Transformation	

27 February 2019				
Quarterly Health, Safety and Environment Performance Reports (to include resilience, assurance and compliance issues)	D HSE	To note.		
Human Resources Quarterly Report	СРО	To note.		
Maximising Potential and Succession Planning	СРО	To note.		
Bus Driver Facility Improvements	Managing Director, Surface Transport	To note. (6 monthly standing item)		
Transformation Update	D. Transformation	Standing Item		
Informal Briefing: Transformation	D. Transformation			