

Agenda

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

Date: Wednesday 4 November 2020

Time: 10.00am

Place: Teams Virtual Meeting

Supplemental Agenda

Safety, Sustainability and Human Resources Panel

Wednesday 4 November 2020

- 5 Quarterly Safety, Health and Environment Performance Report
(Pages 1 - 44)**

Date: 4 November 2020

Item: Safety, Health and Environment Performance Report

This paper will be considered in public

1 Summary

- 1.1 This paper summarises key information reported in the second Quarterly (Q2) report for the 20/21 financial year. The Q2 period covers the dates 28 June to 19 September 2020 and the majority of data presented in the Q2 cover this range. In a number of instances, events just outside this range are highlighted to the Panel and this is noted in the text.
- 1.2 The paper shows that we have met and exceeded scorecard targets for safety. While absolute numbers of casualties remain lower than usual and lower than the equivalent period last year, there has been increases in the rate of casualties over Q1 and Q2 of this financial year on both public transport and streets, which we are monitoring carefully.
- 1.3 Days lost to sickness among our workforce remain down compared to last year. We have however seen a concerning resumption of workplace violence and aggression directed towards our people, following a significant reduction in Q1.
- 1.4 Our operational electricity consumption and carbon emissions remain significantly lower than the equivalent period last year, however both have risen compared to Q1 as more services resume. We are pleased to report that we are on track to meet our targets for carbon emissions from our non-operational functions. We are also pleased to report that there have been significant changes to the levels of public exposure to air pollution as a result of a range of policies introduced over recent years.

2 Recommendation

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

3 Key Information Presented in the Q2 report

- 3.1 This paper summarises the key information and trends that are contained in the Quarterly (Q2) report. References in parenthesis give the page numbers of the Q2 report.

Scorecard

3.2 We report that both the TfL H1 safety scorecard measures have been met and exceeded (p6).

3.3 The H1 scorecard was the first time that we have used a rate-based scorecard where casualties are normalised by customer numbers. This approach was adopted as many of our safety, health and environment performance indicators are sensitive to levels of activity on the network and therefore needed to be tracked in the context of changing travel patterns during H1. This was doubly challenging as a new indicator; where exposure information is not entirely reliable, for example with regard to walking and cycling activity; and one without a historic trend that could be used to calibrate targets. Our performance in H1 has informed the setting of the targets presented to the Board as part of the H2 scorecard.

Public Transport Safety

3.4 There were a number of significant incidents during or just prior to the reporting period including:

- a) 21 June 2020, a southbound Chiltern Railways train passed a signal at danger (SPAD), ran through two sets of points and ended up on the northbound road, 23 metres from a Metropolitan train which was in the platform at Chalfont & Latimer station.

In this area, the trains are operated by Chiltern, and the signalling is controlled by LU. The ORR and RAIB were notified. There were no injuries reported, but this incident was a potentially significant near miss. The SHE and Engineering teams are working closely with Chiltern Railways as part of the investigation. Shortly after the incident, the TfL Engineering team confirmed that LU's signalling system was working effectively. A number of immediate actions were taken by Chiltern. The RAIB is investigating this incident.

- b) 25 June 2020, approximately 115 feet of wall collapsed onto the track and cable run on the District line (near East Ham station). No trains hit the obstruction, and no one was hurt.

A Formal Investigation has been commissioned. The ORR is investigating and has asked a series of questions, which have all been answered. The RAIB is not formally investigating and has requested a copy of our Formal Investigation once it is complete.

- c) 26 June 2020 the pantograph of a tram became detached and entangled in the Overhead Line Equipment (OLE). The incident occurred on George Street, approximately halfway between Wellesley Road and East Croydon Station. There were no injuries to staff, passengers or members of the public. An investigation has taken place.

- d) On 5 August 2020, two trams entered the single-line section between King Henry's Drive and New Addington tram stops from opposing directions. The two trams were stopped by each driver (approximately 100m apart) using a normal service brake when they became aware of the conflicting movement in the single line section. A third-party independent investigation was commissioned jointly by TfL and TOL
 - e) 21 August 2020 During high winds an illuminated sign fell from Kentish Town station and hit and injured a member of the public. An investigation has been commissioned.
- 3.5 We also concluded a number of serious incident investigations and reported to relevant operational boards, as summarised in the Q2 (p34).
- 3.6 While total injury numbers are lower than last year, injury rates across all passenger modes have risen during the pandemic, while still being within scorecard tolerances. Customer and workforce injury rates (normalised by passenger numbers) were highest in Q1 but are reverting towards pre-COVID levels.
- 3.7 There is variation by mode (p8. Most injuries are slight with a number of more serious injuries taking place, particularly on London Underground, associated with intoxicated customers.
- 3.8 Our Rail transport mode was the only business area that reported no deaths or serious injuries in the quarter despite passenger journeys increasing by 147 per cent compared to quarter 1. Buses and London Underground reported 9 and 11 serious injuries this quarter respectively.
- 3.9 In comparison to the last financial year (19/20), there had been four fewer suicides on London Underground by the end of Q2 representing a 20% decrease in suicides year-to-date. This number has unfortunately risen since the end of the reporting period.
- 3.10 Bus customer total injuries increased this quarter compared to Q1 following the easing of lockdown (p8). Compared to the same quarter last year, however absolute injury numbers reduced by 60 per cent and bus customer injury rates remain relatively steady despite the changes in operation and return to school in Q2.
- 3.11 Bus customer injuries as a moving average (p8) have been declining since Q2 of 2018/19. The rate of decline started to level during Q4 of 2019/20 but then fell subsequently by 15 per cent in Q1 of this year and 12 per cent in Q2.
- 3.12 The most common cause of customer injuries on many of our customer modes is slips, trips and falls. Absolute numbers of these incidents remain lower than they did prior to lockdown, however the rate of incidents on buses has increased by a statistically significant amount since lockdown(p10). No comparable increase has occurred on London Underground. This trend may result from customers avoiding handrails and the absence of crowding, which mitigates these sorts of incidents.

Road Safety

- 3.13 At the end of September, we released confirmed casualty data for 2019. This showed an increase in fatal injuries to 125, compared to 112 in 2018, the lowest number on record. Five cyclists were killed in 2019, down by 70 per cent from the 2005-09 baseline. There was an overall decrease in serious injuries of 4 per cent compared to 2018. The total number of deaths and serious injuries in 2019 was 39 per cent lower than the 2005-09 baseline and the number of children killed or seriously injured was 65 per cent lower than the baseline. Deaths and serious injuries where a bus was involved had reduced 65 per cent on the 2005-09 baseline against a target of 70 per cent by 2022.
- 3.14 The changes in deaths and serious injuries vary by mode. The number of people seriously injured whilst riding a bicycle had increased by six per cent against the baseline but cycling levels have increased by significantly more over the same period, meaning cycling has become safer on a per journey basis. The number of motorcyclists killed or seriously injured in 2019 has reduced by six per cent since 2018, and has been going down year on year despite an increase in motorcyclist fatalities in 2019.
- 3.15 In 2020, from 1 January to 30 September there were 71 road user fatalities recorded compared to 90 at the same point in 2019. The majority of this improvement has come from reduced pedestrian fatalities, which have almost halved. Most other modes have remained at equivalent levels to 2019 with the exception of motorcycling, where fatalities have increased slightly. There have been no fatalities this year among bus or taxi and private hire customers.
- 3.16 Taking fatalities and serious injuries together, our trend during September 2020 is approaching that of the equivalent period last year. That means that across the year, we are currently likely by year-end to report a reduction in fatal and serious injuries compared to 2019, but this is linked to reduced levels of activity in Q1 and the start of Q2, rather than a step change in safety improvement.
- 3.17 Previously, there has generally been an even split in casualties between inner and outer London (p11). However since calendar Q4 2019, inner London has seen a larger decrease in numbers than outer London. Inner London casualties tend to be driven by cycling and pedestrian injuries, whereas outer tend to be characterised by car occupant casualties. This is consistent with analysis presented to the SSHRP previously, showing that the greatest casualty reduction in the lockdown period had been in central London and was linked to the suppression of walking trips.

Our Workforce

- 3.18 In aggregate, employee days lost due to sickness in Q2 show broadly similar results to the previous quarter during the pandemic, with less than 0.1 per cent difference. Compared to Q2 last year, the change in days lost due to sickness showed a reduction of 37.3 per cent.

- 3.19 Musculoskeletal and mental health conditions remain the two most common reasons for staff being absent from work, accounting for 30 per cent and 33 per cent of lost days, respectively. This is slightly different from Q1 during lockdown when mental health conditions accounted for 45 per cent of total sickness absence. With more staff returning to work this quarter, fewer mental health absences have been reported but work-related sickness absence associated with performing duties such as manual handling have increased.
- 3.20 As London began to recover and public transport ridership increased on the previous quarter, so did levels of crime directed towards our workforce. Police crime data for Q2 (p14) showed a 38 per cent increase (an additional 159 offences) in the number of workplace violence and aggression (WVA) offences compared with Q1 but was 6 per cent lower (39 fewer offences) than Q2 in 2019/20. Our own data shows a similar trend.
- 3.21 Over half of police-recorded WVA offences were targeted at bus drivers. The overwhelming majority of incidents involved verbal abuse and threatening behaviour, followed by common assault¹. The number of spitting incidents – from both passengers and other road users – saw a concerning increase in Q1 2020/21 accounting for 35 per cent of all WVA offences involving bus drivers. In Q2 2020/21 this had fallen to 22 per cent, lower than the same quarter in 2019/20.
- 3.22 In Q2 2020/21, the proportion of offences against staff deemed hate crime was 22 per cent. This remains similar to previous quarters. The majority of hate crime directed at transport staff are race hate crimes (in excess of 80 per cent) and this is consistent across all modes.
- 3.23 There were continued successful prosecutions during Q2 of people who directed violence and aggression towards our people, with a number of cases concluded (p15).

