

## Agenda - Supplementary

**Meeting: Joint Meeting of the Safety, Sustainability and Human Resources Panel and the Customer Service and Operational Performance Panel**

**Date: Wednesday 10 June 2020**

**Time: 10.00am**

**Place: Teams Virtual Meeting**

**Members (Safety, Sustainability and Human Resources Panel)**

Kay Carberry CBE (Chair)  
Dr Nina Skorupska CBE (Vice-Chair)  
Bronwen Handyside  
Dr Mee Ling Ng OBE  
Mark Phillips

**Members (Customer Services and Operational Performance Panel)**

Dr Mee Ling Ng OBE (Chair)  
Dr Alice Maynard CBE (Vice-Chair)  
Bronwen Handyside  
Anne McMeel  
Dr Lynn Sloman

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

**As provided for under section 100B(4)(b) of the Local Government Act 1972, the Chair is of the opinion that these items should be considered as late items as information in relation to the papers were not available at the time that the agenda and papers were published.**

### Further Information

If you have questions, would like further information about the meeting or require special facilities please contact: James Varley, Secretariat Officer, 020 7983 4613; email: [JamesVarley@TfL.gov.uk](mailto:JamesVarley@TfL.gov.uk).

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

Howard Carter, General Counsel  
Friday 5 June 2020

## **Agenda**

### **Safety, Sustainability and Human Resources Panel Wednesday 10 June 2020**

#### **5 Quarterly Safety, Health and Environment Performance Report** (Pages 1 - 46)

Chief Safety, Health and Environment Officer

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

#### **6 Update on TfL's Safety and Health Response to Covid-19** (Pages 47 - 52)

Chief Safety, Health and Environment Officer

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

#### **7 Rail Accident Investigation Branch Annual Report** (Pages 53 - 54)

Chief Safety, Health and Environment Officer

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



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## Joint meeting of the Safety, Sustainability and Human Resources Panel and the Customer Service and Operational Performance Panel

**Date:** 10 June 2020

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

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### This paper will be considered in public

#### **1 Summary**

- 1.1 The Quarterly report is a standing item on the agenda for the meetings of the Safety, Sustainability and Human Resources Panel. It provides a summary of the key points from the Quarter 4 Safety, Health and Environment Report for 2019/2020.

#### **2 Recommendation**

- 2.1 **The Panels are asked to note the report.**

#### **3 Background and current status**

- 3.1 At the time of writing the health and safety of our transport network has been brought more sharply into focus than ever before during the ongoing coronavirus pandemic. Since the Government introduced lockdown measures on 23 March 2020, we have been working to ensure the safety of London's critical workers and our own people, while ensuring essential services and deliveries can continue. 43 people who work for or are contracted to work for TfL are believed to have died of Coronavirus infection, 29 of whom were bus workers. We are doing all we can to support their families and will continue to do so.
- 3.2 The Quarter 4 SSHRP report covers the period 8 December 2019 – 31 March 2020 and largely falls before the coronavirus pandemic. Consequently, although we identify impacts where possible, they are not the focus of this report.
- 3.3 An initial summary of actions and lessons to date from the Covid-19 pandemic has been captured and is presented as a separate paper to the Committee. We are continuing to adjust through the current evolving situation, which presents us with new safety, health and environmental challenges that we must plan for and manage in the future and we will provide further updates to the Committee in subsequent meetings.
- 3.4 The Quarter 4 report sets out performance of TfL-operated services and of London's road network. In addition, and the Committee's request, this report also includes information on the safety performance of the Crossrail project.

## **Quarter 4 Customer Injuries**

- 3.5 There were 2,718 customer injuries across the public transport network in Quarter 4 2019/20, a decrease of six per cent when compared with Quarter 4 2018/19.
- 3.6 The largest reduction was on the London Underground, which saw a reduction from 1,325 to 1,178, equating to a 11 per cent fall in customer injuries in one year.
- 3.7 There was a slight increase of 0.3 per cent for bus occupant injuries when compared to Quarter 4 last year, with four more injuries recorded.
- 3.8 Injuries on other operations, which includes Dial-a-Ride, Santander Cycles, and taxi and private hire reduced by 40 per cent for the quarter from 2018/19 to 2019/2020. This equates to 19 fewer injuries over this period.
- 3.9 Rail customer injuries increased by six percent from 129 to 171 in the quarter, a rise that is associated with improved staffing levels and reporting procedures. Most customer injuries happened on TfL Rail (50 per cent), followed by London Overground (33 per cent), DLR (13 per cent) and trams (4 percent).

## **RIDDOR reportable injuries**

- 3.10 There were four reportable customer injuries during Quarter 4, all of which were on London Underground. These were notified to our regulator. All were a result of slips, trips and falls. One passenger was killed on 13 December 2019, when a man fell onto the track at High Barnet station.
- 3.11 There were ten notifiable workforce injuries. Four of which involved maintenance and construction activities, one manual handling injury at Dial-a-Ride and one during revenue protection activity on a bus where a member of staff was injured when stairway glass broke.

## **Road Safety**

- 3.12 A total of 33 people were killed on London's road in Quarter 4. This is an increase from 26 during this period in 2018. Of those people killed in road traffic collisions over half were vulnerable road users: 12 people walking, six people motorcycling, and one person cycling.
- 3.13 Provisional figures for Quarter 4 show the number of people killed or seriously injured combined fell approximately 12 per cent compared to the same quarter last year.
- 3.14 Analysis of road safety data for the period covering the COVID-19 lockdown from 23 to 31 March showed substantial reductions in serious injury, however the proportion of recorded collisions that were fatal or serious increased, in particular amongst people walking and cycling, when compared to last year. Over a quarter of those deaths were speed related and the proportion of speed related factors assigned to serious collisions almost doubled during this period. We have monitored this situation closely and worked with the Metropolitan Police to deploy

enforcement to the most high-risk locations. A more detailed analysis covering the lockdown period will be presented in the next report.

### **Workforce injuries**

- 3.15 Three operational staff members within London Underground were seriously injured in this quarter and three construction workers were seriously injured.
- 3.16 This quarter recorded a total of 505 workforce injuries (decrease of 17 per cent on Quarter 4 2018/19), 284 workforce injuries for our directly employed buses staff (decrease of 23 per cent on Quarter 4 of 2018/19), and 53 construction related injuries (increase of 4 per cent on Quarter 4 2018/19).

### **Workforce Violence**

- 3.17 There were 1,211 reports of violence against our workforce during the quarter. Of the reported total 388 were physical assaults and 823 were non-physical verbal abuse. There has been almost no variation of reported violence compared 1,228 reports in Quarter 4 2018/19

### **Sickness, Absence and Wellbeing**

- 3.18 Sickness absence was 5.2 per cent in Quarter 4 2019/2, compared to 5.0 per cent in the same quarter last year. The main causes of sickness absence continue to be mental health, musculoskeletal, coughs or colds, and accidents or assaults. There has been minimal year-on-year change in these causes.
- 3.19 A total of 103,387 days were lost to sickness (increase of 3.7 per cent on Q4 2018/19).

### **Environmental Performance**

- 3.20 Compliance with the Ultra-Low Emission Zone (ULEZ) continues to increase. In January 2020, it was 79.1 per cent, which is significantly higher than 39 per cent in February 2017 and 61 per cent in March 2019.
- 3.21 The programme to retrofit the bus fleet and replace older buses to meet the ultra-low emissions standard is now complete. As of March 2020, 230 fully electric buses entered the fleet and 61 Dial-a-Ride ultra-low emission buses are now operating.
- 3.22 A total of 249 rapid charging points were installed by the end of March 2020 with additional charging points coming online in 2020.
- 3.23 This quarter we will report a 70 per cent recycling rate across our head office buildings and we installed five water fountains in collaborations with the GLA and Thames Water.

**List of appendices to this report:**

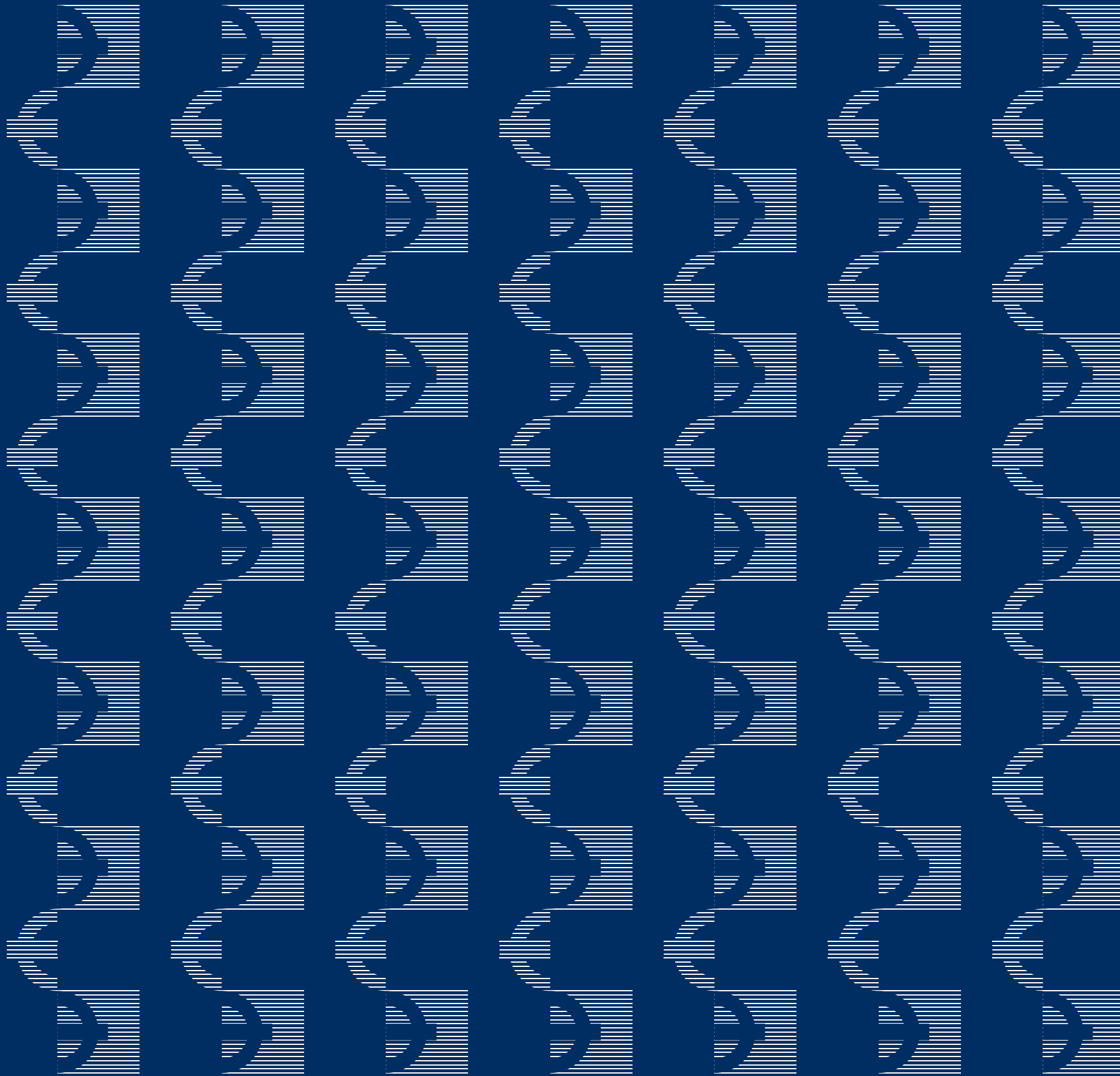
Appendix 1 – 2019/2020 Quarter 4 Safety, Health and Environment Performance Report

**List of Background Papers:**

None

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# Transport for London safety, health and environment report

Quarter 4 (8 December 2019 – 31 March 2020)

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# Introduction

Never has the health or safety of our transport network been more sharply brought into focus than during the ongoing coronavirus pandemic. Since the Government introduced lockdown measures, we have worked to ensure the safety of London's critical workers and our own people, while ensuring essential services and deliveries can continue. We have adjusted our approach through this evolving situation, which presents us with safety, health and environmental challenges that we must anticipate and manage in the future. This report covers the period up to 31 March, a period that tragically saw the loss of two bus drivers and a bus controller to COVID-19. Our thoughts are with their families and friends at this time.

The mental health and wellbeing of our staff is a key focus during this unprecedented time. We are providing additional support for staff and managers, including a new podcast channel, online group training sessions in managing mental health and a dedicated coronavirus website. We have also extended our employee assistance programme to give operational staff suffering with mental health issues greater access to support and counselling.

The safety and sustainability of our network is central to everything we do. We are working to a Vision Zero target to eliminate deaths and serious injuries across the transport network and will continue to work towards this during the pandemic. We are also committed to reducing our carbon footprint and making London a cleaner, greener and better place to live.

These commitments go beyond our legal and regulatory obligations and represent our ambition to drive and lead change in our own operations and beyond. This report describes our progress in meeting these objectives and presents our performance results for Quarter 4 2019/20, between 8 December 2019 and 31 March 2020. It also summarises our key safety, health and environmental improvements during the quarter and looks ahead to Quarter 1 of 2020/21.

Although only affecting the last part of the quarter, the coronavirus pandemic will have a profound impact on our transport network and our people. Although the full consequences cannot be reliably predicted, we have identified the impact of the pandemic where possible in this report. Our subsequent reports will provide more details on the effects and how we are adjusting our strategies to continue to improve our performance within the new context that the pandemic has created.

Although there was an overall reduction in the number of people killed or seriously injured in road collisions compared to the same period last year, 33 people were tragically killed in collisions on our roads and our thoughts are with their families and friends. Most of these people were travelling in cars, on motorcycles or walking, and one person was cycling.

Police data shows the number of people killed or seriously injured in collisions involving buses has fallen compared to the same quarter last year. Nevertheless, improvements to the safety performance

of buses remains a high priority and we continue to work with operators to roll out the Bus Safety Standard, driver training and a range of other initiatives that are described in this report. Fatigue management is another major theme for buses and will be discussed in this report.

The number of people using our services who were killed or seriously injured decreased by 14 across all our transport modes this quarter compared with the same quarter last year. This represents a 3.6 per cent reduction.

Despite this positive trend, injuries on escalators and trips between the train and platform continue to be a significant challenge on the London Underground. Notably, falling between the train and platform accounted for almost 25 per cent of all injuries. The number of injuries recorded on TfL Rail increased and, while some of this is attributable to improved reporting methods, we are reviewing the data to see where we can improve safety.

Across TfL, there was a 9.9 per cent increase in working days lost to sickness when compared with the same time last year. This reflects an increase in the top four causes of sickness absence, the largest of which relates to mental health, which has increased by nine per cent compared to the same quarter last year.

We continue to implement measures to improve London's air quality and have increased the number of compliant vehicles in the Ultra Low Emission Zone (ULEZ) by 18.2 per cent compared to Quarter 4 2018/19.

During this quarter, we launched west London's first all-electric double-deck bus route. The electrification of route 94 follows the 43 and 134 routes in 2019, and brings the total number of electric buses in the capital to 230. New ultra-clean Dial-a-Ride buses also joined the fleet this quarter. The 61 new buses feature the latest specifications to provide greater accessibility and enable us to operate an uninterrupted door-to-door service. A further 105 Dial-a-Ride buses are on order.

This report also details our work to support zero-emission taxis and the progress on the 247 charging points that are being installed across London. New charging points have been installed at New Cross Gate depot for London Overground vehicles. Keolis Amey, which operates the DLR, has installed electric charging points at Poplar, with four new electric vehicles supporting operations in this quarter. We plan to install more charging points in 2020.

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**Gareth Powell**  
Managing Director, Surface Transport

**Andy Lord**  
Managing Director, London Underground

**Stuart Harvey**  
Managing Director, Major Projects

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



# Business at a glance

## How we report on our business

### Underground

London Underground

### Elizabeth line

Currently operating as TfL Rail

### Buses

London Buses

### Streets

Transport for London Road Network

### Rail

DLR, London Overground and London Trams

### Other operations

London Dial-a-Ride, London River Services, London Taxi and Private Hire, Santander Cycles, Victoria Coach Station and Emirates Air Line

### Major projects

Responsible for our largest and most complex projects

### Property

Our commercial and residential estate and building portfolio

### Media

Advertising estate and digital marketing infrastructure

### Professional services

Includes all areas of finance, human resources, legal, communications and marketing

## Facts and figures

**979** Trains on the TfL network



**580km**

TfL-operated highways



**755km**

TfL-operated Rail and London Underground routes



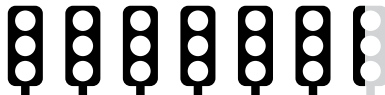
**9,330**

Buses on the TfL network



**6,300**

Traffic signals operated by TfL



We operate and manage a range of services across the Capital



# Mayor's Transport Strategy themes

Our role is to keep London working and moving safely and sustainably, helping to achieve the goals of the Mayor's Transport Strategy. We work in partnership with London's boroughs, businesses, local communities, consumer organisations and others. The Mayor's ambitious plan will increase the attractiveness of public transport and make cycling and walking easier and more convenient options.

## Scorecard measures

We use a scorecard to measure our performance against the Mayor's Transport Strategy. In this report, the scorecard measures are marked with this icon:







Our Vision Zero ambition focuses on eliminating deaths on our roads

# Performance summary

The methodology used to identify serious customer and workforce injuries has been reviewed to improve accuracy. Our previous definition included all those where the injured party was taken to hospital for observation or treatment, which meant many minor injuries were incorrectly identified as serious.

We have developed a new, more accurate, methodology that classifies severity by the type of injury. This method is in line with the approach required by the Department for Transport for reporting road injuries and enables our reporting to be more consistent across the different modes. We will be using this method, in parallel with the old approach, for several months so that we can establish a robust baseline with the new methodology.

Where appropriate and for clarity, this report will show the results of the existing methodology alongside the new proposed methodology, which will be labelled.

Throughout this report, our customers refers to direct users of our services, our workforce may include our directly employed staff as well as people working in our supply chain, and our streets refers to all casualties on London's roads, including borough streets, using data collected by the Metropolitan Police Service (MPS) and City of London Police.

## Our customers

One of our customers tragically died when they fell on to a London Underground track. Our thoughts are with their families and friends. During this quarter, 373 customers were seriously injured across all modes of travel, which is a 3.6 per cent reduction on the same quarter last year.

## Our workforce

During the quarter, 284 directly employed members of TfL staff were sadly injured. There were no fatalities during this time. The total number of injuries sustained by our workforce in the quarter decreased by 74 (19 per cent) when compared to the same period last year. Across our construction and projects activities, 50 people were injured, most of whom were working for our suppliers (63 per cent).

## Our streets

Between 1 October and 31 December 2019, 33 people were tragically killed on London's roads, up from 26 for the same period in 2018/19. This includes three people who sadly died following collisions with a London bus. The total number of people killed or seriously injured during this period was 933, a decrease of 12 per cent from the same time in 2018/19 and the lowest number since Quarter 1 2018/19.

By the end of the quarter, new road risks were appearing as a result of the coronavirus lockdown, particularly around speeding motorists. These will be examined in full in our next report.

## Reporting period

Most data covers the financial quarter (8 December 2019 to 31 March 2020). The exception to this is in the Buses and Streets chapters. For some graphs, we rely on data captured by the Metropolitan Police Service in calendar months, and the most recent data available is reported one quarter in arrears. Where this is the case, we note it next to the graph.



# Our customers

This section looks at overall performance against key safety measures before analysing each mode.

Tragically, one of our customers died on 13 December 2019 when they fell on to the track at High Barnet Tube station. Our thoughts are with their family and friends. There were 2,718 customer injuries of all severities across the public transport network this quarter, which is a decrease of six per cent when compared with Quarter 4 2018/19.

The largest reduction in customer injuries was on the Underground, which saw a reduction from 1,325 to 1,178 compared to the same quarter last year. This is a decrease of 11 per cent. There was a corresponding fall in serious injuries of 151 (41 per cent) compared to the same time last year.

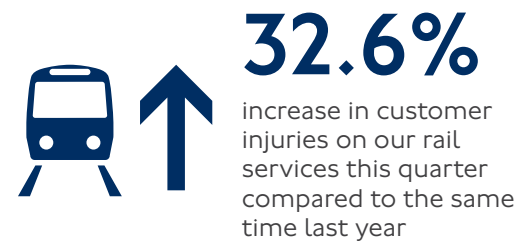
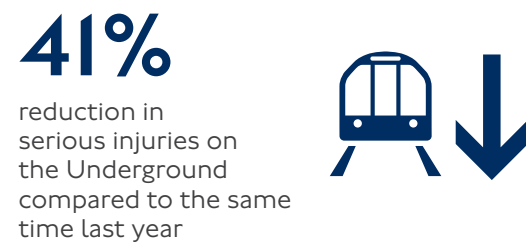
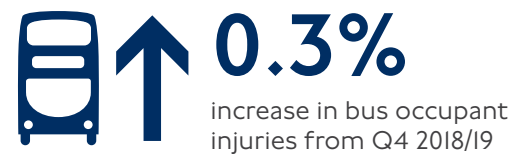
According to bus operator data, there was a 0.3 per cent increase in bus occupant injuries when compared to Quarter 4 last year, with four more injuries recorded.

Injuries on other operations, which includes Dial-a-Ride, Santander Cycles, and taxi and private hire, reduced by 40 per cent for the quarter from 2018/19 to 2019/2020. This equates to 19 fewer injuries.