Environment

- 3.24 Electricity consumption in our operations remains down but rose steadily in each period during Q2 as more rail services resumed (p30). Carbon emissions (not including buses) also rose during Q2 in line with increased electricity consumption. Year to date electricity consumption (up to Period 5) for our operations is c12 per cent lower than the equivalent period in 2019/20.
- 3.25 Operational CO₂ emissions (excluding buses) track closely to our energy consumption, with year to date emissions c20 per cent lower than the equivalent period of last year.
- 3.26 CO₂ emissions from our support functions (head office buildings and support vehicles) are on track to meet the London Environment Strategy target for the GLA Group to reduce its CO₂ by 60 per cent by 2025. While carbon emissions from our rail services are continuing to decrease, we can only meet the ambition

¹ Defined as an act done intentionally or recklessly that causes a person to feel under immediate threat of injury or violence. It can include acts such as spitting, pushing, throwing an object at the driver and other threatening behaviour

for TfL services to be zero carbon by 2030 by ensuring our energy consumption comes from renewable sources.

- 3.27 Although slightly outside the quarter, the Q2 report also details the results of air quality improvements during the current Mayoral term (p28) which were released at the beginning of October, including the headlines that data shows:
- a) a 97 per cent reduction in the number of state primary and secondary schools located in areas exceeding legal pollution limits – from 455 in 2016, to just 14 in 2019
 - b) A 94 per cent reduction in number of Londoners living in areas exceeding legal limits for nitrogen dioxide (NO₂)
- 3.28 However, there is still a long way to go until Londoners breathe clean air as tens of thousands still live in areas with polluted air and 99 per cent of London still exceeds the World Health Organisation's recommended limits for PM 2.5 particulates.

List of appendices to this report:

Appendix 1: Safety, Health and Environmental Performance – Quarter 2 2020-21

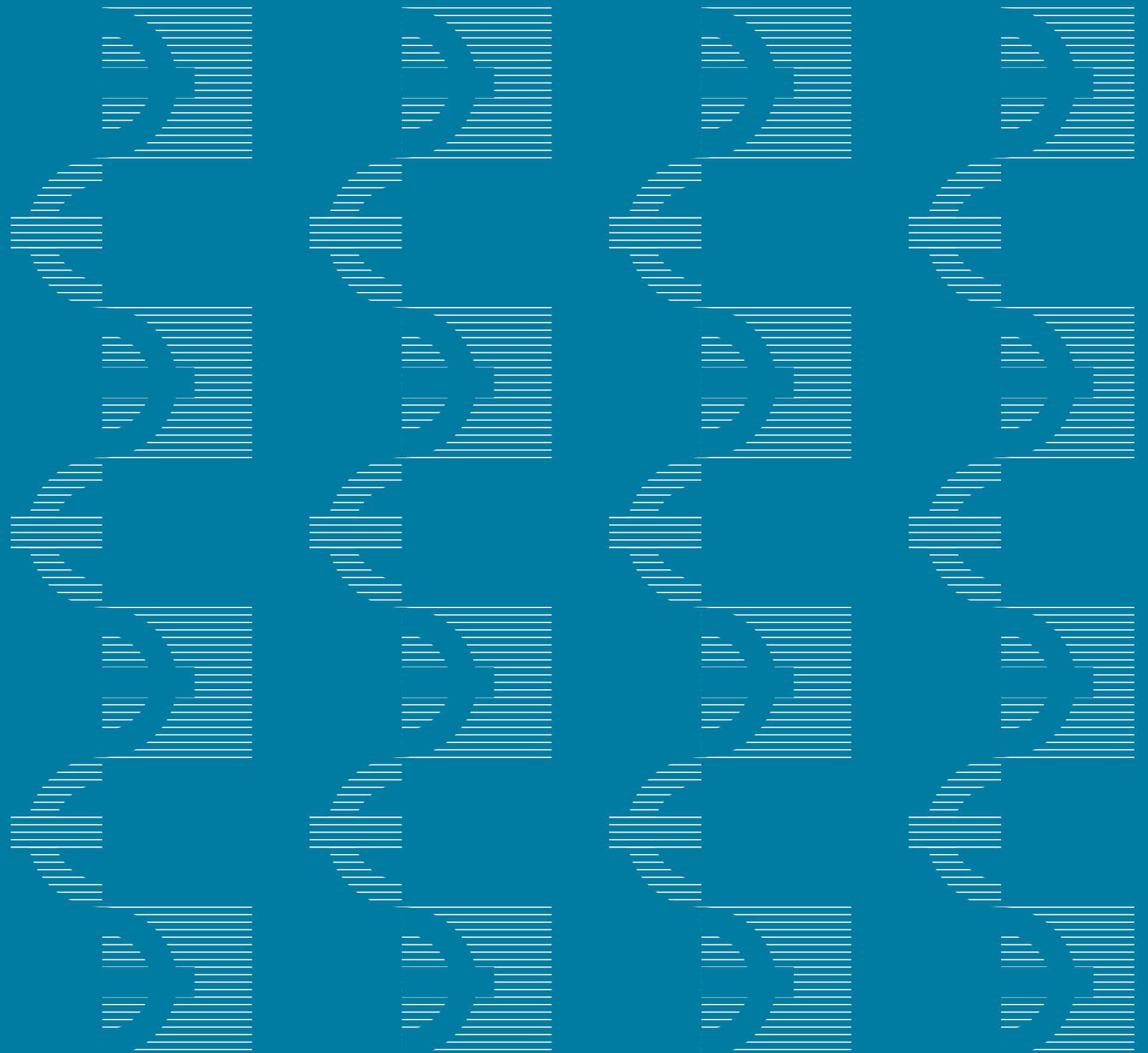
List of Background Papers:

None

Contact Officer: Lilli Matson, Chief Safety, Health and Environment Officer
Number: 020 3054 4707
Email: LilliMatson@tfl.gov.uk

Transport for London Safety, Health and Environment report

Quarter 2 (28 June - 19 September 2020)



Contents

03 Introduction

04 Our performance

05 The Mayor's Transport Strategy

07 Safety, Health and Environment performance overview

16 Focus on Safety, Health and Environment

17 How London's transport system will be safe and healthy for our customers

21 How London's transport system will be safe and healthy for our workforce

27 Transforming London's environment

32 Engagement with regulators

33 Our engagement

34 Investigations

35 Reference datasets



Keeping people safe on our network is our top priority

Introduction

This report summarises our performance in the last quarter and identifies strategic trends covering the period 28 June to 19 September 2020. The report sets out some of the key ways we have kept our customers and staff safe as we increased our services and began to recover from the deliberate reduction in activity, in response to the coronavirus pandemic.

This quarter our priority was to ensure that our customers and our workforce were kept safe and healthy as we restarted our services and that we continued to make progress towards our longer-term safety, health and environmental objectives.

Measures we have introduced since the beginning of the coronavirus pandemic include enhancing the cleaning of stations, additional buses for the return of pupils to schools in September and enabling front-door boarding of buses.

This quarter has seen only a partial recovery of passenger numbers and of on-street networks, as the coronavirus pandemic continues to suppress economic activity. This reduced travel means many of our key safety staff and environmental performance indicators remain at lower levels than prior to the pandemic. However, we have continued to implement measures to increase our short and longer-term safety, health and environmental performance. Where relevant, we present data in this report as rates, reflecting variation in activity over the past six months.

Many of the projects that were halted as a result of the coronavirus pandemic earlier this year, are now restarting. This includes rapid charging infrastructure and the Go Ultra Low City Scheme (GULCS), which has installed 1,800 residential electric vehicle charging points with work expected to be completed by the end of March 2021.

The remainder of the report sets out our safety, health and environmental performance and future challenges across the range of our operations.

About this report

Throughout this report, we use 'our customers' to refer to direct users of our services. 'Our workforce' includes our directly employed staff, as well as people working in our supply chain. For both our customers and our workforce, we report on performance using data we collect directly from our operational businesses. Some assault data is derived both from our own internal reporting systems and through data collected from the police.

'Our streets' refers to all of London's roads and their users, including borough streets. Where we report safety data for our streets, we use data collected by the Metropolitan Police Service (MPS) and the City of London Police, in line with Government requirements. All road safety data is provisional and subject to data review and assurance, with the final data published annually in line with Department for Transport requirements. While this report covers Q2, casualties on our streets are reported by calendar months, in line with Government guidance on the reporting of road injuries.

Our performance

Our scorecard results and key performance highlights



The Mayor's Transport Strategy

Our role is to enable London to move safely and sustainably, in line with the goals of the Mayor's Transport Strategy, increasing the attractiveness of public transport and making cycling and walking easier and more convenient options. We work in partnership with London's boroughs, businesses, the police, local communities, consumer organisations and others.



Streetspace for London encourages Londoners to walk and cycle



Our adapted scorecard measures are within target

Scorecard

Scorecard measures

Our performance scorecard has been adapted to the particular circumstances of the current coronavirus pandemic, while reflecting the need to make progress against the goals in the Mayor’s Transport Strategy.

Our progress towards 2022 Vision Zero goal scorecard			Q2
Measure	Unit	Target	Actual
People killed or seriously injured in road traffic collisions per million journey stages	Killed or seriously injured per million journey stages	0.78	0.38
Customer and workforce killed or seriously injured per million passenger journeys	Killed or seriously injured per million journeys	0.20	0.11

Both our scorecard measures this quarter are within target and will be used to set targets for the second half of our scorecard for this year.

Safety, Health and Environment performance overview

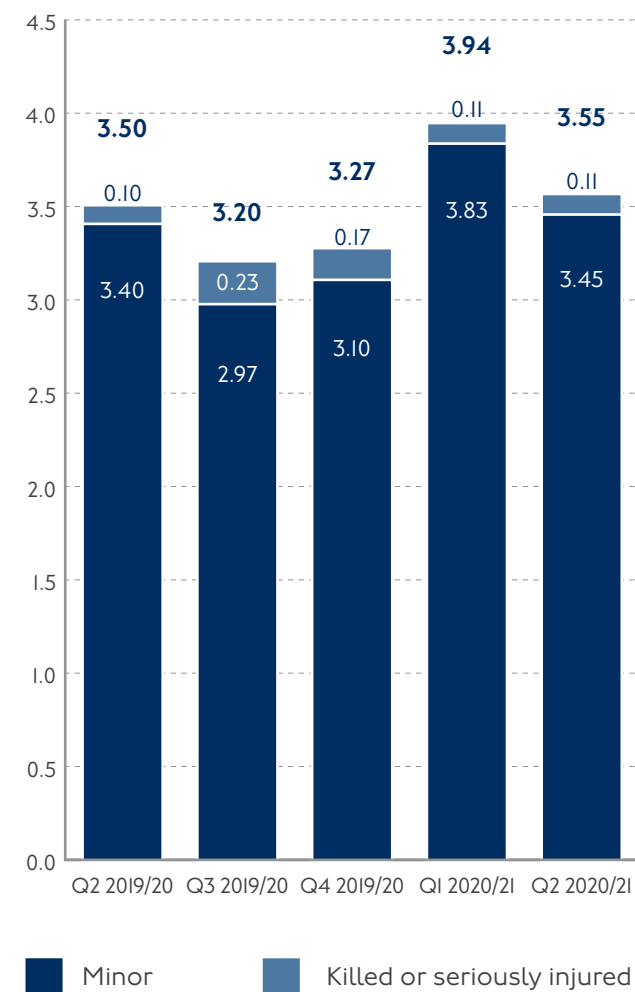
The performance summary in this section provides an overview of key trends for the year and the areas where we are targeting performance improvements.

Reporting period

Most data reported covers the quarter from 28 June to 19 September 2020. In some cases, information is provided by the MPS in calendar months instead of by financial year – where this is the case, it is noted next to the relevant graph.

Looking at our customer and workforce injury rates in aggregate, shows overall injury rates declined from numbers seen during the first quarter of this year. Presenting these as rates allows for the fluctuations in passenger numbers that occurred during the lockdown period and allows comparative performance to be viewed. The rate of deaths and serious injuries at 0.11 was 0.9 better than the scorecard target. However, compared to the same quarter last year, rates of injury this quarter are marginally higher. Put into context, passenger journeys are 51 per cent lower than last year and customer and workforce injuries lower by 59 per cent and 38 per cent respectively.

Figure 1:
Customer and workforce injury rates by passenger journeys



In aggregate, overall injury rates declined in the last two quarters

Figure 2:
Injury rates by business mode and week

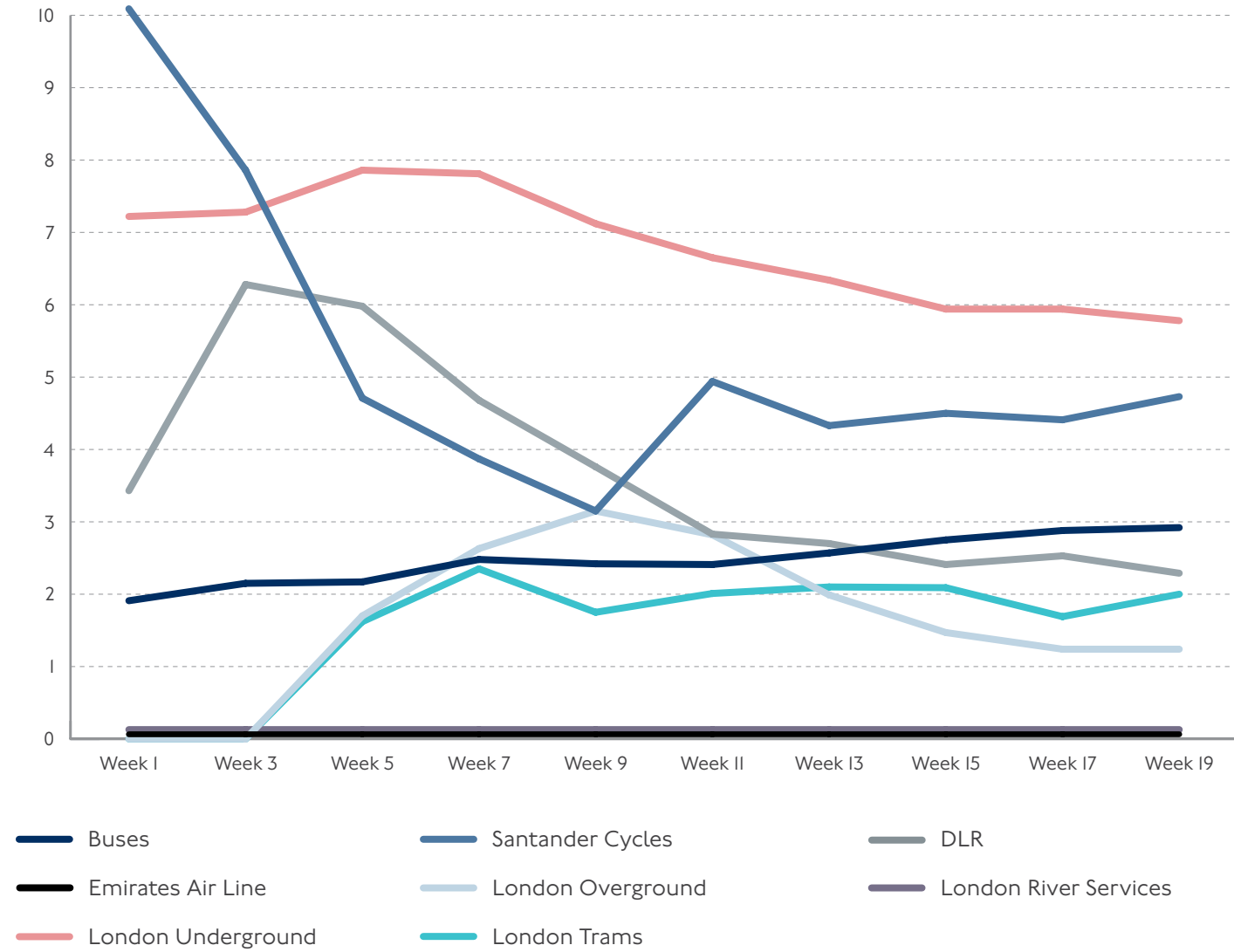


Figure 2 reports weekly injury rates (of all severities) for our operational services from the beginning of the financial year to show the trend over time.

TfL Rail was the only operational business area that reported no customers were killed or seriously injured in the quarter, despite passenger journeys increasing by 147 per cent compared to Q1. Buses and London Underground reported nine and 11 serious injuries this quarter respectively.

Bus customer injury rates since April and throughout the quarter have remained relatively steady. Injury rates on London Underground have been higher than other transport modes but have gradually declined since the peak of lockdown.

In absolute terms, bus customer total injuries were 60 per cent lower compared to the same quarter last year. Predominantly, this was driven by the 51 per cent reduction in passenger journeys compared to Q2 2019/20. However, it also suggests that risk has declined for bus customers compared to the same period last year.

Figure 3:
Bus customer injuries by quarter

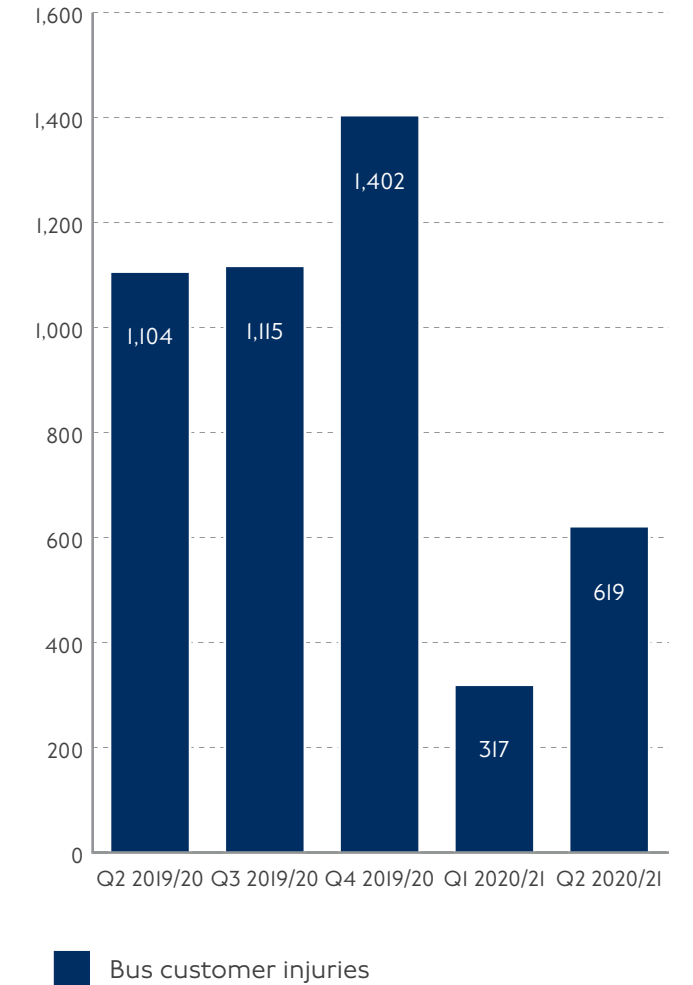
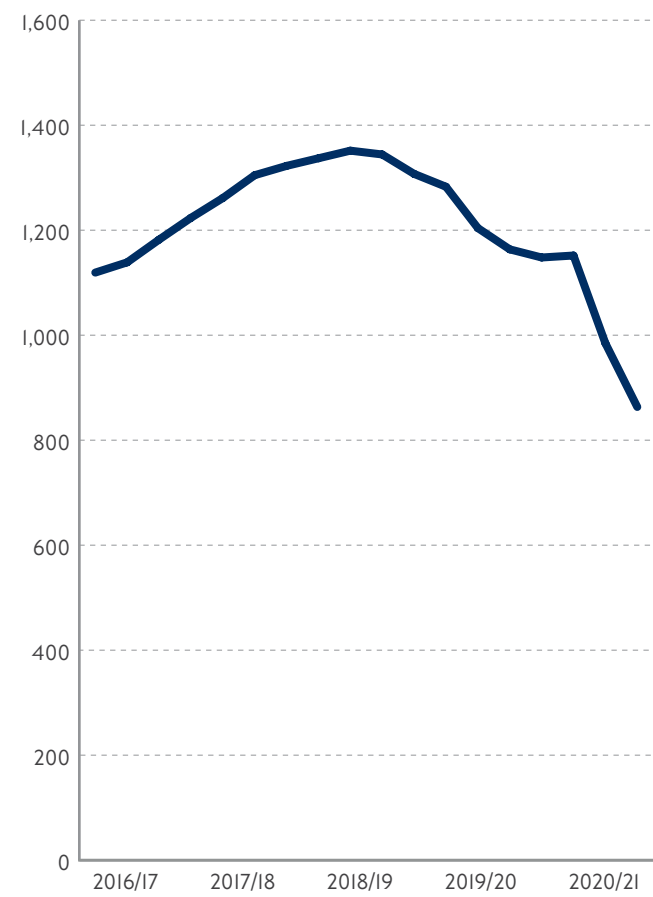