The number of customers injured on our rail services increased from 129 to 171 (25 per cent). Most customer injuries happened on TfL Rail (50 per cent), followed by London Overground (33 per cent), DLR (13 per cent) and trams (four per cent).

## Reportable incidents

Incidents that were reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) and that were reportable to the Office of Rail and Road (ORR) included the tragic death of a customer at High Barnet Tube station in December 2019. There were also four serious reportable customer injuries during this quarter, all of which were on London Underground and were a result of slips, trips or falls.



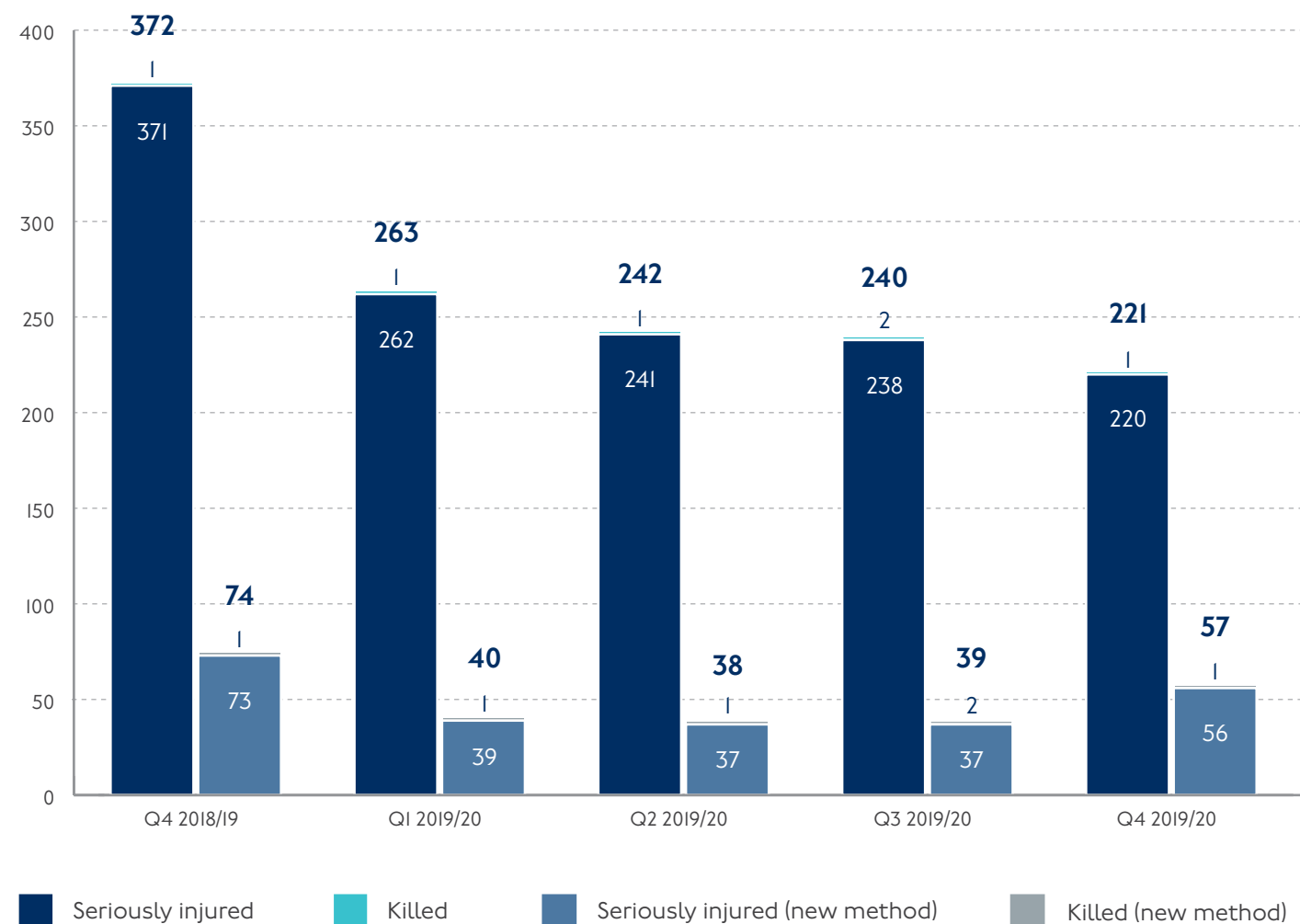
There were fewer injuries on our transport modes compared to last year



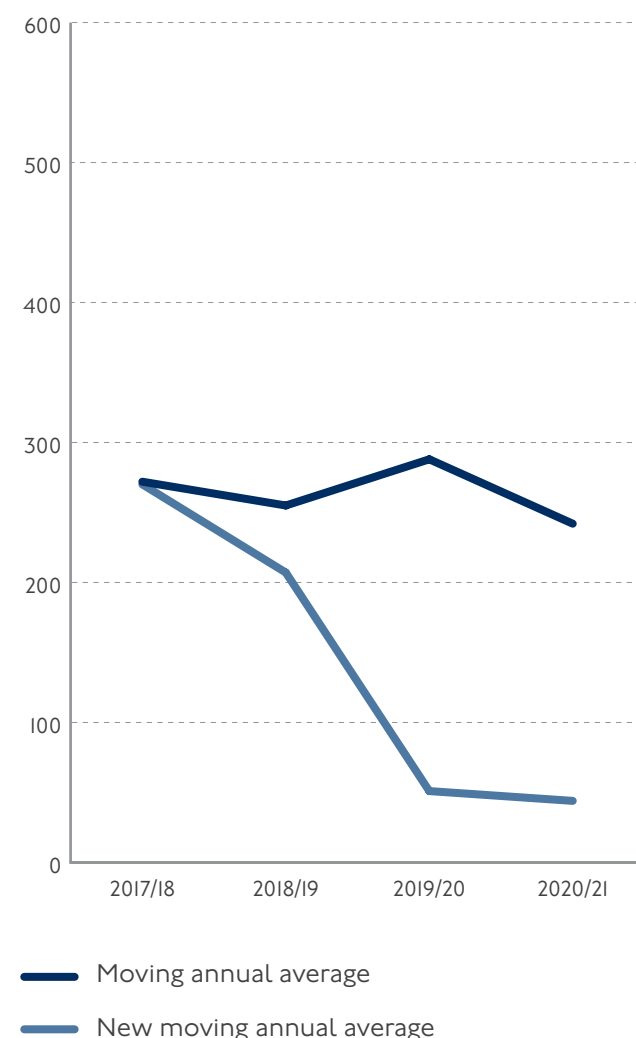
# Underground

This section looks at how we operate the safest possible railway for our customers. This is measured through our scorecard measure of 'Reduction in customer and workforce killed and seriously injured'.

## Customers killed or seriously injured Past five quarters<sup>1 2</sup>



## Moving annual average



The coronavirus pandemic reduced volumes on the London Underground during the last two weeks of March 2020, with 52.6 million (46 per cent) fewer customers when compared to March 2019.

One customer tragically died while using London Underground services, when they fell on to the tracks at High Barnet station on 13 December 2019. Our thoughts are with their family and friends.

Sadly, 220 customers were seriously injured, which is a reduction of 151 (41 per cent) when compared to Quarter 4 2018/19.

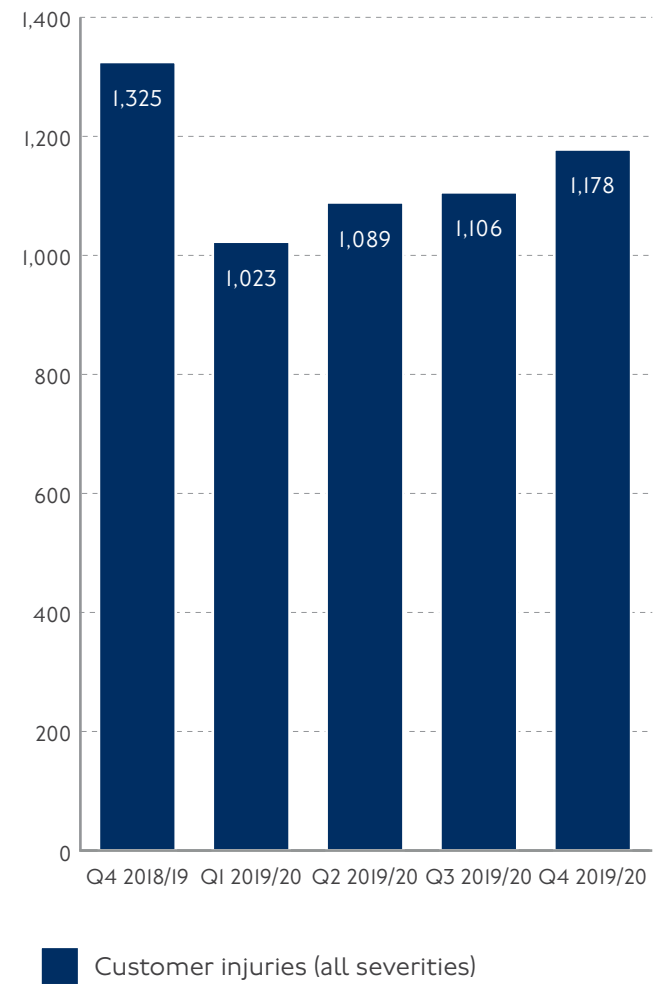
The biggest cause of serious injury remains slips, trips and falls, which accounted for 54 per cent of all serious injuries in Quarter 4.

<sup>1</sup> See page 6 for explanation of methodologies

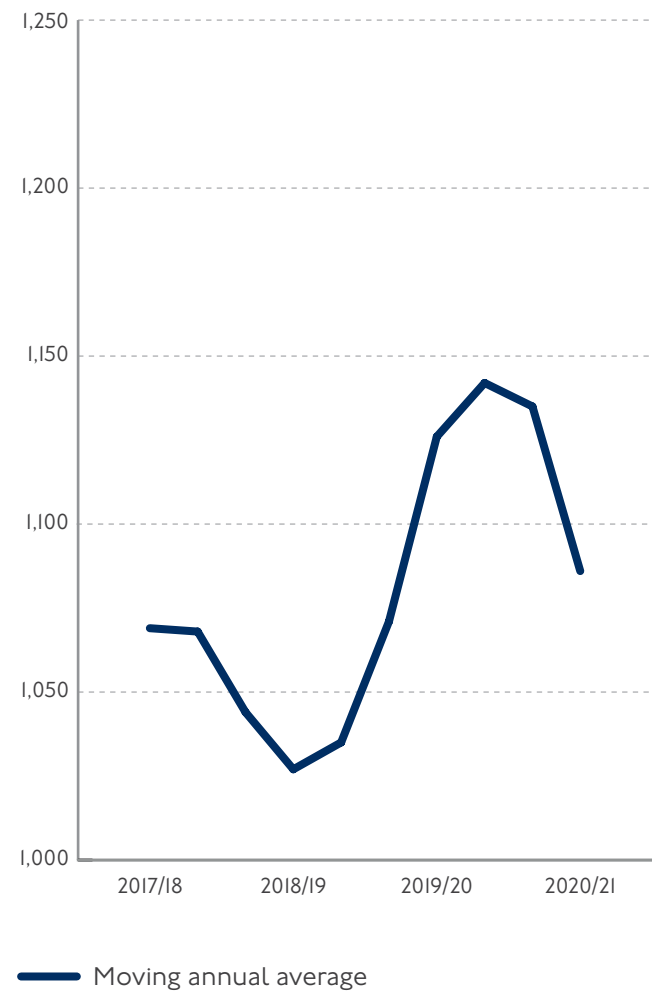
<sup>2</sup> Q4 is longer than other quarters



### Customer injuries Past five quarters



### Moving annual average



### Location of injuries

Escalator	372
Stairs	216
On train	86
Booking hall	104
Platform to train interface	165
Platform	99
Other	136
<b>Total</b>	<b>1,178</b>

There were 147 fewer injuries (of all severities) compared to the same quarter last year. Although this may partly be a result of fewer journeys being made during the coronavirus lockdown, the injury rate has also reduced, from 3.13 customer injuries per million journeys in Quarter 4 last year to 3.09 during this quarter.

Slips, trips and falls continue to be the biggest cause of all customer injuries, with 641 reported during Quarter 4. This number has decreased by 16 per cent from the same period last year. In March 2020, there were 50 per cent fewer incidents compared to March 2019, in line with the reduction in journeys from the coronavirus measures.

The most common causes of injury continue to be intoxication, rushing, reckless behaviour, carrying heavy or large objects, and incidents involving our vulnerable customers.



**641**  
injuries as a result of slips, trips and falls

## Our outcomes

### Coronavirus operations

From the start of the coronavirus pandemic, we have been focused on regular customer information and signage for the key workers that need to travel. This messaging was designed to help those critical workers who had to travel and remind others to stay at home, help the NHS and save lives, in line with Government messaging.

### Safety campaign

Alcohol is a factor in many serious customer incidents on the Underground. During the festive period, we communicated key safety and intoxication messages to our customers. We reviewed the customer safety and intoxication programme in January 2020 to identify areas for improvement as we plan this year's campaign.

We continue to build a wider coalition of agencies that can work together to increase night-time safety. In March, we met with Borough leads on the night-time economy to engage them in aligning with our strategy and interventions at hotspot locations.

### Escalators and stairs

A significant number of accidents happen on escalators and stairs. We have embedded the criteria from our Escalator Excellence campaign as the basic standard we expect at all our stations with escalators. This includes more specific announcements, such as wet weather warnings, helping vulnerable customers, and new posters and signage. We have taken a targeted, evidence-based approach at the 12 stations where most customer injuries occur. We will use this to identify actions to further improve safety at Tube stations in Quarter 1.

### Boarding and alighting

On the Underground, 25 per cent of customer incidents happen when people are getting on or off our trains. During Quarter 4, our Platform Train Interface project continued to run safety awareness days with train and station staff.

Ensuring the driver has clear visibility of the full platform train interface is key to trains departing safely. Our platform camera improvement project, which gives the driver a better view on the in-cab screens, completed camera improvements and new camera housing for all locations on the Central line in Quarter 4. Site works for the second and third phases stopped in Quarter 4 in line with Government coronavirus advice. These works will resume when advice changes.

### Managing fire risks

As part of our safety review on the Underground, we are implementing a new plan for managing fire risk. In Quarter 4, we continued our holistic review of fire safety in all our buildings and made necessary improvements where identified. We also made our online documents more accessible to help frontline staff address actions raised.

The London Fire Brigade continued their planned inspections, using remote 'desktop' inspections from 25 March 2020 to monitor station compliance and only attending stations for incidents.

### Our plans for next quarter

We will work closely with frontline staff to ensure the focus remains on customer and staff safety to prevent the spread of coronavirus, in line with Government and Public Health England advice.

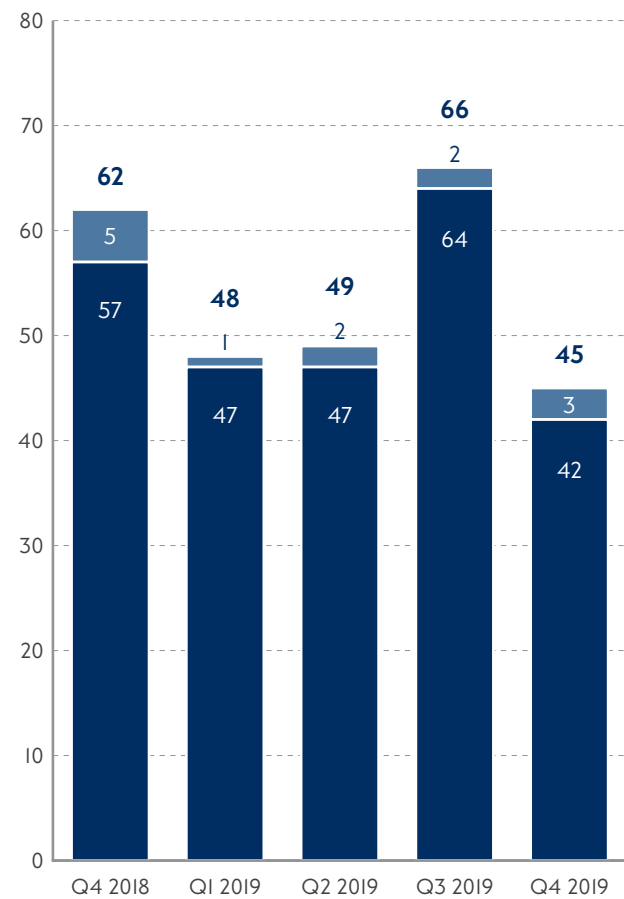
We will develop plans to return to a safe and reliable service as the latest coronavirus restrictions and advice changes.

We will review our approach and plans for 2020/21 to make sure that they consider how to return to work and continue to focus on the top safety issues.

# Buses

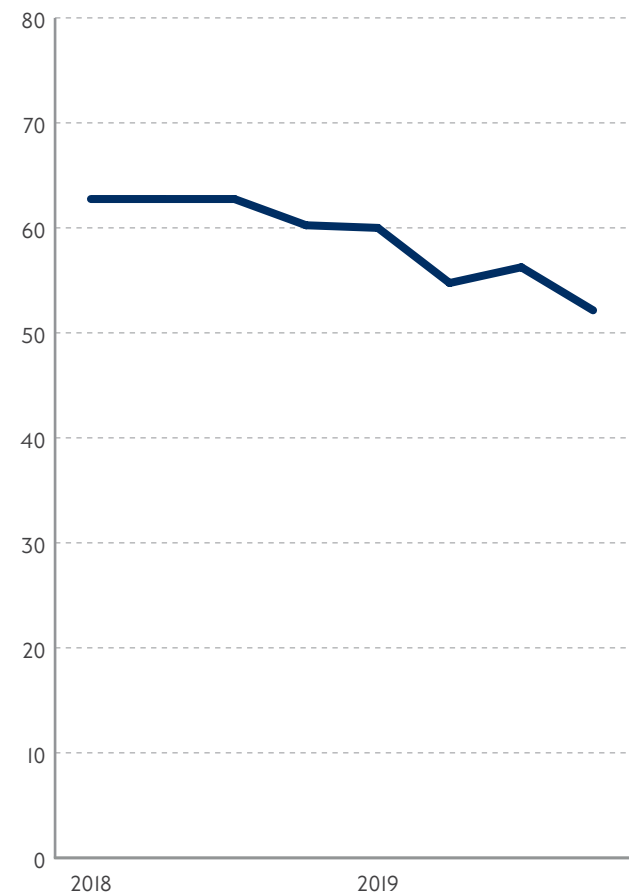
This section looks at the safety performance of our bus network and our scorecard measure of Reduction in people killed and seriously injured involving buses from 2005-09 baseline' using police Stats19 data. This section also analyses customer injuries on buses using bus operator data.

## People killed or seriously injured Past five quarters<sup>1 2</sup>



■ Seriously injured ■ Killed

## Moving annual average



— Annual totals

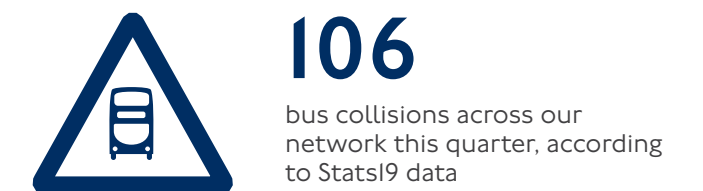
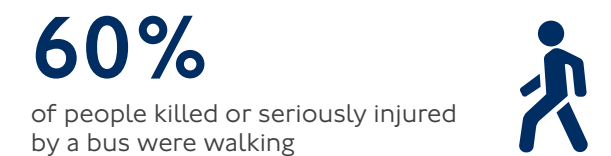
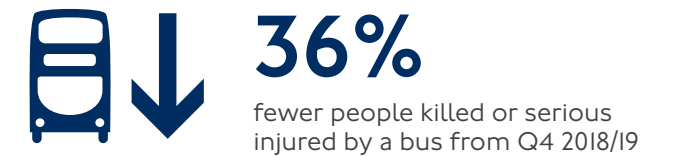
Between 1 October and 31 December 2019, two pedestrians and a motorcyclist tragically died following collisions with buses, according to Stats19 data. Our thoughts are with their families and friends at this time. During this same time, sadly 42 people were seriously injured in collisions involving buses.

On 2 December 2019, a pedestrian died on George Street following a collision with a route 410 bus. On 24 December 2019, a pedestrian was involved in a collision with bus route 167 on Cranbrook Road. Reports indicate the bus driver applied the brakes to steer away from the pedestrian. On 3 October 2019, a motorcyclist died following a collision with a stationary single-deck bus at a bus stop on the A3 Beverly Way. The motorcyclist was taken to hospital but sadly died.

The number of people seriously injured has fallen from 57 in the same quarter the previous year, which is a 36 per cent decrease. The greatest reductions have been among car and bus occupants and people walking.

Buses play a key role in achieving our Vision Zero goal. We are applying a world-leading Bus Safety Standard across the entire bus fleet, which will drive key bus design improvements to make our roads safer.