Figure 4:
Bus customer moving average
by financial quarter



— Bus customer MAA

Bus customer injuries as a moving average has been declining since Q2 of 2018/19. The rate of decline started to level during Q4 of 2019/20, but then fell subsequently in Q1 and Q2 by 15 per cent and 12 per cent respectively.

Top three causes of bus customer injury for Q2 (%)

Type of injury	Number of incidents
Collision	7
Personal injury event	27
Slip trip fall	65



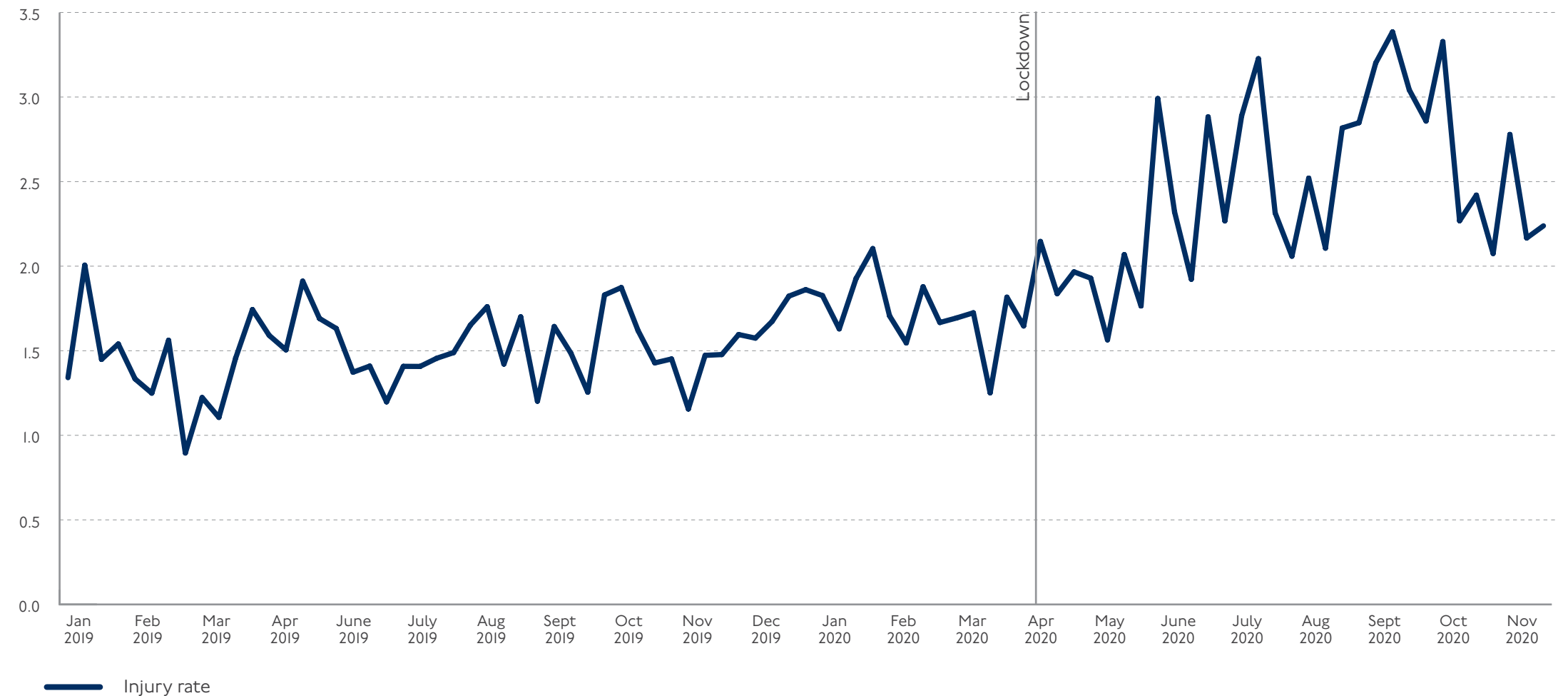
Bus customer injuries have declined over the past two quarters

Slip, trips and falls on buses during the coronavirus pandemic

Since the start of the coronavirus pandemic, we have seen an overall drop in injury numbers as passenger numbers have fallen substantially. However, London Buses has seen a significant increase in the rate of injuries caused by slips, trips and falls since lockdown was introduced on 23 March 2020.

Data on injuries caused by slips, trips and falls on London Buses, excluding those from seating and involving wheelchairs or buggies, shows that the frequency of these injuries has risen from a pre-lockdown rate of 1.6 to 2.5 per million bus passenger journeys. It is thought that this increase could be related to passengers avoiding using handrails and due to the fact that on a very crowded bus, the effects of a potential fall are often mitigated by the density of passengers.

Figure 5:
Buses slip, trip and falls injury rates since 2019
(injuries per million journeys)



Data used: bus incidents of type 'Slip trip fall', excluding falls from seating and falls involving buggies and wheelchairs

Our streets

We are sorry to report that 27 people were killed on London’s streets during this quarter and 715 were seriously injured (a total of 742). This is lower than the equivalent quarter in 2019, but shows a rise compared to previous quarters this year as street activity has begun to resume.

Weekly monitoring throughout Q2 showed that as traffic volumes rose, average vehicle speeds fell, and the risk of injury returned to pre-lockdown levels.

The number of collisions on the roads plateaued at around 500 per week from July onwards, comparable with January and February, as the number of people travelling on the roads returned to near normal. However, the number of people per week killed or seriously injured while walking remained slightly lower than before lockdown.

Number of people killed or seriously injured in Q2 2019/20 and Q2 2020/21

	Q2 2019/20	Q2 2020/21	Variance (%)
Deaths and serious injuries	960	507	-47.2

Overall serious road injuries fell by four per cent in 2019, compared to 2018

In 2019, our final statistics for road safety performance show an increase in fatalities across all areas, except cycling, where fatalities have fallen 70 per cent since our baseline from 2005-09.

Overall serious road injuries fell by four per cent in 2019 compared to 2018, and the number of people killed or seriously injured is now 39 per cent lower than our baseline years 2005-09. Deaths and serious injuries suffered by children have fallen by 65 per cent compared to the baseline. Road traffic collision injuries involving a London bus in 2019 were 65 per cent down on our baseline.

Figure 6: Number of people killed or seriously injured by quarter

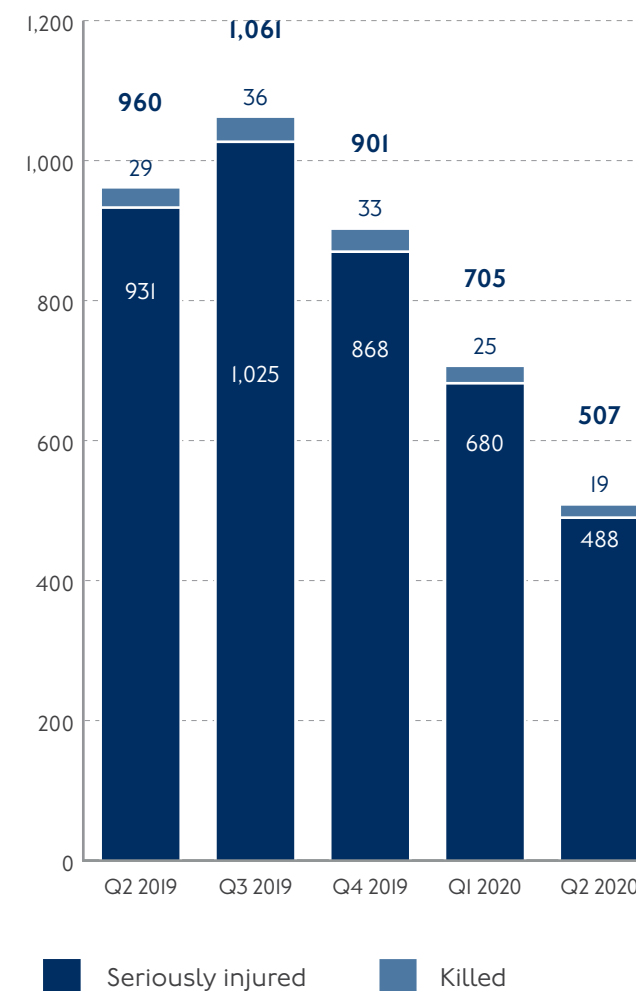
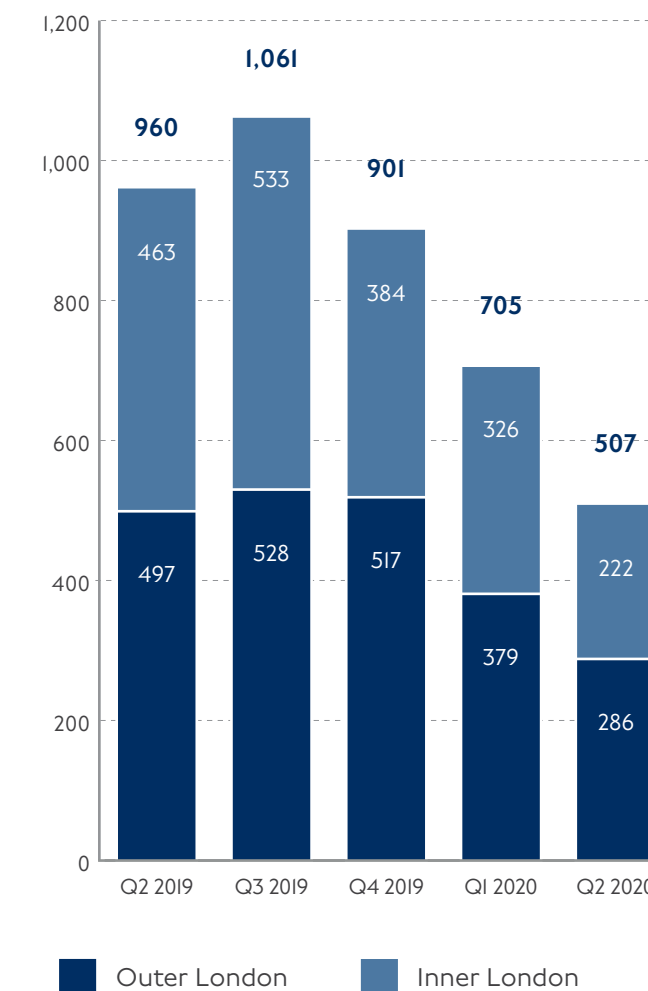


Figure 7: Number of people killed or seriously injured in inner and outer London by quarter



In response to the board member’s request for more insight into geographical variation in casualties, figure 7 shows the number of people killed or seriously injured split between inner and outer London for the past five quarters. Historically, there has been an even split in casualties between inner and outer London. However, since Q4 2019, inner London has seen a larger decrease in numbers than outer London. Inner London casualties tended to be driven by cycling and pedestrian injuries, whereas outer London tends to be characterised by car occupant casualties.

Reportable injuries

This quarter we are sorry to report the death of one person whose body was found on the track at Kingsbury. The incident took place on 2 September 2020 and the incident was reported to the Office of Rail and Road (ORR) and an investigation about the incident is being held to ascertain the circumstances of the person's death.

There were a total of 59 incidents reportable to relevant regulators under Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) this quarter. The majority occurred within London Underground with 54, followed by London Buses, with three incidents, and Major projects with two. The most serious employee RIDDORs reported in Q2 were:

- 4 August 2020 – A staff member lost their footing on a raised part of the road where the tarmac was higher than the rest of the road. The member of staff sprained their ankle and was treated with first aid and then taken to hospital. They have been informed to rest their ankle due to it being strained. The road issue has been raised and escalated via the Transport for London (TfL) control room to the local borough, Dagenham and Barking

- 27 August 2020 – A member of staff fractured their ankle while working on track. The member of staff slipped and fell backwards injuring their ankle. The injured party was taken to hospital

This quarter there were seven serious workforce injuries, with four injuries on buses. Since April, we have had a total of eight serious workforce injuries, with only one serious workforce injury in Q1 and the rest happening as operational services returned to normal levels in Q2. Comparing Q2 2020/21 to Q2 2019/20, there was a significant reduction in injuries across our workforce on London Underground, London Buses and construction. However, this reflects reduced levels of service and the Safe Stop of construction activity.

Workforce injuries in London Underground, London Buses and construction in Q2 2019/20 and 2020/21

	Q2 2019/20	Q2 2020/21	Variance (%)
London Underground workforce	250	156	-37.60
London Buses workforce	90	73	-18.90
Construction workforce	33	16	-51.50

Significant incidents

Recent significant incidents:

- On 21 June, a Chiltern Railways train passed three signals at danger and finally stopped 23m short of a Chesham-bound Metropolitan line London Underground service that was in the platform at Chalfont & Latimer station. This investigation is being led by Chiltern Railways with TfL members on the panel. The Rail Accident Investigation Branch (RAIB) are also investigating independently
- On 26 May, a male passenger got off a train at Waterloo station onto the Bakerloo line northbound platform. The passenger, unsteady on his feet, stepped on to the platform and immediately stumbled, falling back into the gap between the train and the platform edge. Sadly the passenger was struck as the train departed and later passed away
- On 25 June, a wall next to the eastbound District line near East Ham station collapsed in to the recess and on to a section of track. There were no injuries sustained, but there was significant damage to assets and disruption to the service as a result of this event

- On 26 June 2020, the pantograph (an apparatus on the roof of the tram to collect power from the overhead line) became detached and entangled in the Overhead Line Equipment. The incident occurred in Croydon town centre. There were no injuries to staff, passengers or members of the public. An investigation has taken place
- On 21 August, an illuminated sign outside Kentish town station fell during high winds and seriously injured a passer-by. This incident has been investigated internally and a full summary is provided in the investigations section on page 33 of this report
- 5 August, a trams incident took place on the single track between New Addington and King Henry Drive, in which two trams travelling in opposing directions entered a single-track road. Trams 2542 and 2549 were stopped by each driver (approximately 100m apart) using a normal service brake application when they became aware of the conflicting movement in the single line section. This incident was reported under RIDDOR as a dangerous occurrence. The ORR is currently investigating this incident in parallel with a jointly commissioned TfL and Tram Operations Limited independent investigation



Work-related violence and aggression

Protecting our frontline staff from work-related violence and aggression remains a priority for us and our transport policing partners, British Transport Police and the MPS. We are continuing to make excellent progress on commitments in the Work-related Violence and Aggression Strategy which was approved earlier this year. This includes the rollout of a new team of: Transport Support and Enforcement Officers to tackle the triggers of work-related violence, aggression and antisocial behaviour; and beginning the phased rollout of body-worn cameras to our directly employed staff in line with operational requirements.

Work is underway to improve the collection, analysis and reporting of work-related violence and aggression crime and incident data to better understand the risk and harm to our people. This will inform our future interventions.

As London began to recover and public transport ridership increased on the previous quarter, so did levels of crime. Police crime data for Q2 showed a 38 per cent increase (an additional 159 offences) in the number of work-related violence and aggression offences compared with Q1 but was six per cent lower (39 fewer offences) than Q2 in 2019/20.

Over half the offences were targeted at bus drivers. The overwhelming majority of incidents involved verbal abuse and threatening behaviour, followed by common assault - defined as an act that done intentionally or recklessly that causes a person to feel under immediate threat of injury or violence. It can include acts such as spitting, pushing, throwing an object at the driver and other threatening behaviour. The number of spitting incidents - from both passengers and other road users - showed a worrying

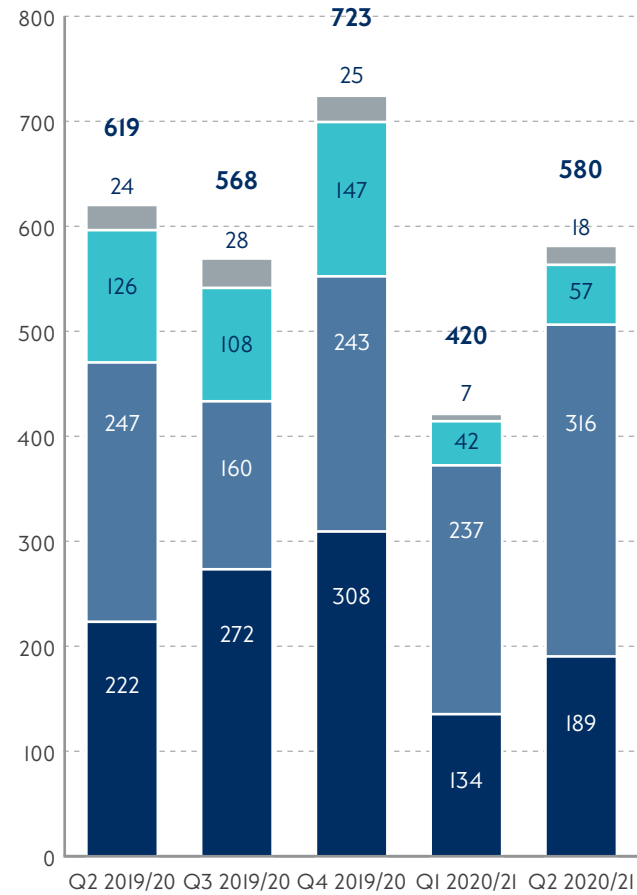
increase in Q1 2020/21 accounting for 35 per cent of all work-related violence and aggression offences involving bus drivers. In most cases the driver was protected by the driver's cab screen or window but it is still an abhorrent offence which can cause physical and mental harm, particularly in the context of the current coronavirus pandemic.

In Q2 2020/21 this had fallen to 22 per cent of work-related violence and aggression offences, proportionately lower than in 2019/20. Given the serious nature of the threat this behaviour poses, spitting offences were and continue to be prioritised by us and our transport policing partners. We are using all evidential opportunities including CCTV, oyster card data and DNA spit kits to quickly identify and charge suspects and prosecute them as quickly as possible.