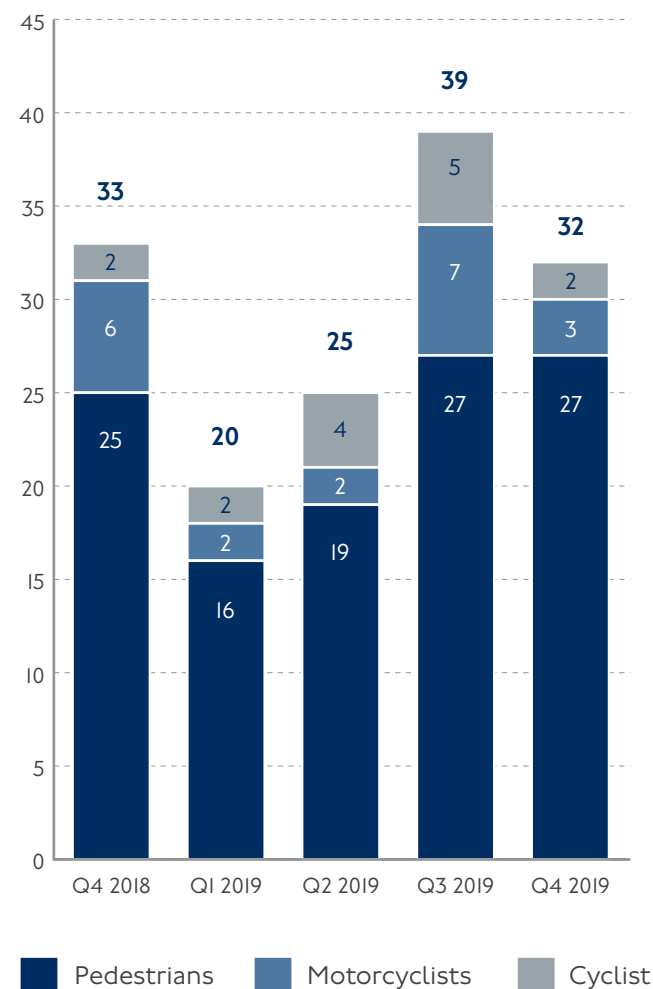
The features of the standard include intelligent speed assistance, blind-spot mirrors, pedal indicator lights to prevent pedal confusion and non-slip flooring. By the end of the quarter, 241 buses in our fleet met all the requirements of the new Bus Safety Standard.



<sup>1</sup> See page 6 for details on methodologies

<sup>2</sup> The quarters are based on calendar months rather than the usual reporting periods

**People walking, cycling or motorcycling injured in collisions involving a bus**  
Past five quarters<sup>1</sup>



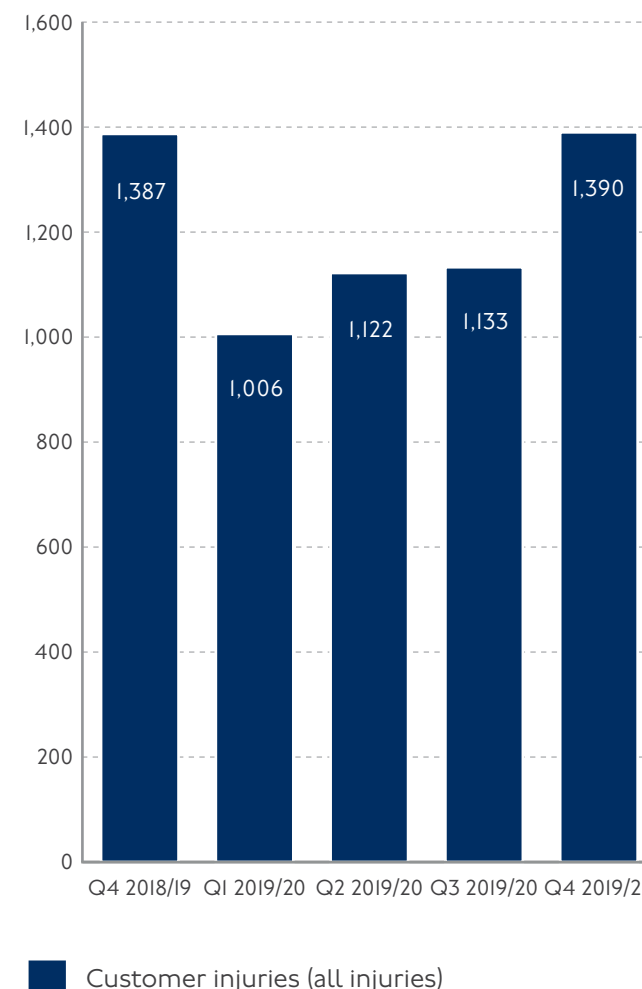
Stats19 data shows that between 1 October and 31 December 2019, 60 per cent of the people killed or seriously injured in a collision involving a bus were walking. Motorcyclists accounted for 10 per cent of the total casualties, a nine per cent decrease from the same quarter last year.

The number of people walking that were killed or seriously injured in collisions with a bus has fallen by three per cent when compared to the same time last year.

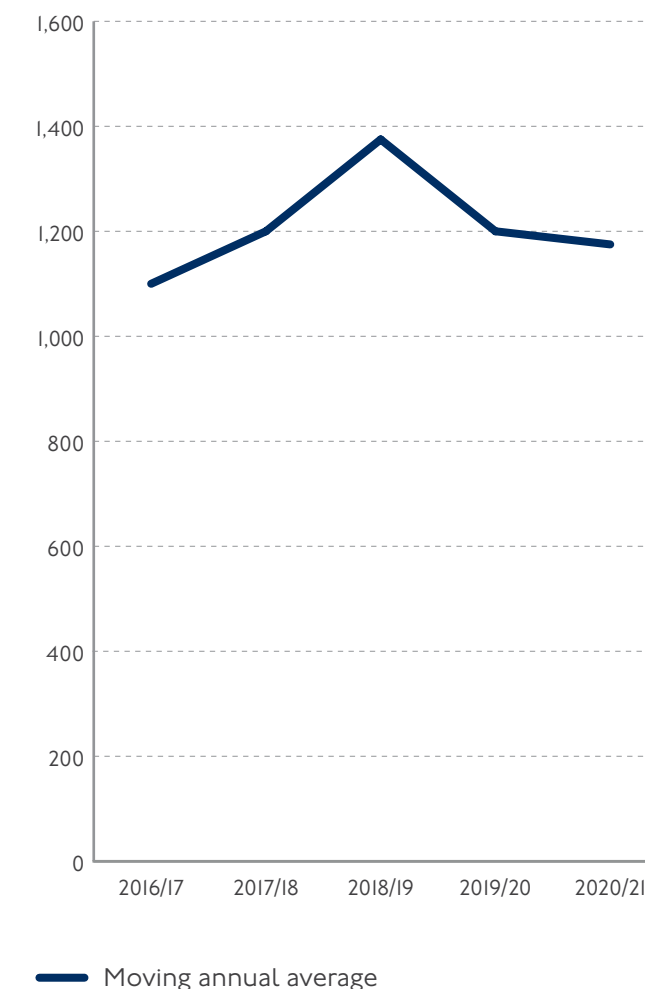
However, the total number of journeys has decreased by 12 per cent in this quarter when compared to Quarter 4 last year, resulting in a negative rate of total injuries per journey of 13 per cent.

According to data from bus operators, there were 1,390 customer injuries during the quarter. While this number is higher than the previous three quarters, it should be noted that Quarter 4 is longer than other quarters, which has an impact on the data. The main cause of injuries on buses remains slips, trips and falls (43 per cent).

**Customers injuries**  
Past five quarters



**Moving annual average**



<sup>1</sup> The quarters are based on calendar months rather than the usual reporting periods

**Top causes of injury (%)**

Slips, trips and falls	48
Struck by or against an object	8
Collision	15

## Our outcomes

### Gimme 5 scheme

We know that older and less mobile passengers are more vulnerable to slips, trips and falls while the bus is moving. Go Ahead, which operates nearly a quarter of the bus network, has been trialling a scheme to encourage drivers to give older and less mobile customers more time to settle on board the bus before they drive off. The 'Gimme 5' scheme also includes a passenger badge.

### Multi-operator prevention days

We ran a further two incident prevention days for all operators in London during the quarter. The first event was held in Hackney Wick in December. Hackney Central is a busy, congested area in peak periods and bus drivers often have issues dealing with merging traffic and negotiating tight corners. There was a good turnout of TfL staff and those from affected bus operators, and we were able to see the problems affecting all the services. This exercise will be used to improve risk assessments and advice given to drivers in this area.

We held our second incident prevention day in February 2020 at Harrow bus station, which can be a particularly busy interchange with London Underground

services. The day was a success in raising awareness of pedestrians moving between the bus station and Harrow-on-the-Hill Tube station, which affects the ability of buses to move freely out of the bus station. It also gave us an excellent opportunity to see drivers performing well and receiving feedback from their managers.

### Buggy user safety

To prevent injuries to children in buggies, Go Ahead and Daisy First Aid have developed an awareness campaign for parents and carers with buggies on buses. The materials include a video highlighting the importance of not overloading the buggy with belongings, ensuring the child is strapped in and that the brakes are applied.

### Fatigue risk management policy

We are working with bus operators and trade unions to discuss fatigue management. We are addressing this in three ways. Firstly, through the Fatigue Risk Management System, which will make it mandatory for bus operators to adopt a risk-based approach and ensure appropriate controls are adopted. Secondly, by developing a fatigue awareness training course for managers. We will also use new technologies where possible to detect and predict driver fatigue.

Our robust Fatigue Risk Management System is a requirement for all operators by August 2020, and good progress has been made in this area with drafts already received from each operator, which are being reviewed. Operators that do not have an agreed system in place by August 2020 (subject to coronavirus) will not be eligible to bid for any further routes.

The Bus Operations team is developing a Fatigue Awareness training course for managers, in partnership with operators and trades unions.

The scope and process for the £500,000 innovation fund for operators to find new and active ways of tackling fatigue has been agreed but has been delayed while operators deal with the coronavirus crisis. It is now scheduled to launch in autumn 2020.

Finally, testing continues on new technologies that can detect and predict fatigue in drivers. Both Go Ahead and RATP Dev were involved in monitoring the Guardian device, which is already used on London Trams to detect potential fatigue. The approach is being shared with other operators to encourage greater adoption of these technologies. Tailgating, late braking and lane departure can all result in last-minute braking, which increases the risk of customer injuries on our buses. In December 2019, Abellio completed the roll-out of the new Mobileye technology across its entire bus fleet, which encourages drivers to avoid the scenarios that can lead to last-minute braking.

### Falls on stairs

We have been working with Arriva to trial a poster encouraging passengers to hold the handrail when using the stairs, which is in place across all their buses. If the poster helps to reduce falls, it will be rolled out to other bus operators.

## Bus technology

Metroline is trialling an innovative new lighting system. The Vehicle Avoidance Lateral Lights system illuminates the area on the sides of buses to help show road users they are close to a bus. This is especially important for vulnerable road users, such as pedestrians, cyclists and people with hearing impairments. The system will be fitted to 24 buses, including night services on route 6 which run from Willesden garage.

### Acoustic vehicle alerting system

We have expanded our acoustic vehicle alerting system trial, which plays an external sound on quiet running buses at low speeds. Several routes that are due to operate new electric buses during the trial period have now been included, including 94, 106, 212, 230, 323, 357, 444 and 482, as well as the C10 and P5, which are required under UN ECE Regulation 138 as new models of bus.

The inclusion of further routes will make the trial more robust, enabling a bigger and more diverse sampling group. It will also expand the environments and times of operation in which the system can be assessed. This will ensure we achieve the best outcome and optimise the safety benefits of our acoustic vehicle alerting system, while minimising noise annoyance.



# 1,390

people injured on London buses (0.3% increase from Q4 2018/19)



### Our plans for next quarter

We will continue to work closely with frontline staff and bus operators to ensure the safety of staff members and key workers, and to prevent the spread of coronavirus, in line with Government advice. We will develop and evolve plans to safely restore services as restrictions and advice changes.

We will review our assurance arrangements for bus operators to ensure they remain fit for purpose and are aligned with other areas of our organisation.

Further multi-operator prevention days are planned, subject to the coronavirus situation. The next is planned to take place in central London to incorporate as many operators as possible.

We will continue to work with bus operators and trade unions to implement the fatigue risk management programme, including the Fatigue Innovation Fund.

We continue to work closely with bus operators to focus on reducing customer injuries, following an increase in slips, trips and falls during Quarter 4.

We will review the success of stair safety posters and decide whether this should be rolled out to other buses across the network.



We are working to manage the risk of fatigue among our drivers

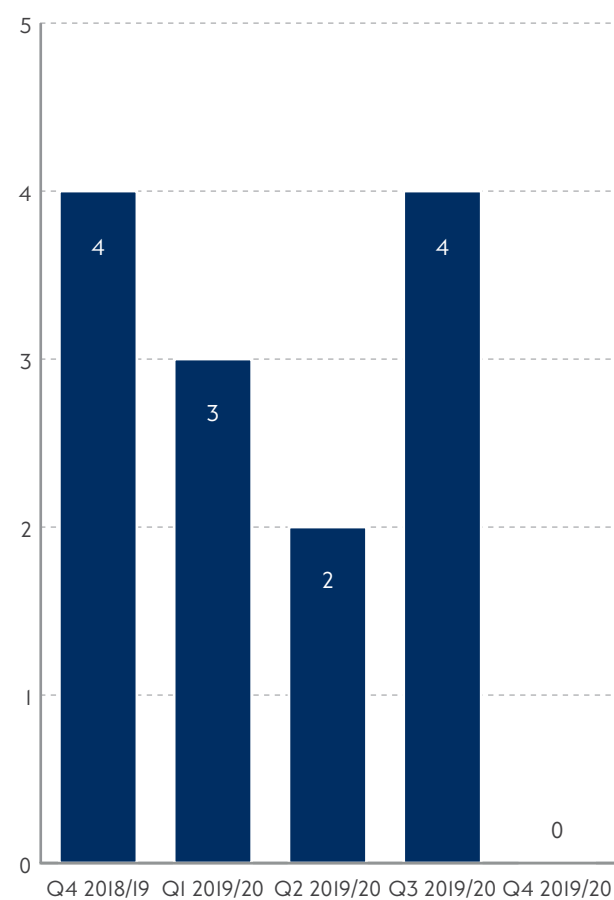


# Rail

This section looks at how customer safety on our rail services contributes to our scorecard measure 'Reduction in customer and workforce killed and seriously injured' and analyses all customer injuries on our rail network.

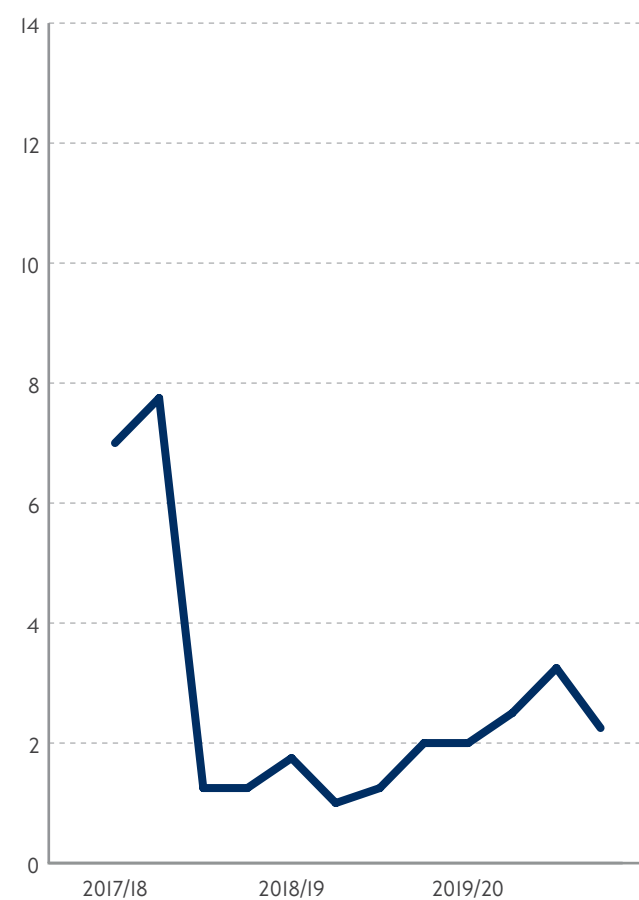
## Customers killed or seriously injured Past five quarters

Page 19



■ Seriously injured ■ Killed

## Moving annual average



— Moving annual average

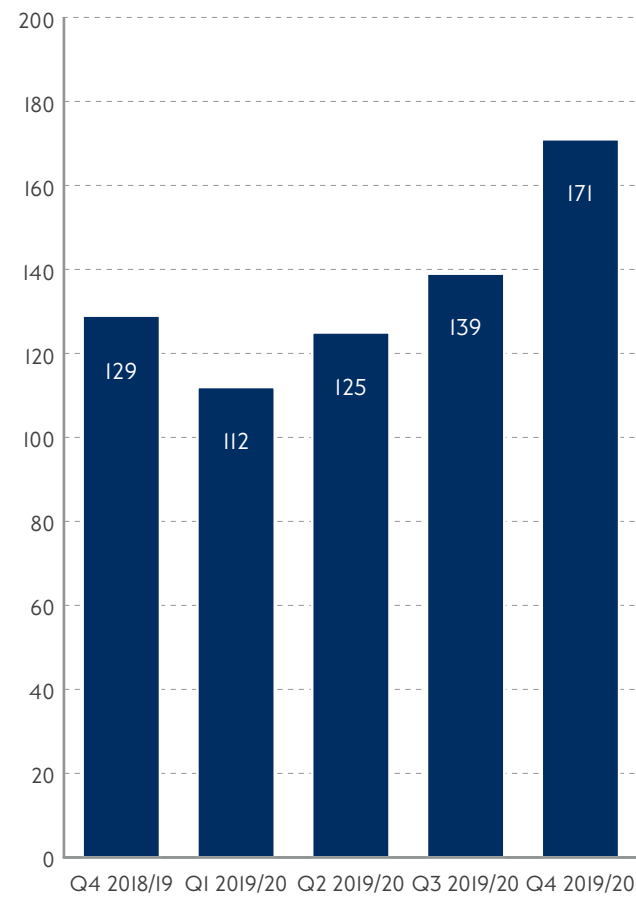
## Injuries by mode (%)

TfL Rail	50
London Overground	33
DLR	13
Trams	4

The total number of journeys on TfL Rail, trams, London Overground and the DLR has decreased by eight per cent this quarter, compared to Quarter 4 2018/19. In March 2020, the number of journeys decreased by 35 per cent compared to March 2019, as a result of the coronavirus pandemic.

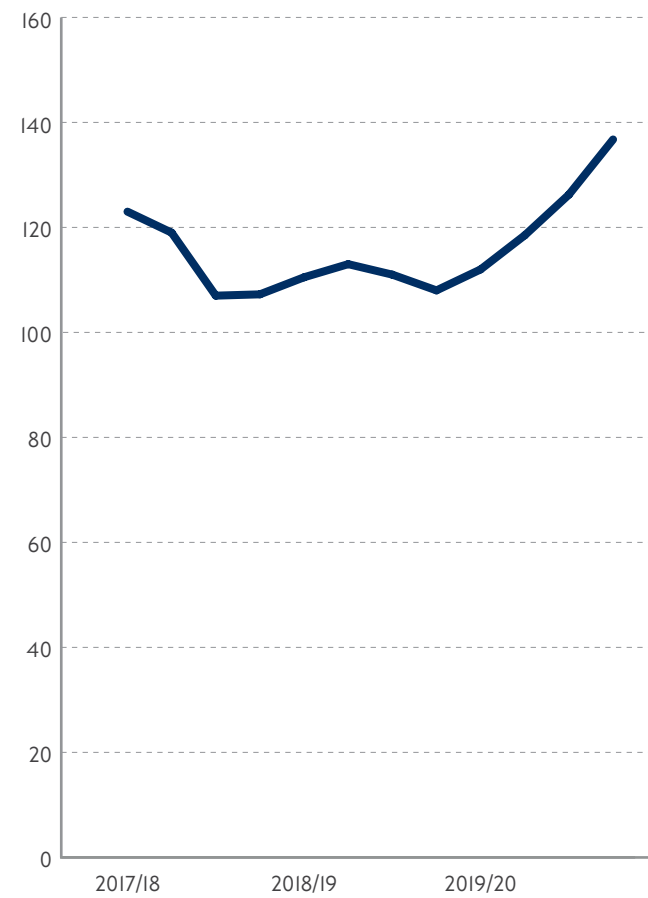
There were no fatal or serious casualties on our rail services during Quarter 4, compared to four serious injuries in the same quarter last year. There were 171 minor injuries on our rail services, compared to 129 in the same quarter last year.

**Customers injuries**  
Past five quarters



■ Customer injuries (all injuries)

**Moving annual average**



— Moving annual average

Overall customer injuries have increased by 32.6 per cent, compared to Quarter 4 last year. Half the injuries occurred on TfL Rail, 33 per cent on London Overground, 13 per cent on the DLR and four per cent on the trams network.

Injury rates based on millions of passenger journeys on all rail services have increased from 1.1 to 1.6, which represents a 44 per cent increase from Quarter 4 2018/19.

Since Quarter 2 2019/20, the number of customer injuries on TfL Rail has increased. We have done a lot of work during this quarter to improve our reporting and to manage upgrade work in our stations. We have introduced a new incident reporting app called iSafety for TfL Rail members of staff, which has resulted in better reporting and reversed the trend of underreporting and miscategorising injuries. We have also increased the number of station staff by 65 per cent, which has resulted in more incidents being reported as more staff are now available for customers to report injuries to. This is a major factor in the higher reporting levels.

Ongoing work, including introducing new trains on London Overground and refurbished stations aim to improve the environment and safety for all customers.