It is completely unacceptable that transport staff are being subjected to hate-motivated abuse and assault while doing their jobs. In Q2 2020/21, the proportion of offences against staff deemed to be hate crime was 22 per cent. This remains similar to previous quarters. The majority of hate crime directed at transport staff are racial hate crimes (in excess of 80 per cent) and this is consistent across all services.

During the first half of 2020/21 the overall positive outcome rate of successful prosecutions was 23 per cent compared with 14 per cent in 2019/20. The majority of work-related violence and aggression offences were on the bus and London Underground networks with the positive outcome rate for the first half of 2020/21 being 14 per cent and 37 per cent respectively.

Figure 8:
Police recorded violence/public order offences



According to our own data on assaults, total assaults directed towards our employees or suppliers have reduced on the same quarter last year by 22 per cent but increased in Q2 compared to Q1 as we came out of lockdown. The long-term average trend is declining by a rate of 12 recorded assaults per quarter. Total non-physical assaults show the greatest reducing trend at a rate of 15 assaults per quarter, mainly as fewer non-physical assaults have been directed towards our suppliers. Conversely, physical assaults directed towards suppliers continues to show an increasing trend despite lockdown with a long-term trend rate of 2.8 additional assaults every quarter. Compared to the same quarter last year supplier assaults increased by four per cent.

Figure 9:
TfL recorded employee and supplier assaults by financial quarter

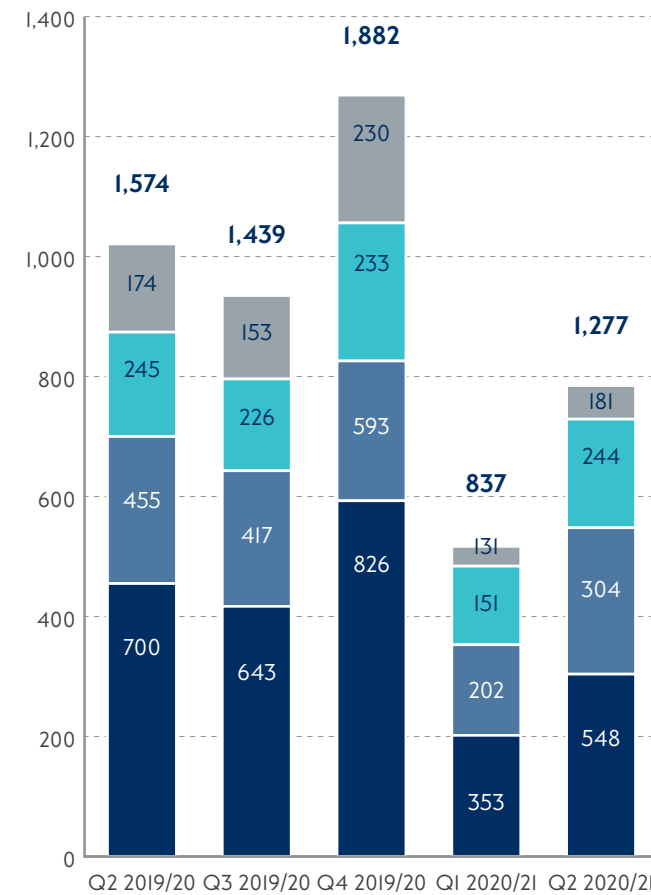
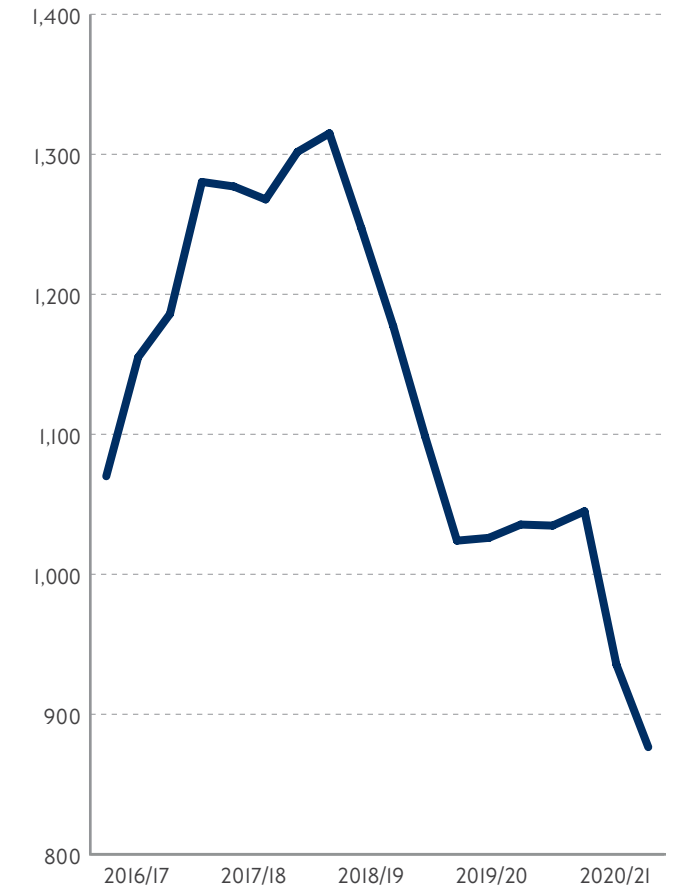


Figure 10:
TfL reported assaults moving annual average



- TfL employees - London Underground
- Operators - Buses
- Operators - London Overground, TfL Rail, DLR, London Trams
- TfL Employees - Other operational areas

- Employee physical assaults
- Supplier physical assaults
- Supplier non-physical assaults
- Employee non-physical assaults

- Reported assaults moving average

Significant prosecutions of unacceptable behaviour toward our workforce

The cases highlighted below for Q2 include those where the incident or court case took place during the quarter.

On 6 July, a bus driver experienced racially-aggravated harassment from a passenger who was drunk and disorderly. On 6 August at North London Magistrates Court, the offender was found guilty and ordered to pay £200 to cover fines, costs and victim surcharges.

On 9 July, a drunk and disorderly man boarded a route 468 on Norwood Road and proceeded to racially abuse the bus driver and the officers who later attended the scene. He was charged and found guilty at Central London Magistrates Court on 14 July. He received a prison sentence of 16 weeks wholly suspended 18 months and required to pay £128 in compensation.

On 14 July at Green Lanes, a man threatened to stab a Bus Station Controller with a needle and was racially abusive. On 14 September at North London Magistrates Court the offenders’ institution for 12 weeks, wholly suspended for 18 months and was required to pay £178 in compensation.

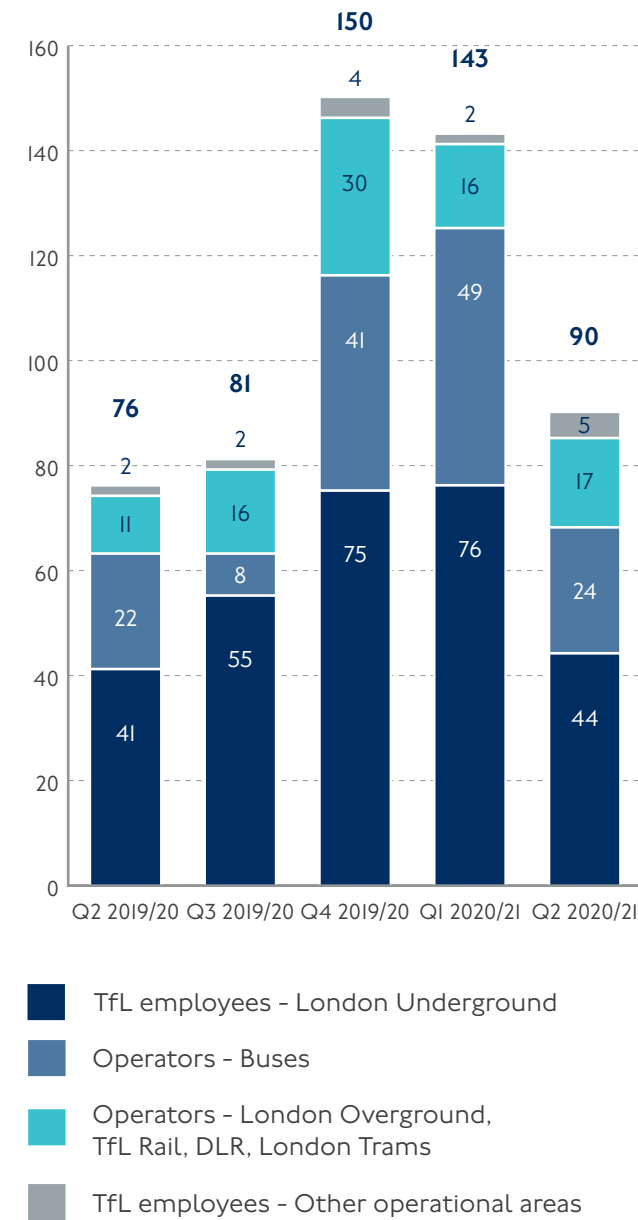
On 15 July, a bus driver of a route 287 was threatened with a knife over a dispute regarding a face covering. The offender was arrested at the scene and later charged. He was sentenced on 16 September at Snaresbrook Crown Court to 20 months’ imprisonment and required to pay £156 in victim surcharges.

On 23 July, a drunk and disorderly male boarded a 345 bus and was verbally aggressive towards the driver. When the police arrived, it was discovered the man was wanted on recall to prison, in breach of his Community Behaviour Order and in possession of cannabis. On 25 July at South London Magistrates Court he received eight weeks imprisonment.

On 10 February 2020, the Customer Service Manager at Manor House tried to persuade a man who was sitting on the stairs at one of the station exits to leave. The man became aggressive, threatened violence and was racially abusive. The Customer Service Manager activated his body-worn camera which captured the threats. Officers from the British Transport Police attended and arrested the man for racial abuse. The man also racially abused a police officer. On 13 July the man was sentenced to an 18-month Conditional Discharge and ordered to pay compensation to both the member of staff and to the police officer.

On 16 November 2019 a female attempted to exit the station without a ticket but was caught by the gates. She became very abusive towards the Customer Service Assistant and spat at him twice. The incident was reported to the British Transport Police and a sample of spittle was secured for forensic testing. On 6 July 2020 at Harrow Crown Court the female was fined £80 and ordered to pay £80 compensation.

Figure II: Successful prosecutions



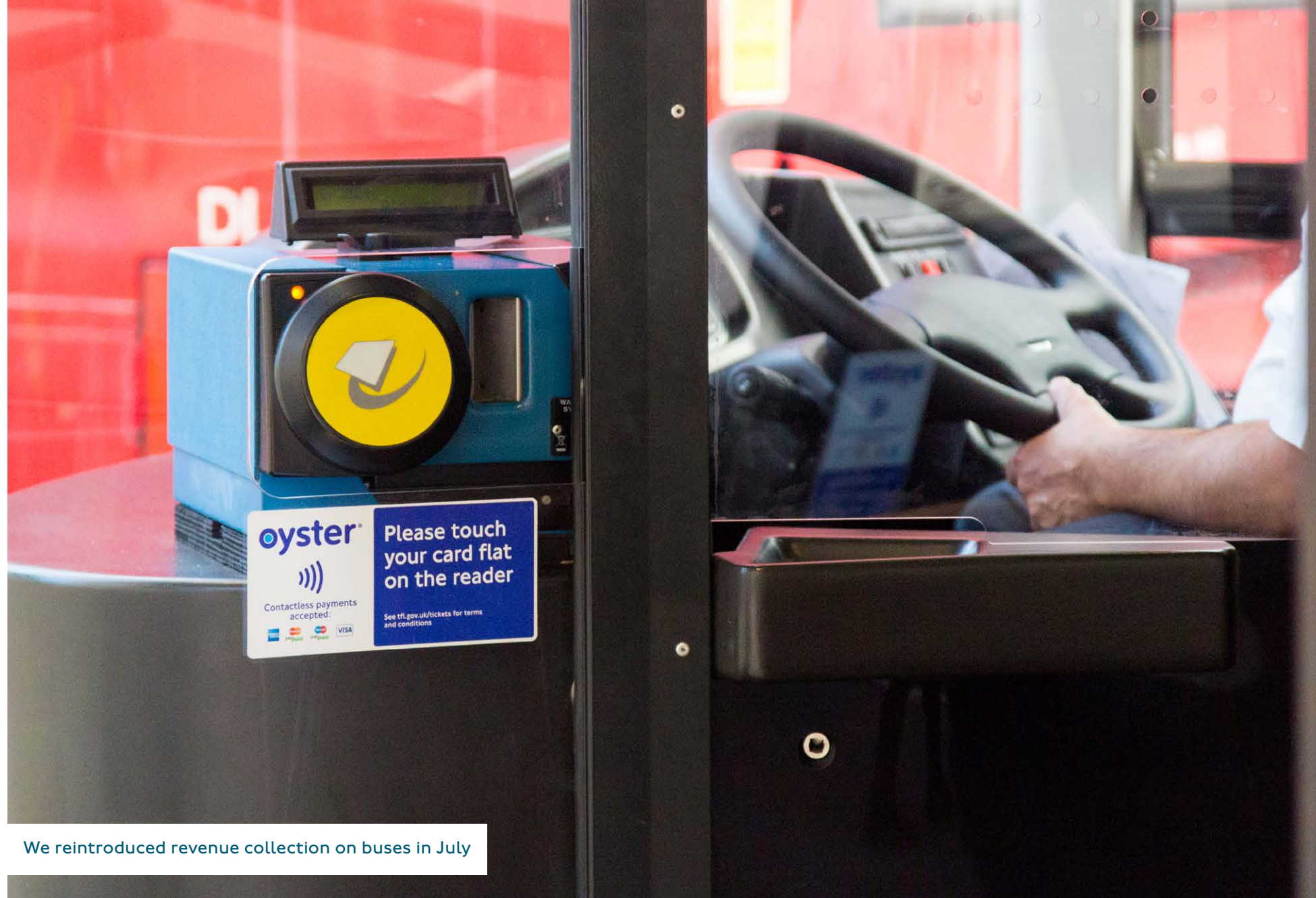
Focus on Safety, Health and Environment

Making the network safer
for our customers and staff
during the pandemic



How London's transport system will be safe and healthy for our customers

The safety of our customers is our utmost priority. In this section, the initiatives are aligned to a common theme of making our network safer. A major theme this quarter has been the restart and recovery of the transport network.



We reintroduced revenue collection on buses in July

Revenue collection on buses resumes 11 July

Reintroduction of revenue collection on London buses was completed on Saturday 11 July following safety improvements to drivers' cabs.

All London buses are taking payments after enhanced safety measures were installed across the fleet to protect drivers and customers from coronavirus.

Customers are now required to touch in with Oyster, contactless and concessionary cards on all buses, entering through the front doors on most buses in a near complete return to front-door boarding arrangements with the reintroduction of revenue collection and front-door boarding beginning in late May.

'The coronavirus has had an unprecedented impact on London's transport network, and we have been working incredibly hard to ensure the safety of all our staff and passengers.'

Heidi Alexander



Ensuring the safety of our staff is a top priority

Buses risk assessments for moving to front door boarding

We returned the bus network to front-door boarding this quarter after seeking scientific advice from University College London on the best ways to protect drivers in the cab. Computer modelling of the cab environment assessed how we could reduce infection risks and based on the findings we sealed openings in the driver's protective

shield as well as speech holes. To prepare customers for the change back to tapping in, we broadcast messages on regional radio and added posters to bus doors. At the same time, we deployed revenue protection officers to our busiest stops to help supervise the numbers boarding and maintain social distancing.

Bus services for school restart

One of our greatest challenges has been adapting bus services to meet the needs of children returning to school from early September. During the busiest times we've introduced an extra 230 buses each day to help people complete their journeys.

Under the national social distancing rules, more young people can travel together on buses than adults, so on routes most used by pupils, we dedicated some buses to school services only. This allows us to double the number of children taken on board and helps other passengers socially distanced from this younger age group too.

As the return of schools puts pressure on buses at a time when more people are returning to workplaces, we are also appealing to customers to walk, cycle, scoot, or travel at quieter times if they can.

'We all want London to continue to get back on its feet, and TfL is fully focused on supporting this as we strive to make sure that customers and staff are safe'

**Andy Byford
Commissioner**



Schools reopened in September and we adapted our services

Engagement and enforcement activities

We began to enforce the face covering regulations on 4 July across London Buses, London Trams, London Overground, the DLR and London Underground. TfL and the police have helped to amplify the enforcement efforts through PR and communications activity.

Our cumulative enforcement results for 4 July to 7 October include:

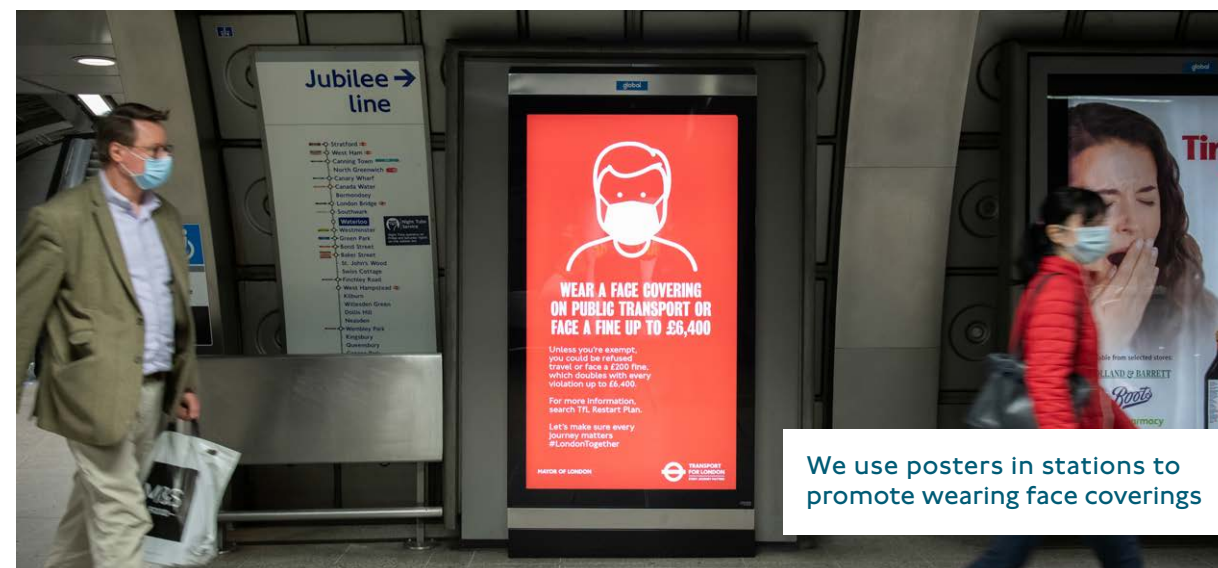
- Enforcement officers stopping 106,279 people from getting on our public transport services until they put on a face covering. Most complied by getting their face covering from their bag or pocket, putting it on correctly or buying one nearby
- Enforcement officers reporting 507 people for fixed penalty notices for refusing to comply. Fixed penalty notices are a last resort, but are used where necessary

The police are engaging with passengers and stopping those without a face covering who do not

have an exemption from wearing one. Numbers above do not include police enforcement.

Periodic TfL customer surveys show compliance is generally very high, particularly at peak times. Ninety-two per cent of customers say they are wearing face coverings at all times on our transport network, five per cent are wearing it on some journeys and four per cent not at all. Of the nine percent who are not wearing a face covering at all times or not wearing one at all, around three quarters claim to have an exemption or good reason under the regulations for not doing so.