**Our outcomes**

**Tram safety technology**

We have been working to prevent overspeeding by implementing new devices that automatically stop a tram if it goes too fast in certain zones. Testing was completed this quarter, ready for full installation during Quarter 1 2020/21, subject to the coronavirus situation.

Along with the operator Tram Operations Limited, we continue to work closely with the ORR to ensure all the recommendations relating to the Sandilands tragedy are being tracked appropriately and in good time. There are no outstanding concerns that the ORR has with ourselves or Tram Operations Limited in this regard.

Following vandalism on the tracks at Phipps Bridge in September 2019, where an obstruction caused a tram to derail, we completed an unauthorised access risk assessment this quarter. We are now focusing on producing an action plan based on the recommendations.



**171**

people injured on our rail network (32.6% increase from Q4 2018/19)



### Mental wellbeing

A key focus on the London Overground this quarter has been on wellbeing. The existing Arriva Rail London mental health programme has been accelerated and a resource centre has been set up for staff on the intranet, which contains information, guidance and contacts to help protect the mental health of staff. Arriva Rail London's network of Mental Health Supporters has also received training.

### Trespass on DLR

Our work to reduce the number of trespass incidents continues to be a focus with approximately 50 per cent further reduction in incidents of people going trackside from Quarter 3 to Quarter 4. Work, such as poster campaigns and announcements, continues to further reduce the numbers of trespassing incidents.

### Preventing train surfing

We have launched a Surfing Strategy to reduce incidents of people riding on the outside of trains and have completed a number of the actions. The strategy has been shared with the ORR, which has taken a keen interest in incidents of surfing. In the medium term, the design and introduction of the replacement DLR trains will reduce the areas of opportunity for train surfers.

### Our plans for next quarter

We will work closely with staff and operators to ensure the focus remains on customer and staff safety to prevent the spread of coronavirus, in line with Government and Public Health England advice.

We will develop an action plan to reduce the risk of unauthorised access on the tram network following the finalised risk assessment process.

Work will begin to evaluate tenders to carry out an assessment of crossings, with a view to continue improving safety at these locations.

We will continue to implement train surfing deterrents on the London Overground, DLR and trams.

We have approved the design for emergency tram lighting, which will start being rolled out early next year, and we will assess the feasibility and cost effectiveness of fitting an obstacle detection system to the front of DLR trains.



Our work on reducing trespassing on the DLR continues to be a focus



# Crossrail

In response to an action from the previous Safety, sustainability and human resources panel meeting, this section outlines Crossrail's performance for Quarter 4.

There were 12 recorded significant incidents, including four RIDDORs and one notifiable third-party incident, which was attributable to MTR on Network Rail infrastructure, during the quarter.

There were seven high-potential near misses during Quarter 4, compared to 13 in Quarter 3. The rate of high-potential near misses was 0.27, which is the same as the start of the year.

Crossrail contractors continue to perform well against the Crossrail Health and Safety Performance Indicators. Following an audit last quarter, health and safety professionals continue to validate the indicator submissions and they require contractors to present their improvement plans at our regular Crossrail Safety and Health Executive Leadership Meetings.

## Improvement plans

The focus on the Target Zero Improvement Plan continues, based on the principle that all harm is preventable. This was shown to be achievable during seven weeks without any significant incidents during this quarter. The goal is to continue this improving trend when works start again. Several initiatives have been rolled out to support this, including improved trend analysis at Crossrail leadership meetings to help with decision making.

Health and safety improvements and actions are monitored and tracked at the executive level through a newly developed dashboard, as well as Crossrail's Target Zero Improvement Plan.

Crossrail is currently working on plans to safely start works, once the coronavirus restrictions are lifted. A Stepping Up week is planned to coincide with the restart of construction activities. As part of the Safe Start programme, essential maintenance activities continue and strict guidance principles are being developed for more niche works.

## Reportable incidents

The RIDDOR incident rate ended the year at the same rate it started – 0.09. There were four incidents, three of which involved slips and falls. There was also a dangerous occurrence at Bond Street where there was an electrical fire.

All incidents have been rigorously investigated. Where incidents are not owned by Crossrail or its contractors, support and oversight is provided to the investigation. To share learning, Crossrail continues to issue industry-wide safety alerts and host the Crossrail Learning Forum each month.

### 11 February 2020

A Siemens worker fell while looking for a cable connection. Their left arm was fractured when it got trapped between parts of the cable management system. There was a thorough investigation, which found the causes included the level change, low level of lighting and inadequate planning.

All Siemens works under the platform where the incident happened were suspended while risk assessments and method statements were reviewed to include lighting assessments. Temporary lighting has also been reviewed across the entire project.

### 18 February 2020

A damaged UK Power Networks (UKPN) cable pot end caused an explosion at Bond Street station, which led to a fire. The site was evacuated and the UKPN Emergency Response team attended and made the

cable safe. The investigation found that it was likely to have been caused by vibrations from digging. It also found there was a lack of specific detail on the permit to dig with respect to specific works and location. Crossrail suspended all ground works and reviewed the procedure around issuing permits to break ground.

### 21 February 2020

An operative slipped and fell in the Connaught Tunnel, injuring their back. They were evacuated and taken to hospital by ambulance where an x-ray showed no immediate damage and they were discharged later that evening. It was their last shift, and a doctor's report says they remain unfit for work after leaving the Crossrail project. The investigation found they had slipped while walking in an unapproved area, which had become slippery. Crossrail stopped work and issued a 24-hour alert.

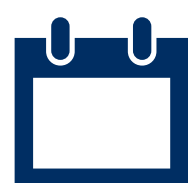
### 28 February 2020

An operative slipped while descending a Haki staircase at Bond Street station, landing on their lower back and elbow. They were reportedly holding on to the handrail when they slipped, but the staircase was damp from rain. They were assessed by a first aider before being taken to hospital as a precaution. The investigation has focused on the adequacy of Haki stairs as a primary form of access. Crossrail has now improved the briefings at the start of shifts and put up more signage to remind operatives to use three points of contact. This is being monitored to ensure the controls are adhered to.



7

high-potential near misses (compared to 13 in Q3)



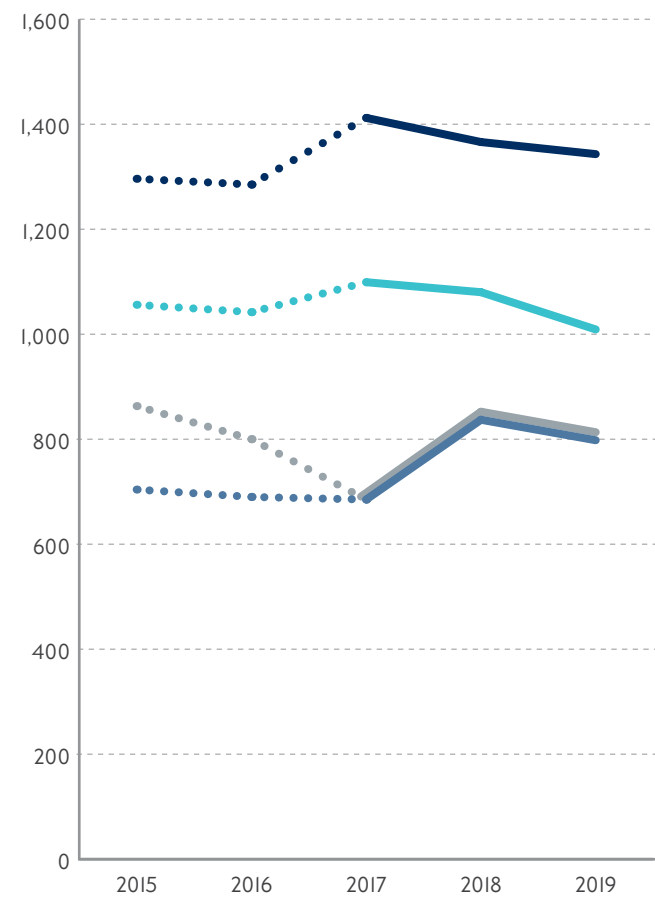
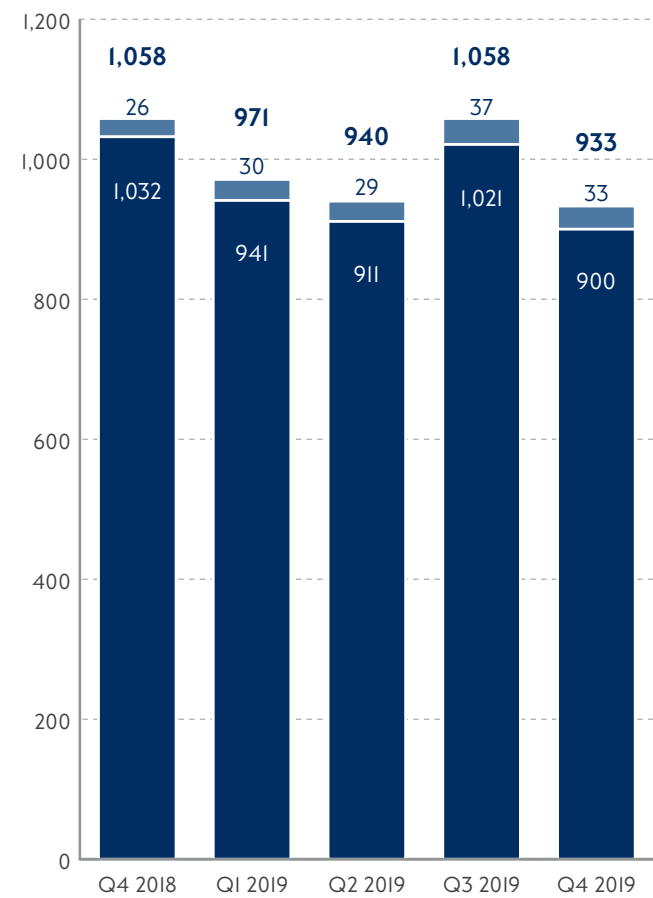
7

consecutive weeks of zero significant incidents during the quarter

# Streets

This section looks at how London's streets perform against our scorecard measure 'Reduction in people killed and seriously injured on the roads from 2005-09 baseline' and analyses police-recorded injuries on London's streets.

 **People killed or seriously injured on London's streets**  
Past five quarters\* Annual totals\*\*



■ Seriously injured ■ Killed

— Pedestrians — Motorcycles  
— Cyclists — Motorised vehicles

We have made good progress in reducing the number of people seriously injured, although the number of people killed on our streets remains a concern. For the most recent quarter available, 33 people were tragically killed on London's roads, up from 26 during this period in 2018/19. Of those people killed in road traffic collisions, 12 were people walking, six were motorcyclists, and one was a cyclist.

The number of people killed or seriously injured fell by 12 per cent compared to the same quarter last year, to 933 people. The greatest reduction was among people walking and cycling, particularly men aged 25 to 59.

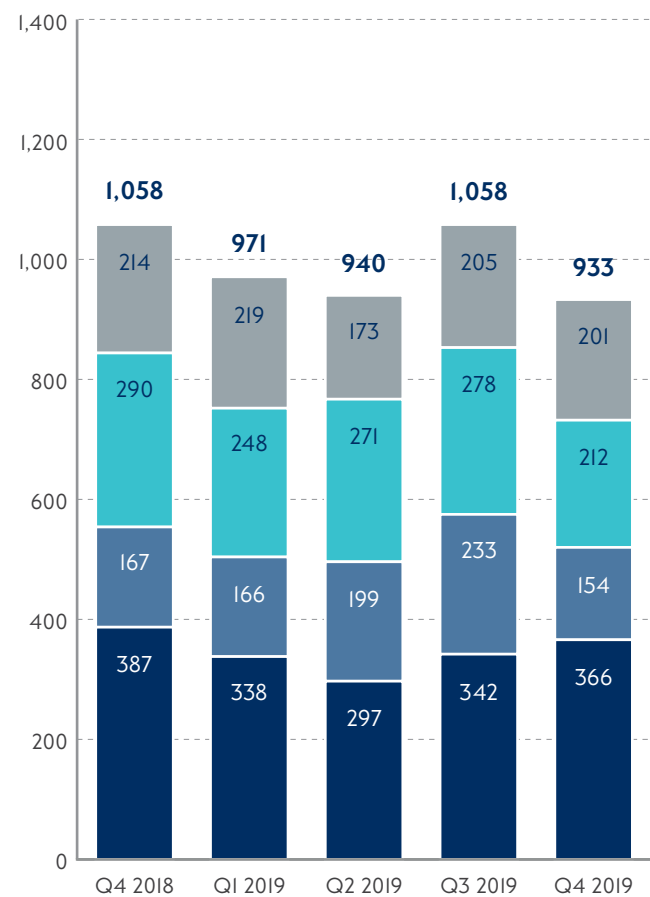
**12%**

fewer people killed or seriously injured compared to Q4 2018/19



\* The quarters are based on calendar months  
\*\* Figures from the end of 2016 have been reported using a new system. The dotted lines in the graph show how many collisions would have been reported in prior years under this system

### People injured while walking, cycling or motorcycling Past five quarters\*

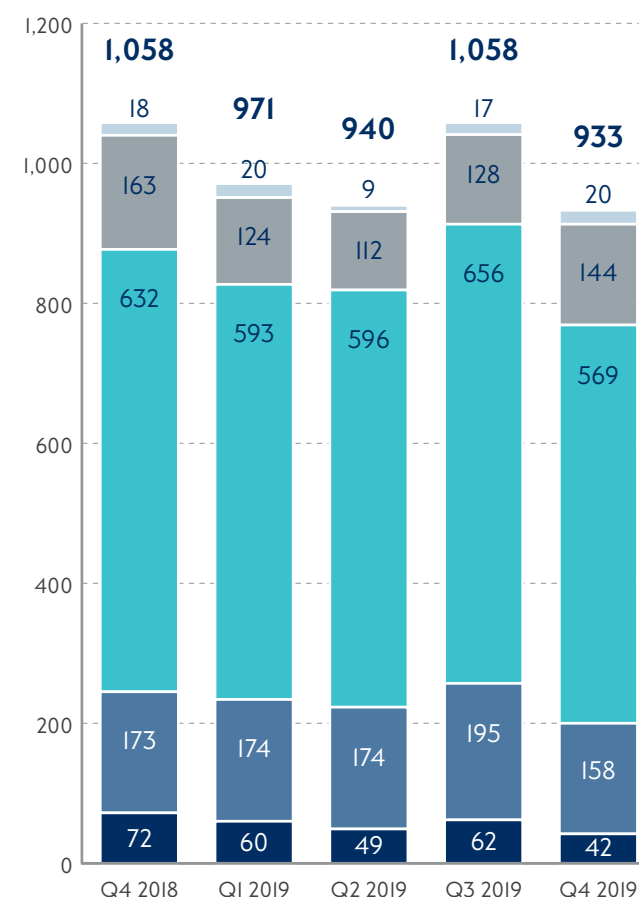


During the most recent quarter, 78 per cent of people killed or seriously injured were walking, cycling or motorcycling.

People motorcycling accounted for 23 per cent of casualties despite this group making only about one per cent of journeys. When compared to the same quarter last year, the number of people walking, cycling or motorcycling who were killed or seriously injured has fallen by 13 per cent. The greatest reduction in the number of people killed was seen among people motorcycling.

Pedestrians
  Motorcyclists  
 Cyclists
  Other motorised vehicles

### Age of people injured Past five quarters\*\*



The number of people killed or seriously injured fell among all age groups. The number of children killed or seriously injured decreased by 42 per cent, which is a significant decline, although every incident is a tragedy.

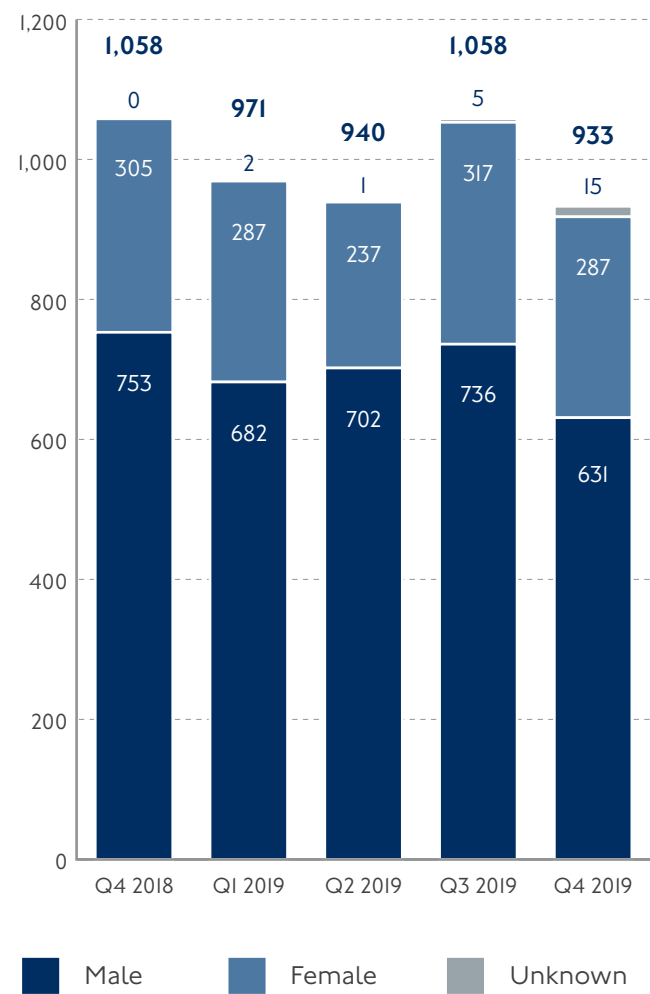
Almost two thirds (61 per cent) of people killed or seriously injured were aged 25 to 59 years old.

0-15
  16-24
  25-59  
 60+
  Unknown

\* The quarters are based on calendar months rather than the usual reporting periods.

\*\* Age was known for over 98 per cent of casualties

**Gender of people injured**  
Past five quarters\*



The number of men killed or seriously injured fell by 16 per cent and the number of women killed or seriously injured fell by six per cent, compared to the same quarter last year. However, men still made up over two thirds (62 per cent) of casualties and were at greater risk of injury per journey than women.

In Quarter 4, 94 per cent of all fatalities (31) were male. Men also accounted for 95 per cent of the motorcyclists killed or seriously injured. More than half of the injuries to people walking were to men (55 per cent). However, women accounted for the largest proportion of people killed or seriously injured when cycling or travelling in a car.

**Our outcomes**

**Lower speed limits**

On Monday 2 March, we reduced the speed limits across all our central London roads, in a significant move to reduce road danger across the Capital. The new 20mph speed limits will be enforced across all our roads within the Congestion Charging zone – including Millbank, Victoria Embankment and Borough High Street – following strong public support for the proposals.

The 20mph speed limits are supported by new signage and road markings, with raised pedestrian crossings being installed in locations where a high number of people walk, including near Embankment and Tower Hill Underground stations and outside Tate Britain.

**Safer Junctions**

Improving the safety of the Capital’s junctions is a central part of the Mayor’s £2.3bn Healthy Streets Approach and the Safer Junctions programme targets the 73 junctions that pose the highest risk to people walking, cycling or riding a motorbike. Our target was to complete 41 of these schemes before May 2020, with 35 already completed and a further six under construction. Owing to the situation with the coronavirus pandemic, all six schemes have been brought to a safe stop.

**Travel Safe Priority Areas**

In line with our Vision Zero ambitions, we are committed to taking action to reduce the toll that death and serious injuries have on our communities. Our Travel Safe Priority Area programme identifies high-risk locations and trials interventions of targeted police enforcement, increased communications and community engagement to reduce road danger risk.

In March, we worked at Fore Street in Enfield and Romford Road in Newham, which both have a higher than average number of collisions involving cyclists and pedestrians. Local communities have been involved in the identification of the sources of road danger, including representatives from the London boroughs, faith centres, primary schools, as well as London Cycling Campaign, Action Vision Zero and ward councillors. New interventions will be trialled, including geographically targeted messaging to anyone listening to a podcast within the boroughs, radio adverts, personalised emails and adverts.

**Safety camera installation**

Following persistent issues of anti-social behaviour, including racing vehicles, we installed an average speed camera system along a stretch of the A10 in Enfield, between Bullsmoor Lane and Southbury Road, in March. The 18 cameras were installed before lockdown measures were bought into effect. The MPS were able to test and calibrate the cameras, and the system is now live and enforceable.

\* The quarters are based on calendar months rather than the usual reporting periods



### Our plans for next quarter

Working with the MPS, we will continue to urge motorists to respect speed limits during the coronavirus lockdown.

As the lockdown eases, it is essential that London's streets are safe. We are taking a number of important steps to ensuring that people have the confidence to travel in a safe and sustainable way. This includes reallocating road space for people to walk and cycle, working with the boroughs to support walking and cycling and implement low traffic neighbourhoods, updating our marketing and communications to reinforce critical safety messages to drivers, and ensuring police enforcement prioritises high risk locations and emerging trends.

Our Watch Your Speed campaign will continue to run at advertising sites across London to challenge the culture of acceptance of speeding and reinforce the message that motorists should always obey the speed limits.

Owing to coronavirus and the need to bring construction work to a safe stop, activity to complete our Safer Junctions schemes will be delayed. However, design work will continue for the second phase of the Lowering Speed Limits programme to ensure work remains on track to deliver further speed limit reductions across London in the coming years.



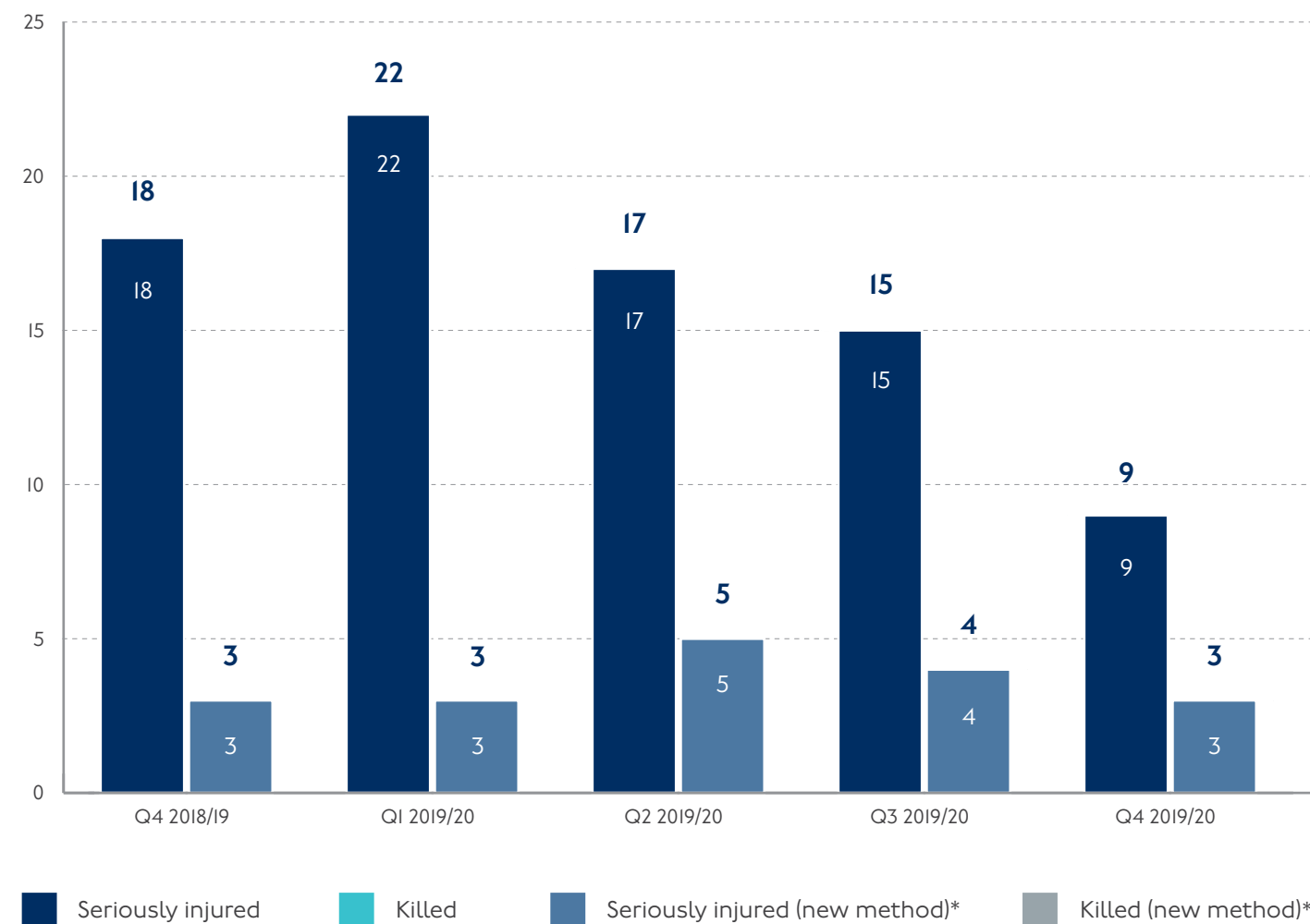
Our speed awareness campaign will remind drivers to travel safely



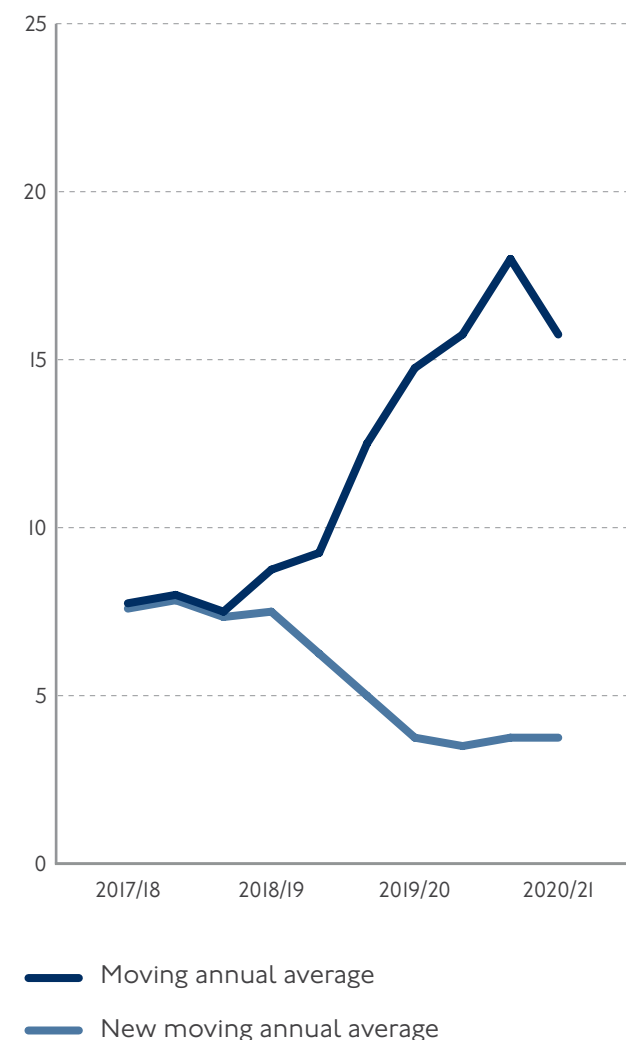
# Other operations

This section looks at how customer safety on our other operations contributes to our scorecard measure 'Reduction in customer and workforce killed and seriously injured' and analyses all customer injuries on our other operations, which includes Santander Cycles, taxi and private hire, river services, Victoria Coach Station and Dial-a-Ride.

## Customers killed or seriously injured Past five quarters



## Moving annual average

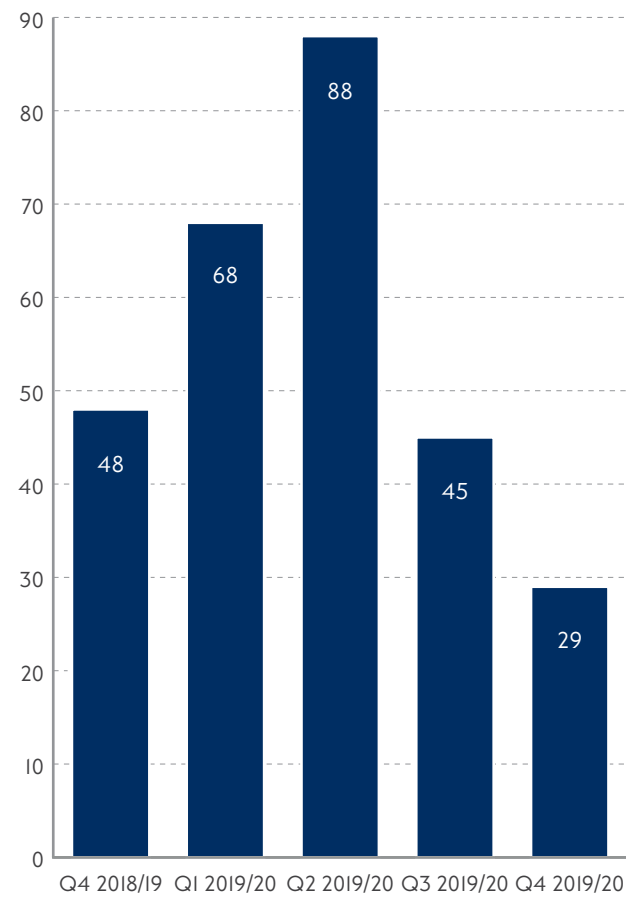


In Quarter 4, there were no customer fatalities on our other operations. However, three customers were seriously injured while using Santander Cycles, all caused by collisions. Three customers were seriously injured in the same quarter last year.

The total number of journeys decreased by 25 per cent this quarter compared to Quarter 4 last year. There was a decrease in the injury rate of 19 per cent compared to the same quarter last year.

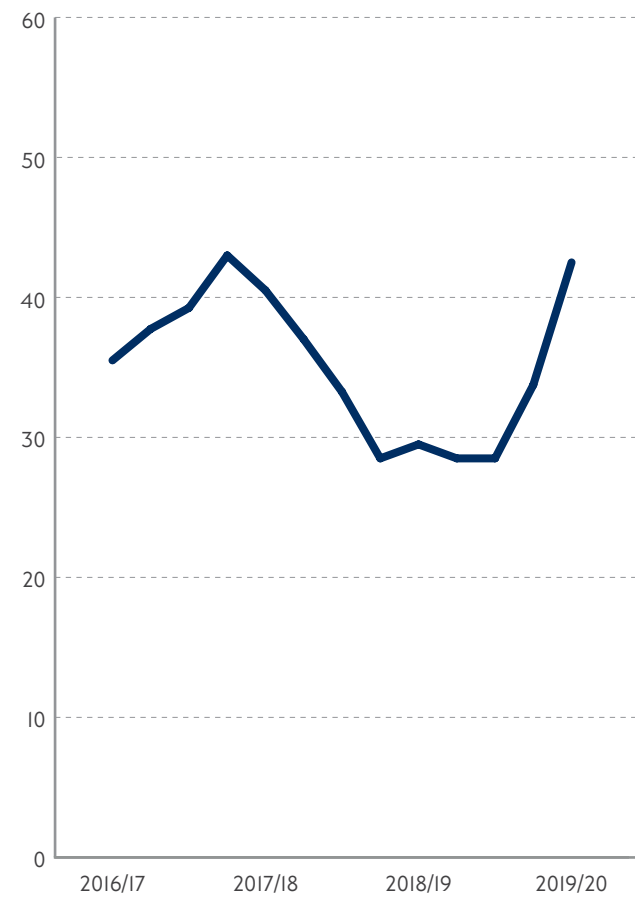
\* See page 6 for details on our new reporting methodology

### All customers injuries Past five quarters



Customer injuries (all severities)

### Moving annual average



Moving annual average

### Causes of injury (%)

Slips, trips and falls	55
Struck by or against an object	14
Collision	24
Cut or abrasion	7

There were 29 customer injuries on our other operations during Quarter 4, of which all were minor injuries. This is a reduction of 19 (40 per cent) when compared to the same quarter last year.

### Injuries by mode (%)

Dial-a-Ride	41
Santander Cycles	34
London River Services	7
Victoria Coach Station	17

There was a major improvement in the number of minor customer injuries on Dial-a-Ride when compared with the previous quarter, falling from 31 to 12. Incidents while boarding and alighting have been mitigated by new vehicles having guard rails added to the ramp, enabling customers to hold on to a handrail while boarding.

# 29

injuries within our other operations this quarter  
(39.6% decrease against Q4 2018/19)





## Our outcomes

### London River Services

Owing to the coronavirus pandemic and in line with Government advice, Woolwich Ferry will operate a one-boat service and riverboat services will be suspended until Government advice changes.

We have completed most of the activities from our Safety Improvement Plan for the Thames, which was launched in Quarter 1 2019/20. Other activities have been rolled over to the 2020/21 plan, with new activities being added.

We continue to engage with all Thames stakeholders to improve customer and staff safety through active monitoring and operator licensing requirements. Monitoring of operators using our piers is now part of business as usual activity.

We have continued work on our safety improvement plan, which is designed to enhance our customer and workforce safety health and environment, in the form of a London River Services Safety Standard. Plans for the launch of this programme are being finalised for 2020/21.

### Victoria Coach Station

Following an inspection by the London Fire Brigade during Quarter 4, we have made significant improvements in our fire protection arrangements across Victoria Coach Station.

This includes improving emergency signage and preparedness arrangements, safely storing flammable materials, tidying back of house areas, and improving arrangements to prevent the spread of fire through doorways and openings. Work continues to ensure the fire detection and suppression systems are fully compliant with the required standards.

### Our plans for next quarter

We will work closely with staff and operators to ensure the focus remains on customer and staff safety to prevent the spread of coronavirus, in line with Government and Public Health England advice.

We will continue to work on charter boat operator licenses. Any new requirements will be introduced during the quarter.

We continue to enhance fire safety measures and progress the remaining improvements to the fire detection and suppression systems at Victoria Coach Station.

We will work on our chains and ladders safety inspection programme, which only has a couple of areas outstanding, with two more piers are expected to be completed in the quarter. These will be addressed once the piers concerned are taken into dry dock.

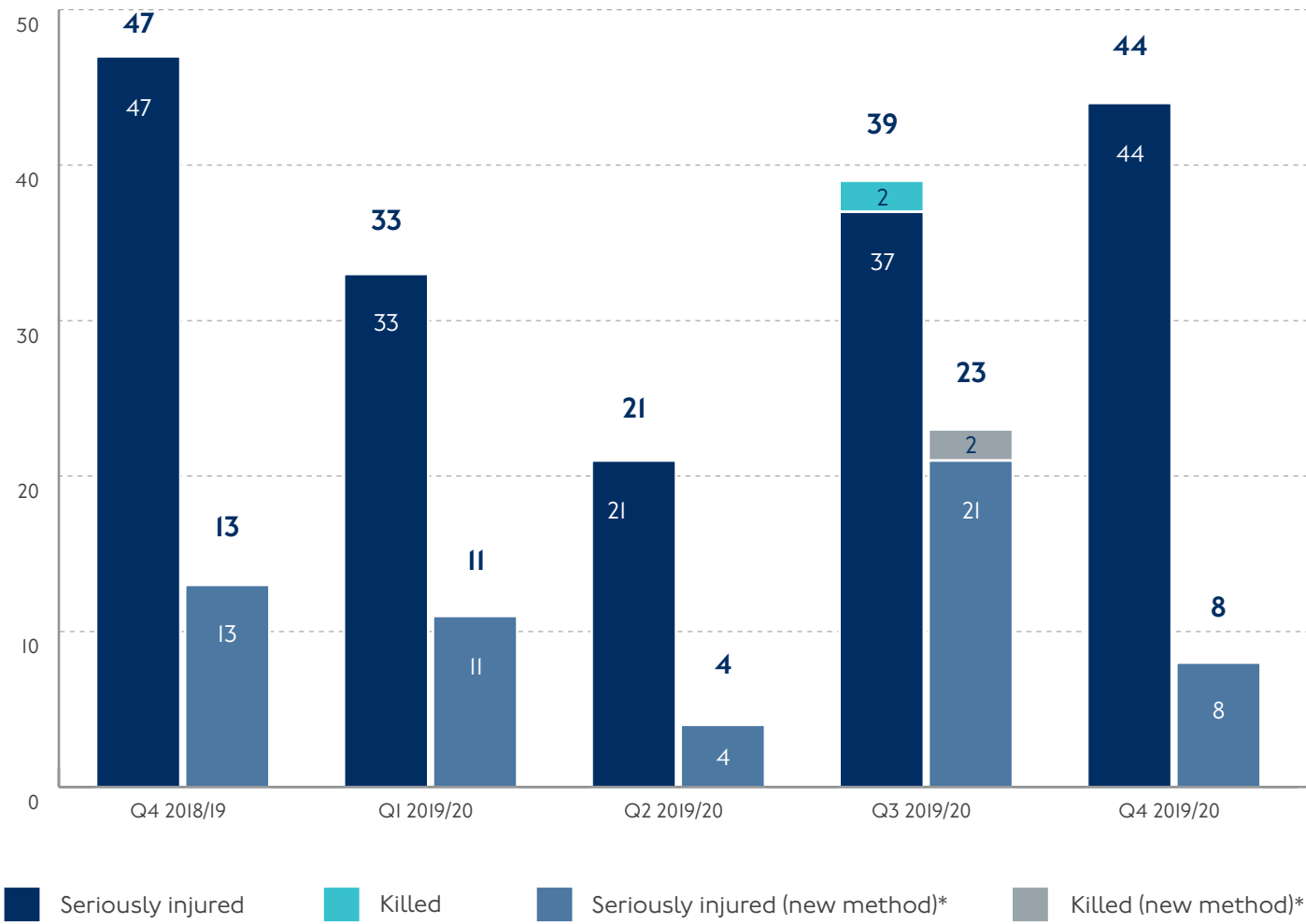


We continue to work on our safety improvement plan for river services

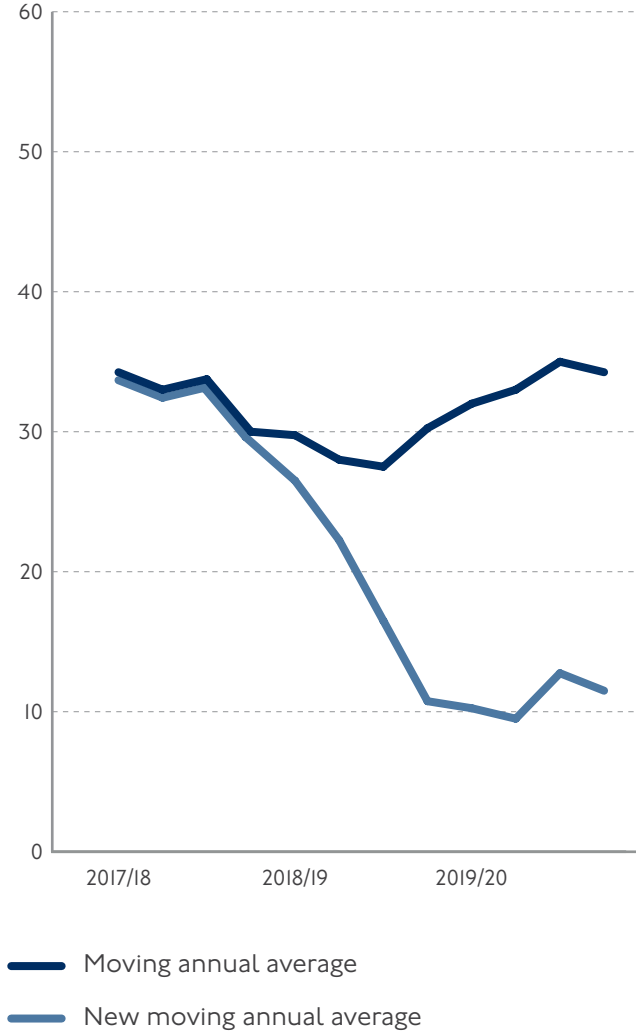
# Our workforce

In this section we look at the overall safety of our workforce and what we are doing to improve the safety, health, and wellbeing of everyone who works for us. This is measured through our key safety performance across all our work.

 **Workforce killed or seriously injured**  
Past five quarters



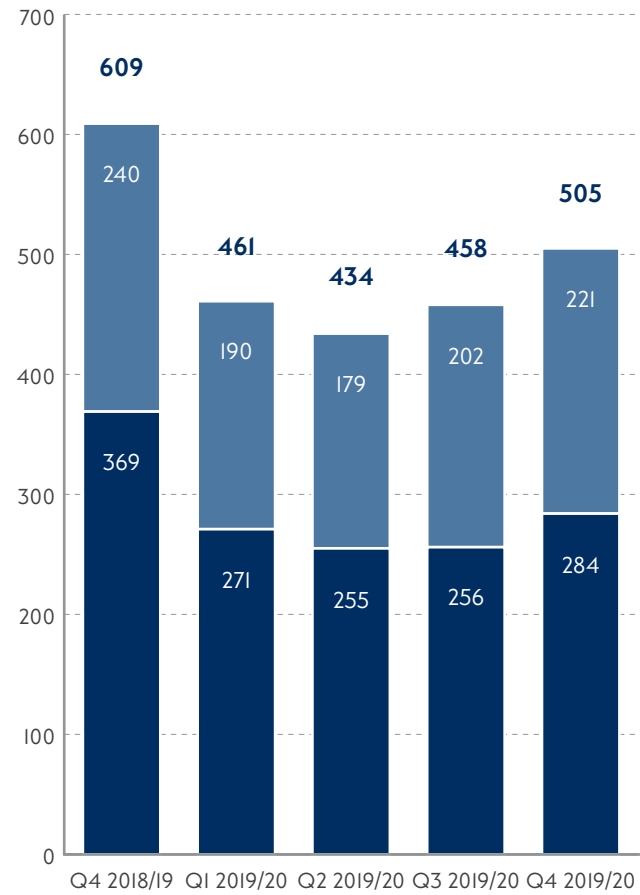
**Moving annual average**



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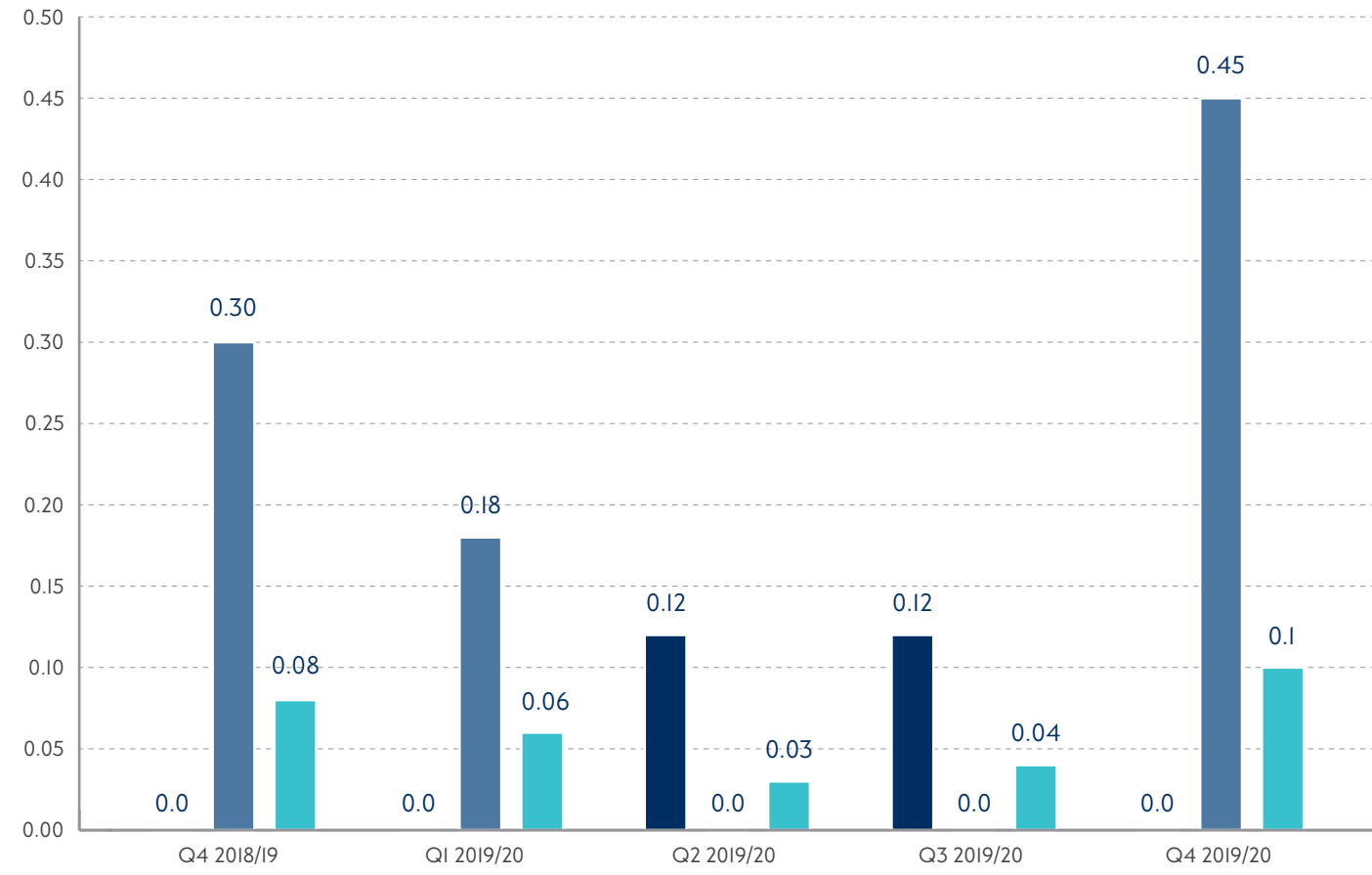
\* See page 6 for details on our new reporting methodology

### All workforce injuries Past five quarters



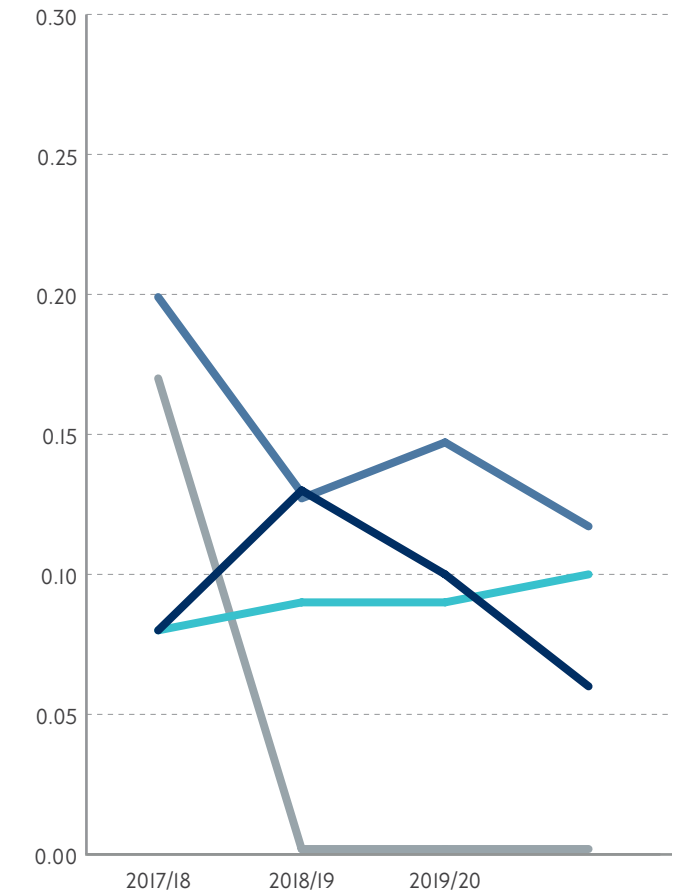
- Directly employed workforce
- Supplier workforce

### Projects and construction accident frequency rate Past five quarters



- Major Projects directorate
- London Underground renewals and enhancements
- Crossrail

### Past three years



- Major Projects directorate
- London Underground renewals and enhancements
- Crossrail
- Project and programme delivery

### Top causes of injury (%)

Slips, trips and falls	13
Manual handling	11
Hand tools	5
Other	10
Non compliant with HSE rules (eg safe systems of work, PPE)	3



### Reportable incidents

During Quarter 4, there were 10 reportable incidents affecting our members of staff, four of which were a result of maintenance and construction activities, with two manual handling injuries in Dial-a-Ride operations and one incident involving a Revenue Protection Inspector.

This section excludes Crossrail construction incidents as these are reported separately. Please see page 18 for details of Crossrail safety performance in the quarter.

### Workforce injuries

Three members of staff working in London Underground operations were injured during the quarter. At Finsbury Park station, a member of staff slipped during a routine site inspection, injuring their left side. At Victoria Station House, a member of staff fell as they stepped into a lift, injuring their hip. The lift had overshot the floor causing a step. A member of staff twisted their ankle and grazed their knee by stepping in a pothole on the walkway at Ruislip Depot.

Three construction workers were injured this quarter. At Ruislip Depot, a faulty door mechanism caused a member of staff to fall down the stairs. They suffered a broken wrist, lacerated forehead and injuries to their mouth and teeth. A member of staff broke their leg at Boston Manor when they stepped on a catch pit lid that was not secured. A member of staff was working on a ladder in the ticket hall at High Street Kensington station when the ladder collapsed. They bumped their head and suffered a swollen wrist.

Our construction workforce accounted for 53 of our workforce injuries in the quarter. This is a four per cent increase on the same quarter last year. There were three specified RIDDOR reportable injuries in the quarter – an avulsion hip fracture, wrist fracture and leg fracture. Four minor injuries were also reportable under RIDDOR as they resulted in an absence from work of more than seven days. This is compared with two in Quarter 4 2018/19.

Our bus operators continue to work on safety initiatives. This includes reducing assaults on staff, and reducing risks of slips, trips and falls on bus operator premises.

Working collaboratively with bus operators and trade unions, a Health Bus has started visiting bus garages to offer support and information to drivers on health-related issues and fatigue.

### Directly employed workforce

Of the 53 construction workforce injuries, nine occurred to our direct employees (18 per cent compared with 35 per cent last year). For our direct employees, slips, trips and falls were the main cause of injuries in Quarter 4. Most injuries occurred within London Underground, which accounts for most people employed by TfL, where there continues to be a stable trend since the start of 2017/18. Manual handling, hand tools, and slips, trips and falls were the top causes of injuries for our construction workforce within London Underground and our Major Projects directorate.

### Kenneth Matcham

In October 2019, Kenneth Matcham was tragically killed when the bus he was driving was struck by a speeding car, leading to a head-on collision with another bus. Our thoughts remain with his family and friends. We continue to support the bus operator and police with their investigations. We have independently commissioned research into the safety of the bus driver environment and surroundings, which will help inform future bus design and help ensure drivers are protected as far as possible.

### Christian Tuvi

On 18 September 2019, Christian Tuvi tragically died while working on the moving walkway at Waterloo Underground station. We ensured his employers were providing all necessary support to Mr Tuvi's family and we have also offered support.

The investigation, led by the British Transport Police (BTP) and supported by the ORR, continues, with the root cause still not confirmed. We have provided all information requested.

London Underground also carried out an investigation. We have reviewed the competence and training requirements for cleaning Underground moving walkways and escalators to ensure people working on them can do so safely. We brought together the leading escalator and moving walkway manufacturers to identify safer ways of working. We have taken a new approach to

procuring and managing safety, which will give our suppliers greater confidence that we are managing all works safely. We will review our investigation following the BTP and ORR investigations.



# 320

workforce injuries on the London Underground this quarter (8% decrease from Q4 2018/19)

# 116

workforce injuries on our buses this quarter (5.7% decrease from Q4 2018/19)



# 53

construction workforce injuries this quarter (2% increase from Q4 2018/19)

## Our outcomes

### Operational communications

The new Operational Communications Monitoring app was launched in March 2020. This is a key part of London Underground's safety assurance regime, making sure that everyone uses the right operational communication protocols when sharing safety messages.

### Safer lifting operations

We have reviewed our approach to lifting, such as when heavy components need to be lifted in a fleet maintenance depot or stores. We will publish new guidance and tools for ensuring safety risks are understood and managed in Quarter I.

We have also completed a new lifting plan template and guidance notes. These will be made available to all our office-based staff through our existing reporting systems.

### Safety initiatives

Our bus operators continue to work on safety initiatives. This includes reducing assaults on staff, and reducing risks of slips, trips and falls on bus operator premises.

Working collaboratively with bus operators and trade unions, a Health Bus has started visiting bus garages to offer support and information to drivers on health-related issues and fatigue.

### Zero Harm Forum

As a major client, we accept our role in providing the means to share learning and innovation with our suppliers. However, owing to the coronavirus outbreak, the final preparations for the spring TfL Zero Harm Forum did not go ahead. Instead we will take the opportunity to reassess the forum purpose, content and audience, ready for planning for later in 2020.

### Beacon Award

The Beacon Award scheme for our construction sites continues to help drive safety, health and environment standards across our suppliers' sites. The awards are our prestigious safety, health and environment site and team award scheme. They recognise suppliers that have demonstrated commitment to site and team occupational health, safety, wellbeing and the environment regardless of their size or the sector they operate within.

The Beacon Awards recognise the supplier and their TfL counterpart. They are designed to motivate the site and office teams, celebrate success in the industry, benchmark against other key suppliers and show our commitment to excellent safety, health and environment standards.

Three of our sites were awarded the Beacon Award in 2020 in recognition of their excellent standard of safety during inspections. These were Wayside to Uxbridge signal equipment rooms, Barking Riverside and Stockwell Substation.

### Fatigue management

Thales, which is one of our major suppliers on the Four Lines Modernisation programme, carried out a trial to investigate ways of managing fatigue, particularly for its nightshift workers.

Quality of sleep is an important part of fatigue management. The trial, which surveyed a small number of TfL construction staff and one regular evening PC user, looked at the effects of reducing the 'blue light' or bright screen on PCs and mobile devices at night, which is closely linked to tiredness by affecting the quality of sleep.

The results showed there was no significant benefit from using a 'blue light' filter and that better results would be achieved by simply avoiding PC's and mobile devices before sleep. A Fatigue Working Group has been established. This group will work to identify areas for further trials to improve the tiredness of staff.

### Safe systems of work

In recognition of increased monitoring, site safety stand downs continue to be used to highlight the importance of workers following their safe system of work. Analysis of safety performance identified this as a positive trend and it is therefore a regular and ongoing activity across our Major Projects directorate.

### Workplace violence and aggression

To help improve the safety and wellbeing of our staff, we have developed an awareness package called 'urban safety training', which focuses on mitigating potential risks when working, travelling and accessing worksites.

Following successful trials, the course content has been revised to include audience participation and 'real life' videos that demonstrate how to overcome conflict. It is now being rolled out to all of our staff. This initiative is part of our strategy for tackling workplace violence, which is described in the next section of this report.

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# 3

sites awarded the Beacon Award for excellent safety







We continue to improve safety for people working on tracks at night

#### Construction design management regulations awareness

As part of our strategy to improve the safety, health and environment knowledge and skills of our people, we continue to deliver a suite of four Construction Design Management Regulations 2015 awareness sessions. So far, more than 700 members of staff have attended the sessions, with positive feedback. We have now commissioned more courses as a result of the high demand.

#### Principal Designer role

The Piccadilly Line Upgrade programme is now using a Design Approval Panel to take a wider overview of design issues where health, safety or environment issues can be considered and reviewed. The proposed work on Principal Designer is now to be incorporated into the Quarter 2 2020/21 in the 'Safe and Sustainable by Design' theme.

#### Safe track access programme

During Quarter 4, we developed plans to improve safety for people who access the London Underground track at night. We reviewed all projects within our Safe Track Access programme to ensure they are prioritised to have the greatest safety impacts. We also met others in the rail industry to learn from their experiences. These projects will continue in 2020/21.

#### Our plans for next quarter

The majority of projects have stopped, owing to the coronavirus pandemic. The exceptions are where safety critical or emergency works are needed to ensure the health and wellbeing of our customers, staff and workforce. We will develop a strategy for safe resumption of construction and project work following the easing of coronavirus restrictions.

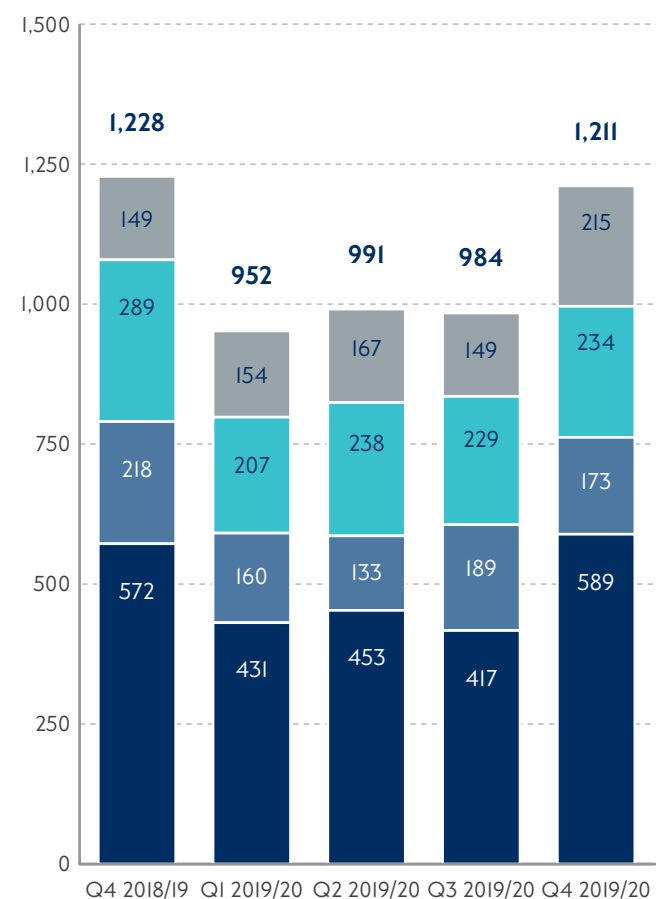
We will apply greater significance and focus on improvement plans, considering the situation with the coronavirus pandemic.

We will continue to roll out the Construction Design Management Regulations 2015 training sessions across the organisation.

We will develop a strategy and plan to expand the profile and audience of the TfL Zero Harm forum.

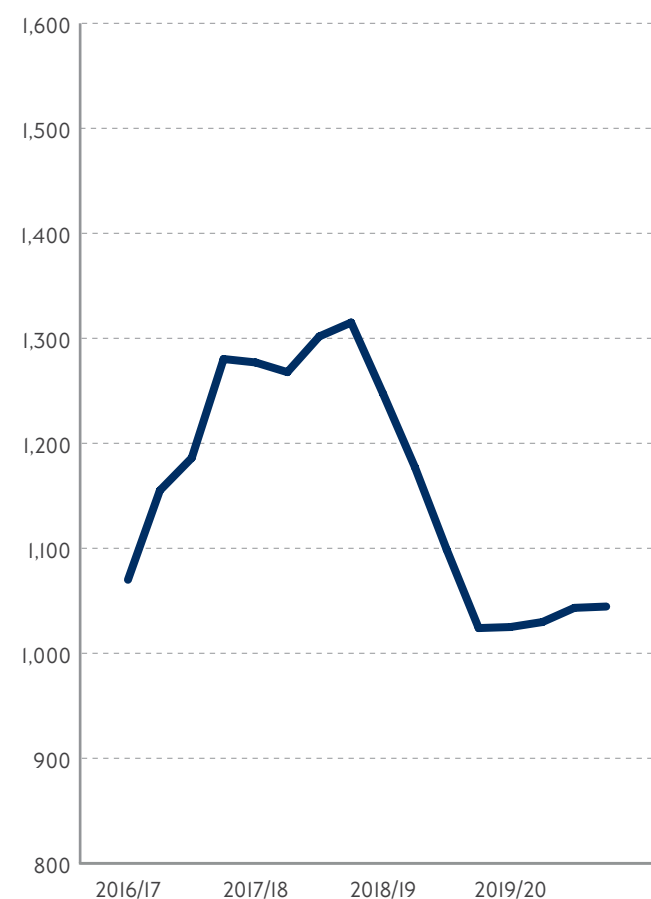
# Workplace violence

## Violence against our staff Past five quarters



- Workforce non-physical assaults
- Workforce physical assaults
- Supplier non-physical assaults
- Supplier physical assaults

## Moving annual average



- Moving annual average

## Types

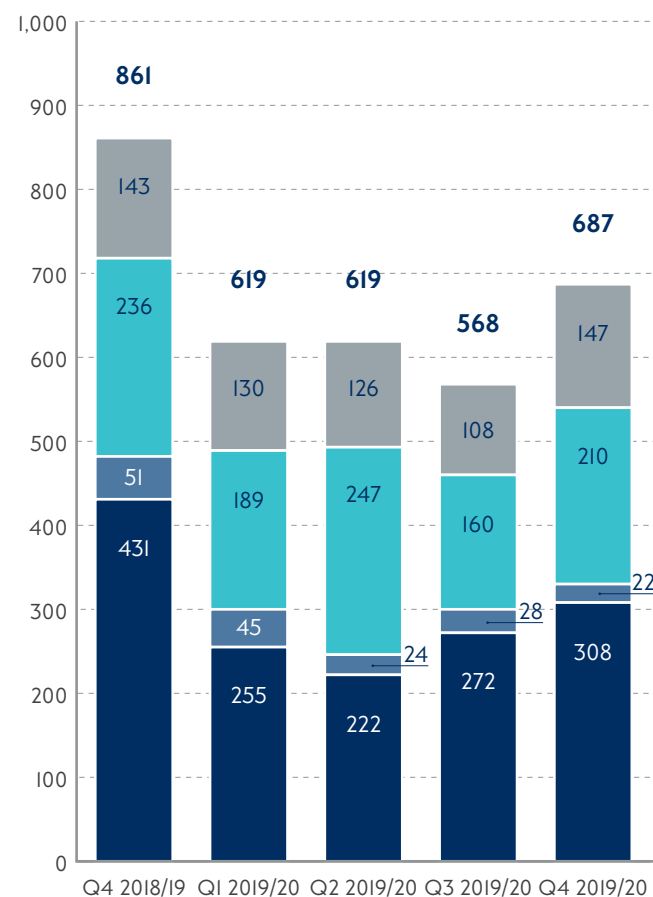
Physical assaults	388
Non-physical assaults	823
<b>Total assaults</b>	<b>1,211</b>

In Quarter 4, there were 1,211 reports of violence against our staff. Of these, 388 were physical assaults and 823 were threats or verbal abuse. This compares with 1,228 in the same quarter last year, showing a small decrease of 1.4 per cent.

During this quarter, the overall positive outcome rate, where action was taken against a perpetrator, was 17 per cent compared with 21 per cent the year before, the full-year rate for 2019/20 is 15 per cent compared with 21 per cent last year. This value fluctuates greatly between the BTP and the MPS, reflecting the live nature of ongoing investigations with many cases open at the time of reporting. Examples of some successful prosecutions are given on page 34.

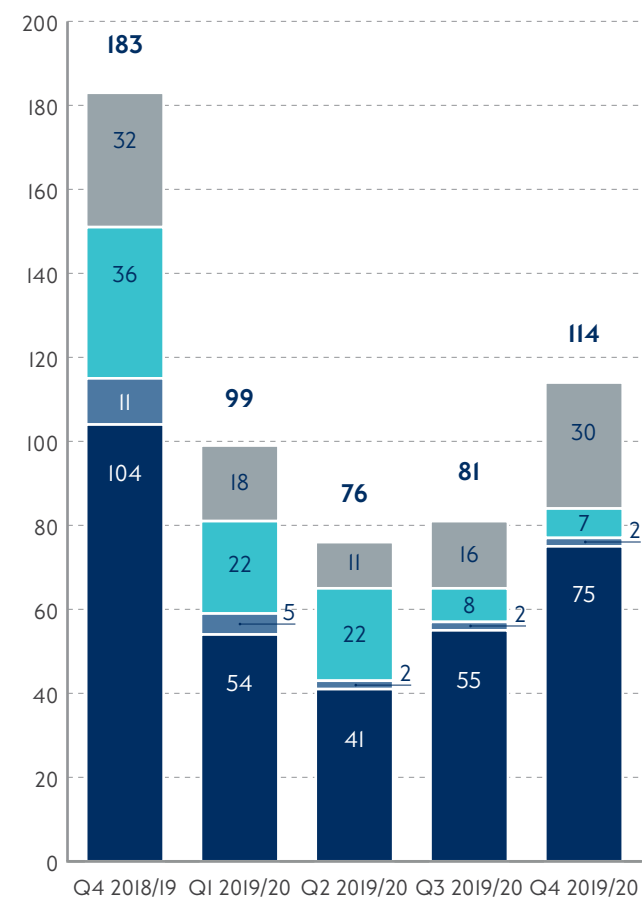
The majority of recorded staff assaults were on the bus and London Underground networks (32 per cent and 42 per cent respectively), with the positive outcome rate for this quarter being eight per cent on the bus network and 18 per cent on the BTP-policed TfL networks.

**Police recorded violence/  
public order offences**  
Against our members of staff



- TfL workforce – London Underground
- TfL workforce – other modes
- Operators – Buses
- Operator – DLR, London Overground, TfL Rail, trams

**Successful prosecutions**



- TfL workforce – London Underground
- TfL workforce – other modes
- Operators – Buses
- Operator – DLR, London Overground, TfL Rail, trams

We work closely with the MPS Roads Transport Policing Command and the BTP to support their investigations into cases of physical and non-physical violence towards our workforce.

It is imperative that our workforce, including suppliers and contractors, feel safe and supported and we are determined to do more to tackle workplace violence and aggression. On 6 January 2020, we brought together the Surface and London Underground teams to create a single group in our Directorate of Compliance, Policing and On-street Services to lead on the implementation of our Work-Related Violence and Aggression strategy.

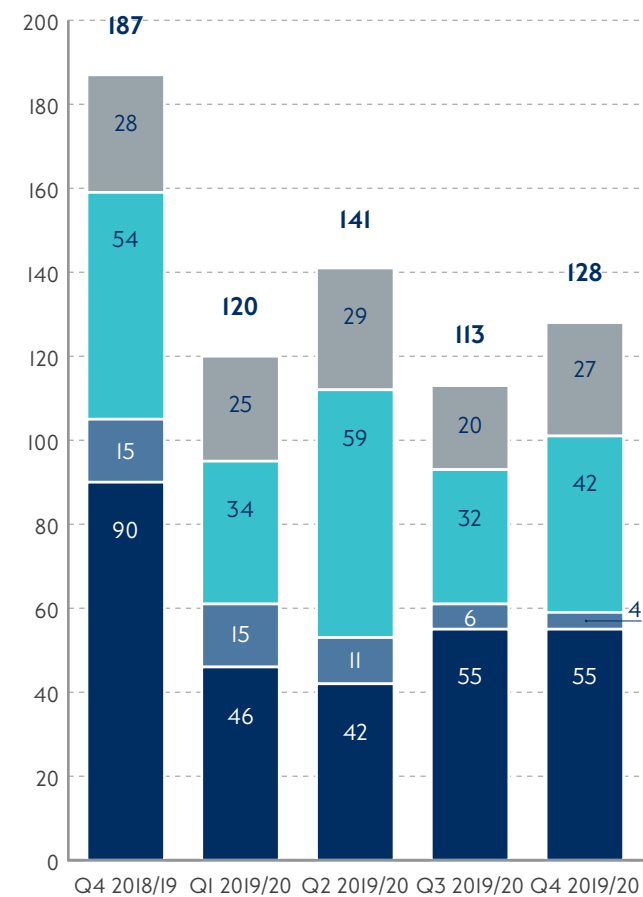
We continue to review the processes and activities of the team and we are working to improve the quality of our reporting, data and analysis to better understand the trends and issues so we can better target actions. Future safety, health and environment quarterly reports will include more insight as this work progresses.

Recruitment to vacant positions started in Quarter 4 but was paused due to the coronavirus pandemic. We will look to fill these vacancies as soon as possible. In the meantime, the team continues to provide valuable support to members of staff who are victims and to the police for the investigation of offences.

The police recorded 687 violence or serious public order offences against staff. This was a 21 per cent increase from Quarter 3 (619 from 568). This increase could be as a result of better reporting and our people have more confidence that their reports will be acted on. Full-year data for 2019/20 is 12.1 per cent lower than the previous year (342 fewer recorded offences).

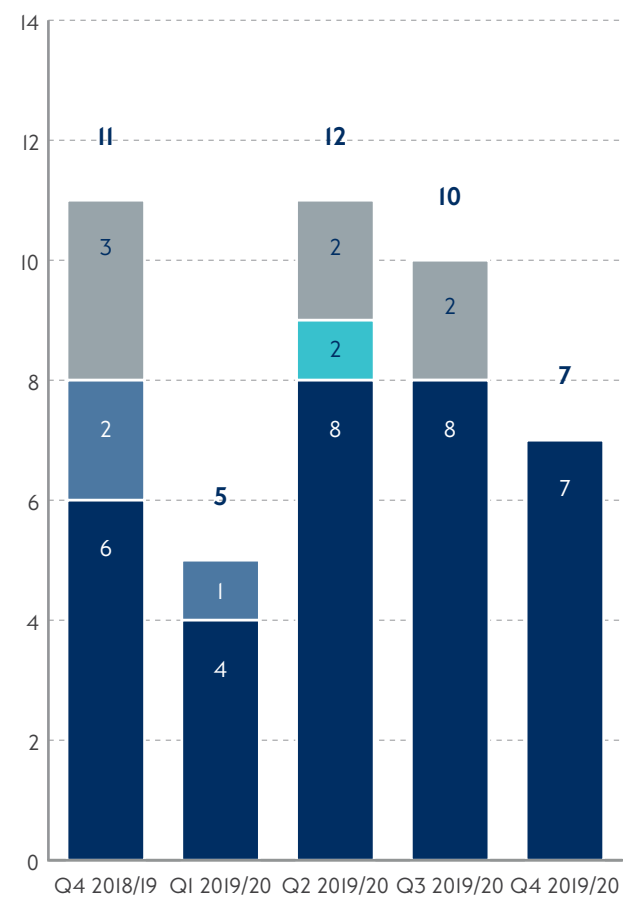


**Police recorded violence/public order offences against our workforce**  
Hate crimes



- TfL workforce – London Underground
- TfL workforce – other modes
- Operators – Buses
- Operator – DLR, London Overground, TfL Rail, trams

**Sexual offences**



- TfL workforce – London Underground
- TfL workforce – other modes
- Operators – Buses
- Operator – DLR, London Overground, TfL Rail, trams

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

In Quarter 4 2019/20, the proportion of offences against our members of staff deemed hate crime was 19 per cent, slightly lower than the same period last year (22 per cent). Full-year data for 2019/20 currently stands at 20 per cent, the same as 2018/19. The majority of hate crimes against our staff were racially motivated (more than 80 per cent), which is consistent across all transport modes.

The volume of reported sexual offences remains low and at a similar level to previous quarters. The offences involve sexual assault, such as inappropriate sexual touching, and exposure.

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

The volume of sexual offences against our members of staff this quarter was low, with the majority occurring against London Underground members of staff. All of these were sexual assaults or exposure offences. The volumes recorded in 2019/20 for Quarter 4 and for the full year remain at a similar level to previous years.

We know these offences often go under-reported. As part of our commitments to improving the safety and security of our workforce, we will support our members of staff to report these offences, so action can be taken. We continue to work with the police to stamp out unwanted sexual behaviour on the transport network and where it does happen, to identify offenders and to bring them to justice.

### Significant positive prosecutions

These are positive outcomes from both the MPS and BTP in bringing perpetrators to justice for harming our people:

#### 23 January 2020

A man was found guilty and sentenced for racially aggravated harassment, after punching a bus driver's cab several times and shouting abuse at him. He was also arrested for a public order matter for shouting at the police. He received a suspended sentence of 20 weeks imprisonment and ordered to receive alcohol treatment.

#### 3 February 2020

A man was found guilty and sentenced after making threats to a bus driver who called the police when he refused to tap on. He also pushed a member of the public who tried to help. He was arrested for common assault and racially aggravated public order. The man received a community order and was ordered to pay £275 in costs and compensation, and ordered to rehabilitation.

#### 27 January 2020

A man was found guilty of racially aggravated assault on a bus driver. The driver was fixing the ramp on the bus when the offender shouted racial slurs at him. He was charged and remanded to court where he received a community order, rehabilitation requirements and £100 in victim surcharge and compensation.

#### 2 March 2020

A man was charged with common assault and two public order offences for slapping the chest and making threats to kill a London Underground member of staff. He pleaded guilty and received £140 fines and £32 victim surcharges.

#### 10 March 2020

A man was found guilty of assaulting two members of London Underground staff at Piccadilly Circus station. The offender shouted and swore at staff, demanding to be let through the gates as he had no money to pay for his travel. He pushed a member of staff and attempted to headbutt him and spat at another member of staff. The man was found guilty of two counts of common assault and was sentenced to four weeks imprisonment for each assault and £120 in victim compensation and £600 in costs. As the offender was already on a suspended sentence for another offence, he was sent to prison for 12 weeks.

#### 25 February 2020

A man was found guilty of racially abusing and assaulting three members of staff at Bond Street station in April last year. He was refused access to travel as he was too intoxicated spat at and punched staff. He was charged and found guilty of racially aggravated public order, two counts of common assault, assaulting a police officer and two counts of public order. He was given a two-month community order with an electronic tag curfew and £315 in fines, compensation and costs.

### Our outcomes

#### Work-Related Violence Aggression strategy

Our plans to launch the Work-Related Violence and Aggression strategy at a summit in April were put on hold as a result of the coronavirus lockdown. The summit will be held once the measures are lifted. We will continue to work across the organisation and with our operators to maintain the focus on improving our collective effort to reduce risk of work-related violence and deliver better support to all our people.

#### Body-worn cameras

We have completed our trial of body-worn cameras on the London Underground, with 250 more body-worn cameras being delivered to frontline staff earlier this year. This ensures that every station has at least one camera available. We are now working to make a body-worn camera available to every frontline member of staff.

To scale this up means we must change our processes for uploading and reviewing footage. We successfully tested key infrastructure at Stratford station, which has informed key areas, such as the design for the camera system and uniform.

Footage captured during this trial has already been used to support successful prosecutions of people who are aggressive towards our staff. We are now working to roll out cameras and docking points over the coming months.

#### Our plans for next quarter

We will finalise plans for a summit to launch the Work-Related Violence and Aggression strategy after the coronavirus lockdown.

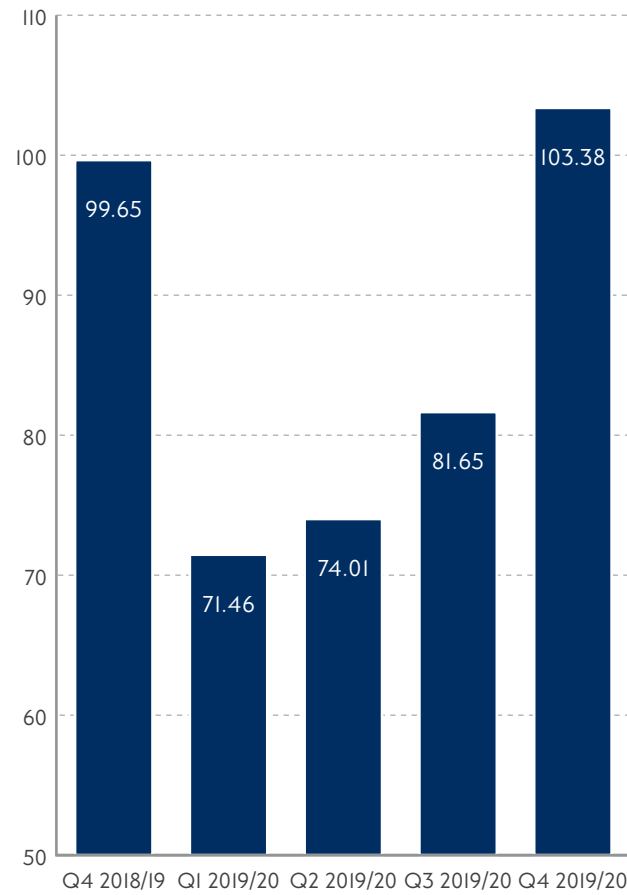
We will further integrate the Work-Related Violence and Aggression team to enable them to provide consistent levels of support and service across the organisation.

We will start an internal audit of conflict management training across the organisation.

Our body-worn video programme will continue.

# Sickness, absence and wellbeing

**Days lost to sickness**  
Past five quarters (thousands)



Sickness absence was 5.2 per cent in Quarter 4 2019/2, compared to 5.0 per cent in the same quarter last year. The main causes of sickness absence continue to be mental health, musculoskeletal, coughs or colds, as well as accidents or assaults. There has been minimal year-on-year change in these causes.

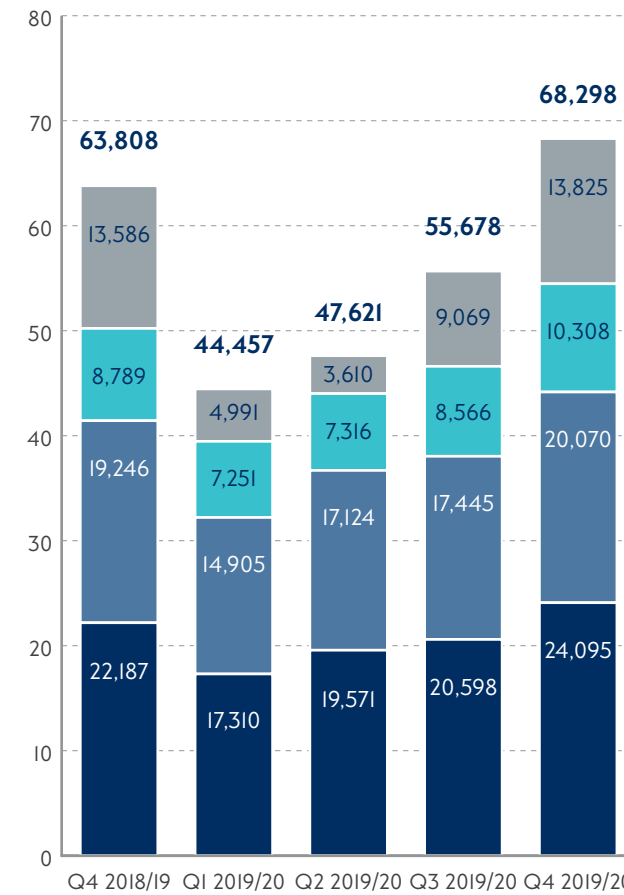
The majority of this quarter was before the coronavirus pandemic and our data did not attribute reported absence or sickness to COVID-19 according to available data at the time of producing this report.



**103,387**

working days lost to sickness  
(3.7% increase compared to Q4 2018/19)

**Main causes of days lost to sickness**  
Past five quarters (thousands)



We provide rehabilitation services in the Physiotherapy department to help members of staff return fit to work. We also advise on ergonomics to prevent work-caused injury. For accidents and assaults, we have peer support via the Trauma Support Groups and we have a counselling team for people suffering from post-trauma distress. There is also an Employee Assistance Programme available to all members of staff for telephone and face-to-face counselling. This service also offers support to managers dealing with distressed workers and to support those with mental health conditions.



**5.2%**

working days lost to sickness  
(0.1% increase compared to Q4 2018/19)

Days lost to sickness

Mental health  
Musculoskeletal  
Accidents/assaults on duty  
Coughs and colds

## Our outcomes

### Condition Management Group

During Quarter 4, the Physiotherapy team introduced a new, ongoing Condition Management Group for employees with recurrent musculoskeletal pain. The group gives participants the tools to enhance their function and quality of life and follows a five-year longitudinal study of our staff that demonstrated a 70 per cent reduction in musculoskeletal sickness absence. The study was presented to the World Congress for back and pelvic pain in 2019.

### Health and wellbeing improvement initiatives

Time to Talk day took place on 6 February 2020 in support of the Time to Change initiative. This is aimed at breaking down the stigma of mental health in the workplace. We held many events, including mindful walks, games, drop-in sessions and cake sales. The Health and Wellbeing department hosted a resilience talk from the Head of Mental Health, a yoga demonstration, mindful colouring and also encouraged staff to share a pot of tea and a chat about their mental health.

We also introduced a Virtual Gratitude Board on our internal social media platform Yammer to encourage staff to post something they are grateful for and spread positivity. Gratitude messages became the top trending Yammer posts during the week of launch.

We invited Cancer Research UK to have an information health stand in the foyer at our Palestra head office on 19 February 2020, which was well received by our staff. One of the Cancer Research nurses said:

'We had a great day and many very useful interactions. Staff were very engaged in our health messages. We had a super busy day!'

### Management training

We ran our monthly Work and Health course in January and February and trained a further 29 managers in ways to understand workplace health and to work more effectively with the Health and Wellbeing department. So far we have trained more than 125 managers on how to create a mentally healthy workplace and start conversations about mental health. Delegate feedback indicates this has significantly increased the knowledge and confidence of line managers in supporting their staff.

### Employee Assistance Programme

The Employee Assistance Programme gives our people free, confidential, 24/7 telephone access to a range of emotional and practical support for problems that might adversely impact their work, health and wellbeing. Usage was high in December and January but began to tail off in February as the coronavirus situation escalated and staff started to use the COVID-19 helpline.

The programme also includes a dedicated support line for managers but take up remains low. We continue to promote this facility, particularly to those who have attended mental health awareness training.

### Coronavirus helpline

A COVID-19 enquiry line was set up by Health and Wellbeing on 2 February 2020 to take calls and emails from staff and managers. As of 31 March, more than 1,000

enquiries had been received covering a range of subjects, including concerns around foreign travel, underlying medical conditions and the risks associated with contact with the public or those suspected of having COVID-19.

### Our plans for next quarter

Having reengineered many occupational health and wellbeing activities for remote working during the coronavirus pandemic, the emphasis will be on preparing to safely restart activities that require face-to-face contact, such as periodic medical examinations for operational staff.

We will source appropriate personal protective equipment for clinicians, in line with guidance from Public Health England, and will reorganise our clinic space to support social distancing. Other occupational health activity will continue to be done remotely where possible.

We will also be developing a process to support managers and staff dealing with the impact of coronavirus. We are planning a fast-track assessment tool to help identify high-risk staff who need to continue to self-isolate. This will assist in resource planning for our operations as lockdown restrictions are relaxed and transport services are ramped up.



# 125

managers trained on creating mentally healthy workplaces

# 1,000+

calls made to our COVID-19 helpline since it launched in February





# Environment

We aim for London's entire transport system to be zero emission by 2050. We are using regulatory and pricing incentives to support the transition to ultra-low emission vehicles.

## Ultra Low Emission Zone

Compliance with the Ultra Low Emission Zone (ULEZ) continues to increase. In January 2020, it was 79.1 per cent, which is significantly higher than 39 per cent in February 2017 and 61 per cent in March 2019. We are ahead of our expectations that 79.2 per cent of vehicles would be compliant with the scheme after one year of operation.

We suspended all road user charging schemes in London between 23 March and 18 May. The suspension of these schemes followed a request from the Mayor to ensure critical workers, particularly those in the NHS, are able to travel as easily as possible during the coronavirus pandemic.

A report published on 26 February 2020 into the impact of the Mayor's bold action to tackle London's air quality crisis. It predicted that by 2050 these air quality policies – including the ULEZ, Low Emission Bus Zones and no longer licensing new diesel taxis – will result in almost 300,000 Londoners being saved from diseases attributable to air pollution, such as coronary heart disease, lung cancer and dementia. This is a reduction of around one in every four air-pollution-related diseases.



We are working to clean up London's air by cutting transport emissions





We are building a network of rapid charge points across London

### Van scrappage scheme

On 22 January 2020, the Mayor increased the support offered by the van scrappage scheme by opening it up to small businesses with 50 or fewer employees and doubling the payment available to £7,000, with £9,500 now available to those switching to electric vans.

The increased funding will enable more van owners to switch to cleaner vehicles, while helping businesses prepare for the expansion of the ULEZ to the North and South Circular Roads.



### Bus emissions

We have nearly completed our programme to retrofit and replace buses, with 90 per cent of our bus fleet now being ultra-low emission. We expect to raise all remaining vehicles to this standard or better by autumn this year. Route 94 became west London's first all-electric double-deck route on 17 February 2020, operating between Acton Green and Piccadilly Circus. We now have 230 electric vehicles in our bus fleet.

### Cleaner Dial-a-Ride vehicles

We began the roll-out of 166 new ultra-clean Dial-a-Ride minibuses, with 61 of the latest specification vehicles now in service. These have been ordered to enable us to operate uninterrupted door-to-door services for passengers with the greatest accessibility needs in the expanded ULEZ. This follows an earlier order for 90 vehicles to comply with the ULEZ from April 2019.

The latest vehicles have enhancements like autonomous braking at low speed, better CCTV, improved heating and air

conditioning, and more tinted windows to reduce glare. These newest buses also have new handrails, and an easier to deploy and stow away ramp at the front door to improve access. We are halfway through retrofitting the first 90 buses with these new modifications.

We are evaluating the possibility of procuring an all-electric minibus that meets the requirements for Dial-a-Ride users.

### Electric charging points

To support the growing number of zero-emission capable taxis and the wider take up of electric vehicles, we are spending £18m and working with the boroughs and other organisations to build a network of rapid charge points across London, with 247 currently installed.

### TfL support fleet

We are developing a detailed programme to convert our support vehicles to ultra-low emission. In support of this, we are studying the future requirements of our support fleet, including vehicle types, daily mileage, vehicle charging and leasing arrangements. Once complete, we will progress investment in the first phase of vehicle conversions in 2020/21.

We aim for all cars within the Greater London Authority (GLA) group support fleets to be zero-emission capable by 2025. This includes all new cars and vans (weighing less than 3.5 tonnes).

We aim for all heavy vehicles (greater than 3.5 tonnes) in the GLA group fleets being fossil fuel-free from 2030 and for the GLA fleets to be zero emission by 2050.



## Reducing carbon emissions

### Energy efficiency

We are working to reduce energy consumption across our network and improve energy efficiency. This includes the development of an energy procurement strategy that will look at all elements of our operations.

London Overground has installed LED lighting across all stations between Willesden Junction and Clapham Junction, reducing energy use by around 12 per cent for each station. In addition, three electric vehicle charging points have been installed at the New Cross Gate Depot.

Keolis Amey Docklands, which operates the DLR, has installed electric charging points at Poplar with four electric vans brought into use to help support its operations. More charge points will be installed throughout 2020.

We have completed the re-lamping of Greenwich Power Station's gas turbine hall, with 90 high-pressure sodium lamps replaced by LED lamps that are reducing lighting power demand by 60 per cent and saving around £10,000 per year. Maintenance and hazardous waste costs will reduce too as the sodium lamps need to be replaced every two years, whereas the new LED lamps last for at least five and half years.



# 249

rapid charging points installed by the end of March 2020

## Waste and recycling

We are collating waste and recycling data from across our operations and projects, which will be reported in our Safety, health and environment annual report. Based on the data so far, around 42 per cent of commercial and industrial waste collected at our sites was recycled in 2019/20, with stations showing the lowest recycling rates. Our head office buildings had recycling rates of more than 70 per cent.

Most of our waste comes from our construction, demolition and excavation activities. Of this, more than 99 per cent was reused, recycled or recovered.

### Waste heat export

The waste heat from London Underground's ventilation shafts has the potential to be used to heat nearby buildings. On 5 March 2020, in partnership with the London Borough of Islington and the Mayor, we launched the Bunhill 2 Energy Centre, which takes waste heat from Northern line tunnels to heat local homes, a school and two leisure centres. We have also studied 56 vent shafts to assess the potential for waste heat export. We have completed detailed technical feasibility studies on the top six sites and are developing our strategy to bring feasibility studies of other potential sites.



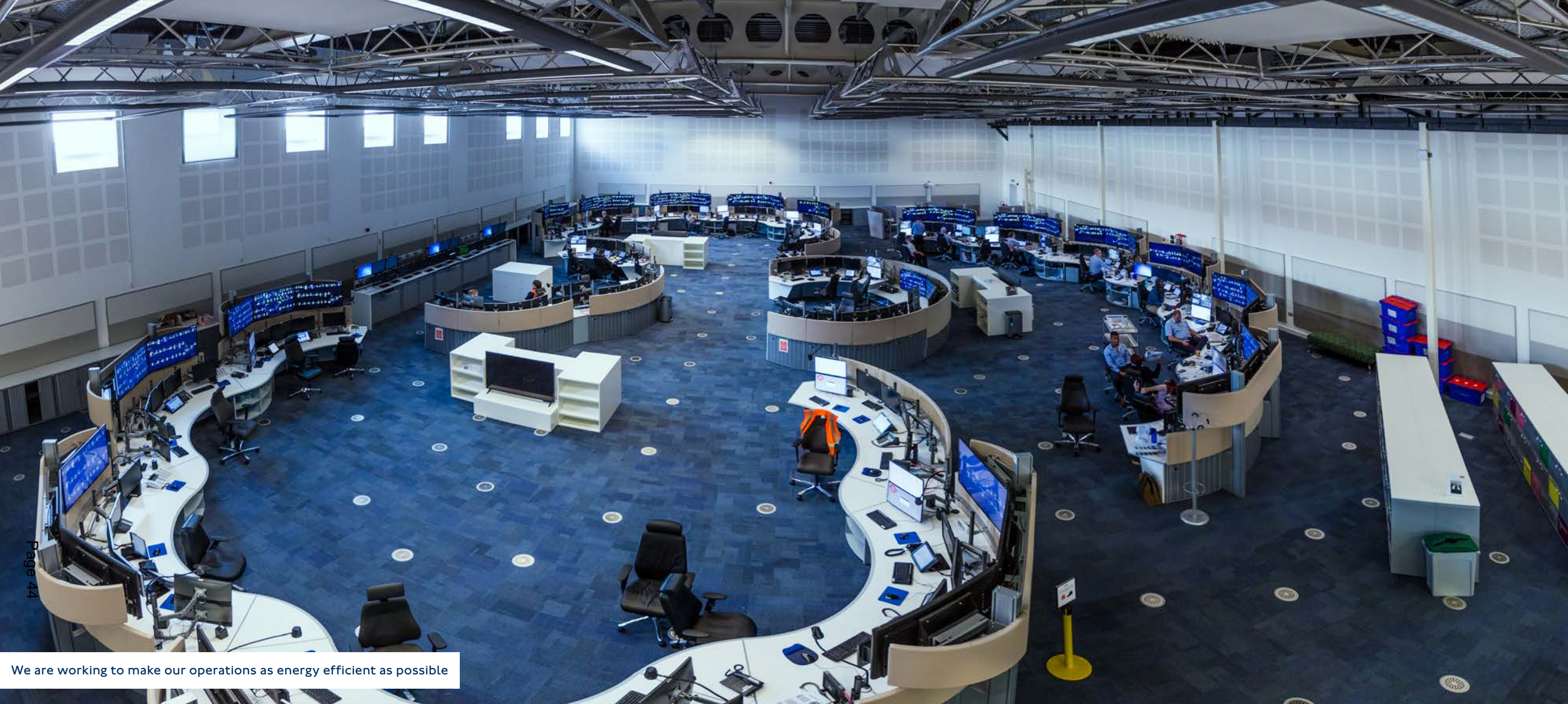
# 70%

recycling rate across our head office buildings



Most of our bus fleet is now ultra-low emission





We are working to make our operations as energy efficient as possible

**Get to Site campaign**

The first theme for our Get to Site campaign for 2020 is the environment. This quarter, we developed and shared the first Major Projects video as part of our training sessions. We ran three environment awareness sessions around climate change, which were held at our Endeavour Square head office and led by the Four Lines Modernisations Environment Champions.

The sessions emphasised the importance of working together with our supply chain to show how they contribute to our overall Environmental strategy.

Participants made an Environment Pledge and the team circulated a 'Get to Site' checklist to make it easier for people to make environmentally worthwhile site visits. The concept is to get out on site, carry out a tour or inspection, speak to people and engage them on looking after our environment.

The topics covered included reducing oil spillages and ground contamination, controlling hazardous substances and noise, working on redundant assets, damage to wildlife habitats, waste reduction, and using car-pooling to travel to site.

**Major Projects environment plan**

We have revitalised our Major Projects safety, health and environment plan for 2020, building on the previous themes of Making Safety Personal and Get to Site. The latest plan combines these themes with key topics that are either specifically relevant to the Four Lines Modernisation work, or tie in closely with other themes.

**Electricity**

As part of our aim to be a zero-carbon by 2030, we are pursuing local renewable generation in our head offices, as well as in rail and all other operational electricity.

**Natural resources**

**Waste**

We are working to procure a new waste management contractor. The evaluation has been completed and the decision was due within Quarter 4.

**Water fountains**

In Quarter 4, we continued to install water refill points in collaboration with the GLA and Thames Water, with five water fountains installed in our locations. The installation programme has been paused due to the coronavirus.



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

We are moving ahead with many of London's most significant infrastructure projects, using transport to unlock growth. We are working with partners on major projects like Crossrail 2 and the Bakerloo Line Extension that will deliver the new homes and jobs London and the UK need. We are in the final phases of completing the Elizabeth line which, when open, will add 10 per cent to central 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.





## Joint meeting of the Safety, Sustainability and Human Resources Panel and the Customer Service and Operational Performance Panel

**Date:** 10 June 2020

**Item:** Update on TfL's Safety and Health Response to Covid-19

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### This paper will be considered in public

## 1 Summary

- 1.1 It is not yet known when the Covid-19 pandemic will end but we are moving beyond its early lock-down phase into new stages of restart and recovery. Lessons specific to the early lockdown phases have been captured and reviewed so that they are able to inform future lessons-learned activity and planning.
- 1.2 Following the beginning of lockdown, on 23 March 2020, we have completed an organisation change programme and, as planned, launched a new Safety, Health and Environment (SHE) function at the beginning of April 2020. The Covid-19 crisis has tested the new SHE delivery model and provided an opportunity for us to learn lessons now and for the future. This paper sets out the actions taken in the early stages, lessons learned and early recommendations for future action in relation to TfL's SHE function, it does not provide a complete overview of TfL's activity during the pandemic or the wider operational response.

## 2 Recommendation

- 2.1 **The Panels are asked to note the paper as an initial assessment of TfL's Safety, Health and Environment (SHE) non-operational response to the Covid-19 pandemic and provide advice and direction on further improvement to TfL's SHE activity.**

## 3 Background and current status

- 3.1 The Covid-19 outbreak gathered pace rapidly. Only a few weeks elapsed between the reporting of a cluster of cases of viral pneumonia in Wuhan, Hubei Province, China on 31 December 2019 and the World Health Organisation (WHO) declaring a Public Health Emergency of International Concern on 30 January 2020.
- 3.2 The epidemic accelerated leading to the declaration of a Global Pandemic on 11 March 2020. The subsequent UK lockdown was introduced from 23 March 2020.
- 3.3 During this period the newly launched SHE function was closely involved in many aspects of TfL's wider response to the pandemic.

## **Preparedness and Capability**

- 3.4 We had a London pandemic flu plan that provided a starting point for action consideration. The last major pandemic preparation was 2009/10 around the H1N1 outbreak. An update of the plan scheduled for Autumn 2020 had not been commenced at the time of the outbreak. Following early cases in the UK in February 2020, our resilience teams quickly began to adapt and update existing plans.
- 3.5 With regards to sourcing and distributing Personal Protective Equipment (PPE), we had local arrangements in place across the business. This was superseded by a centrally coordinated approach developed during the lockdown but would have benefited from more strategic coordination from the outset.
- 3.6 As the pandemic developed, the embedded in-house Occupational Health (OH) expertise became increasingly important. We were able to engage effectively with Public Health England (PHE), to interpret PHE and Government advice clearly and quickly, enabling authoritative advice to be provided to our people.
- 3.7 We are now considering how to improve the process of documenting and refreshing our preparedness plans. We have reviewed our strategic risks and updated them to include these types of risks and are working through to a higher level of detail with our preparedness plans.

## **Responses and Decisions**

- 3.8 We issued our first information and guidance to managers in the week commencing 10 February 2020. We regularly updated this as new PHE advice was issued including self-isolation advice on 13 March and working from home guidance on 15 March 2020.
- 3.9 We responded quickly to protect public health as part of our duty of care to our staff and public, actively discouraging non-essential travel from 16 March 2020, when the Government requested that everyone who could work from home should do so.
- 3.10 Our Safe Stop initiative was communicated on 23 March 2020 and saw the majority of construction activity paused. This pan-TfL approach represented a step-change in integration of our construction management. Following the SHE reorganisation, having one SHE team supporting construction and projects enabled clarity of message and consistency of support to the business.
- 3.11 We have generally acted as a single organisation. However, the response has shown that there remains scope to improve integration and coordination. For example, in our early response, some parts of the organisation obtained and distributed hand-gel more rapidly than others.
- 3.12 The positive joint working across teams has created some unforeseen pressures. For example, on limited OH resources. We have been exploring how more

general areas of work can be delivered more effectively by other business functions to relieve pressures on specialist teams.

### **Staff support**

- 3.13 At the time of writing, we believe that 43 people who work for or are contracted to work for TfL have died from Coronavirus, 29 of whom were bus workers, and we are doing everything we can to support their families. We are especially concerned that evidence appears to be emerging that certain people, particularly people of BAME origin or working in certain roles, may be more susceptible to the virus. In response we have asked the University College London Institute of Health Equity to provide independent advice as part of a two-part study to better understand the pattern of coronavirus infections and deaths amongst London's bus workers. This study will help ensure that we are taking all possible measures to protect the health, safety and wellbeing of those working to keep the bus network moving.
- 3.14 The first part of the study will review and advise on our operational response during this pandemic. It will examine whether the measures that we implemented such as the deep cleaning of our buses and sealing the holes in bus drivers' protective screens helped to protect both bus workers and our customers.
- 3.15 The second part of the study will examine the potential contribution that occupation exposure plays in differences in infection and death rates between London's frontline transport workers and the general London population.
- 3.16 This work is due to start shortly and will take between three and four months to complete.
- 3.17 Throughout the crisis we have focussed on providing a support, reassurance and information to our people.
- 3.18 A management hotline for Coronavirus advice was set up from the beginning of March 2020. This received several hundred queries, peaking in the week before the official lockdown. Queries spanned a range of subjects, but the greatest number concerned employee self-isolation or symptoms.
- 3.19 Our people have access to a bereavement support package which includes emotional support through the Employee Assistance Programme telephone support line, bereavement counselling and group bereavement support for teams. Immediate family of our people are also able to access unlimited emotional support through the 24/7 telephone helpline.
- 3.20 The OH counselling service criteria has been extended to accept management referrals for operational staff who are experiencing ongoing and significant mental distress.
- 3.21 To provide further support to TfL employees, a series of guidance and resources on taking care of your mental health and wellbeing was developed and made available via the dedicated COVID-19 SharePoint.



- 3.22 TfL key workers and their household members are eligible for testing. We offered drive through testing and home tests that are sent within 24 hours of being requested. Both services were offered from the week commencing 20 April 2020.
- 3.23 We are continuing to update information and guidance for staff and managers regularly and rapidly to ensure they have the latest information available.

### **Partnerships**

- 3.24 Existing established partnerships with PHE, the Rail Delivery Group and the Office of Rail and Road (ORR) enabled us to develop our advice in line with that of PHE to be consistent across transport operators. Although requiring significant effort this has avoided issues of inconsistency between operators and enabled clear and consistent guidance to our people and the travelling public.
- 3.25 Furthermore, our relationship with the ORR has been valuable in enabling us to provide the regulator with assurance that revised operations are safe and in line with our operating licenses. Where necessary our Management System team has provided advice on application of the London Underground Rulebook to the unusual operating conditions during the lockdown.

### **Supporting the Business**

- 3.26 In response to the COVID-19 pandemic, we prepared an overarching risk assessment, and followed government guidelines in preparing risk assessment for our operational business areas which have been made available to all staff and which we are publishing on our website.
- 3.27 In line with the overarching risk assessments, we provided each business area with support on how to use PPE when dealing with people on our services who require emergency first aid. This required us to provide each transport mode with a tailored risk assessment to meet the bespoke needs of each business area.
- 3.28 Our partnerships enabled us to hold a risk assessment workshop with national rail operators, concerning how to give greater protection to maintenance and engineering staff. We provided consistent technical guidance on social distancing for these teams, and safe system guidance on use of PPE where distancing could not be maintained.
- 3.29 At each stage in this pandemic, our actions have been guided by the PHE advice at the time. We are considering whether we could have anticipated changes to that advice and implemented some of our actions earlier. For example, acting to secure stocks of PPE or hand gel earlier in the pandemic to enable consistent distribution across all our operations to relevant employees.

### **Future Challenges**

- 3.30 It is not possible to confidently predict all potential challenges, and many are being considered in detail as part of recovery planning workstreams. Some potential areas for discussion are described below.
- 3.31 Mental health impacts of the current situation are likely to be significant with respect to our employees and the impact of the lockdown; the significant workload

that some people are currently experiencing; and of the likely economic impacts on London and our organisation. We are considering how best to review our mental health support packages and will need to closely monitor the workload of key employees.

- 3.32 Mental health impacts are also likely in the wider community and may lead to anticipate an increase in suicide attempts and an increase in customer aggression. We may see increases in hate crime and have already seen increases in types of anti-social behaviour such as spitting, with 60 incidents directed towards bus drivers recorded during the lockdown period. We will continue to implement our workplace violence and aggression plans, roll out our suicide prevention programmes, and explore the potential to extend them. Our customer messaging will be reviewed to reinforce understanding of required behaviours.
- 3.33 We will undoubtedly have less capital budget in the future. This means that achieving our ambitious targets for safety improvement, particularly around Vision Zero, will be inevitably more challenging. While focussed capital investment will remain important, we are working on reviewing and developing more flexible and less capital-intensive strategies including enforcement, culture change and incentivising the uptake of vehicle technologies.
- 3.34 We will also need to use our influence and retain our commitment to keeping environmental objectives in focus during our and London's recovery. There will be understandable pressure to kick-start the economy. While supporting this, we are reviewing the steps we can take to ensure a green recovery. The global climate emergency continues unabated and continues to represent a threat to London and Londoners.

## **4 Summary of emerging areas for future attention and improvement**

- 4.1 The following areas have been identified for future improvement:
- (a) explore opportunities to improve horizon-scanning for risks of this sort and to work through at a higher level of detail into our preparedness plans;
  - (b) how to improve our documentation of these key preparedness plans and processes for refreshing them;
  - (c) building on the many examples of us acting as a single organisation in responding to this crisis, identify further areas for improved integration;
  - (d) consider whether we should or could have anticipated changes in government advice and taken action to pre-empt it; and
  - (e) review our mental health support packages considering the impact of lockdown, future uncertainty and high workload of some individuals, in addition to continuing to take active steps to spread the load within teams.
- 4.2 This paper outlines initial SHE related lessons and opportunities in relation to our response to the Coronavirus pandemic. More detailed lessons learnt exercises have begun in other parts of the business, which will be brought together to inform

our ongoing response and review and update of our preparedness plans. At this early stage in the lifespan of the new SHE function, we welcome advice and contributions from the Committee to ensure we are learning all appropriate lessons to date and can continue to improve and focus our support to TfL and to London.

**Appendices:**

None

**List of Background Papers:**

None

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**Joint meeting of the Safety, Sustainability and  
Human Resources Panel and Customer Service  
and Operational Performance Panel**

**Date:** 10 June 2020

**Item:** Rail Accident Investigation Branch Annual Report

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**This paper will be considered in public**

**1 Summary**

- 1.1 This paper provides a summary of the key points from the Rail Accident Investigation Branch (RAIB) Annual Report, published in May 2020.

**2 Recommendation**

- 2.1 **The Panels are asked to note the paper.**

**3 Background and current status**

- 3.1 On 21 May the Rail Accident Investigation Branch published their [Annual Report](#) and a series of six [Summaries of Learning](#) setting out lessons from incidents they have investigated. They include information on two investigations of direct relevance to TfL.
- 3.2 On their recommendations following the Sandilands tragedy they note the significant progress that has been made and express their support for the changes that have been introduced since the incident. They continue to show the status of three of their recommendations as Implementation Ongoing rather than Implemented. Implementation Ongoing is explained in the report as meaning that "ORR [the Office of Rail and Road] is content with the proposed action plan to implement the recommendation and the timescale for delivery that has been presented by the end implementer".
- 3.3 The three recommendations categorised as Implementation Ongoing relate to Industry Review of Risk; Vigilance Devices and Passenger Containment. It should be noted that all of these remain outstanding for the wider tram industry and the ORR have confirmed that "London Trams do not need to carry out any further action" with respect to these recommendations. Following discussion with RAIB and ORR a fourth recommendation relating to Evacuation and previously shown as Incomplete, is now categorised as Implemented.
- 3.4 In the Summary of Learning looking at the platform-train interface, they refer to lessons learnt following an incident on London Underground in 2018 when a passenger at Notting Hill Gate was dragged and injured after being trapped in the train doors. The Summary and Annual Report refer to wider industry issues

around an over-reliance on door control systems to detect trapped people or items and also point to driver fatigue and alertness as a factor in the specific London Underground incident.

- 3.5 More generally the report highlights a range of industry issues which we need to be aware of including:
- (a) **Safety of track workers.** Particular frustration is expressed at this continuing issue. This includes the need to modernise some protection practices, which are described as 'Victorian'. The more rigorous separation between track workers and trains and better safety record of LU and DLR is noted;
  - (b) **Skills of team leaders** on site and the importance of them having the right training and judgement to make safe decisions;
  - (c) **Effective management of disruption**, particularly in relation to incidents where passengers are stranded for long periods of time and may self-detrain;
  - (d) **Fatigue and cognitive impairment**, particularly of people, including contractors, working on zero hours contracts who may be juggling multiple jobs and working long hours;
  - (e) **Issues of plant design and maintenance**, which have led to a number of incidents and casualties; and
  - (f) **Software design** and the challenges of knowing what's in the 'black box' and having the right assurance that it is safe in design and operation.
- 3.6 We will identify key lessons for TfL operations from this information and will work to ensure that they are embedded in our future practice.

## Appendices

Appendix 1 – RAIB Annual Report – Link: [Annual Report](#)

### List of Background Papers:

None

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