We have recently restarted the bus mystery shopping survey, where trained assessors travel on a representative sample of the network and evaluate the customer experience. The survey now includes questions on face coverings and findings for period 6 showed that 88 per cent of observations found all or most customers were wearing face coverings.



We use posters in stations to promote wearing face coverings



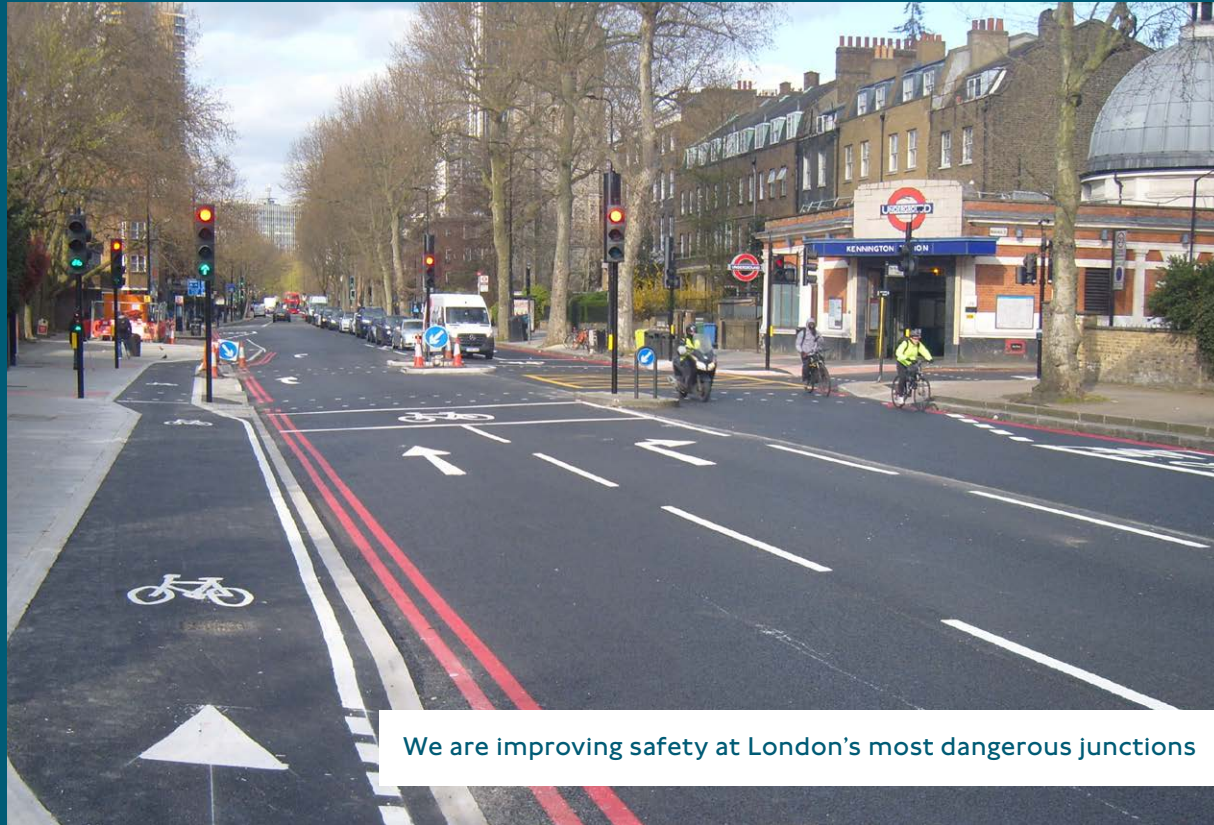
We have enhanced our cleaning measures across our network

Enhanced cleaning

We are implementing a wide range of cleaning and hygiene measures that have been introduced across the transport network, including:

- Use of additional hospital-grade cleaning substances that kill viruses and bacteria on contact and protect for up to 30 days
- Key interchanges being cleaned more frequently – including during the day
- All regular 'touch point' areas on buses, such as poles and doors, being wiped down with a strong disinfectant every day

In addition to these measures, we have trialled using UV light to clean the handrails on escalators on the Tube network. The device, which could help supplement TfL's extensive anti-viral cleaning regime, is connected to the escalator handrail and uses its motion to power a UV bulb that breaks down surface contamination to sanitise the handrail. We are now assessing the benefits of the technology, which could be installed more widely in the future.



Road safety

By the end of Q2 a further four Safer Junction sites were completed, bringing the total number of completed schemes to 40. Further improvements were made in this quarter at sites of high road risk as part of a £5m Healthy Streets allocation under the government funding agreement. This resulted in the completion of two schemes, including on the A12 and ongoing design, modelling and public engagement on a further 22 locations of higher road risk.

Under the Streetspace for London programme, work is underway to reduce the speed limits on up to 30km of the TfL road network in order to protect the safety of vulnerable road users on our road network. A new 20mph speed limit was recently introduced on the A4202 Park Lane, Westminster and A400 Hampstead Road, Camden.

In the next quarter we will also launch a marketing and communications campaign to raise awareness and increase compliance with the Direct Vision Standard requirements for Heavy Goods Vehicles prior to enforcement work starting next year.

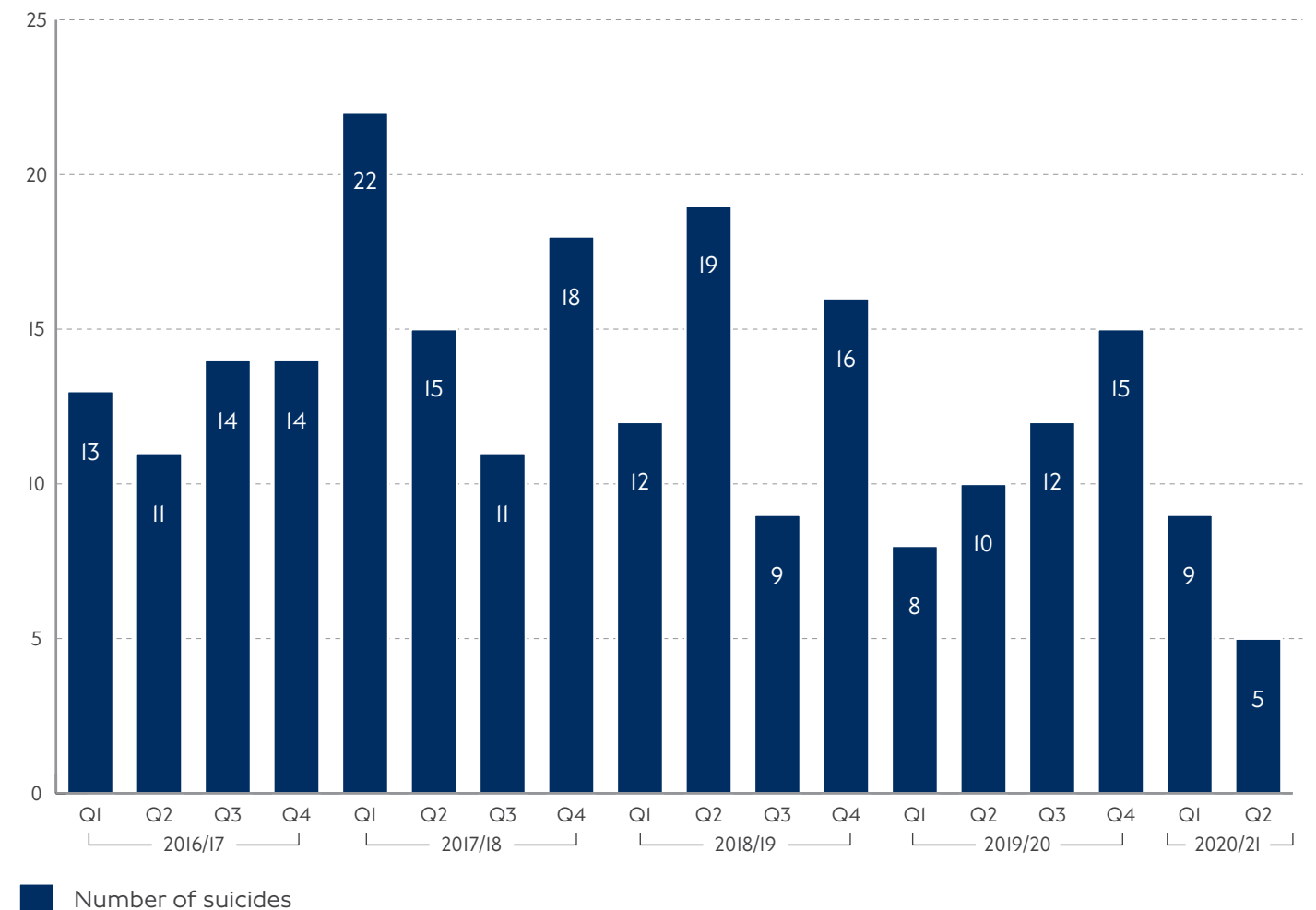
Suicide prevention

Training courses in suicide prevention re-started this quarter. Before lockdown, 59 per cent of station staff were trained in suicide prevention but training was paused on 20 March 2020 in light of the coronavirus lockdown measures and staff working from home. By the end of Q2, 66 per cent of station staff had been trained in suicide prevention.

In comparison to 2019/20, there have been four fewer suicides representing a 20 per cent decrease in suicides in the year to date. The number of suicides this year is at the lowest level for four years, as shown in figure 12.

We have been working closely with Thrive LDN in order to produce and display wellbeing posters across the network and bus stops. In total, we issued 735 lifesaver awards to station staff who have intervened to prevent attempted suicides since 2018 and 135 in 2020 so far. We have been working with the British Transport Police, local councils and many other external stakeholders including suicide prevention groups from other countries to continue to develop and refine our approach to helping staff intervene to save lives in this way.

Figure 12: Comparison of the number of suicides by quarter



How London’s transport system will be safe and healthy for our workforce

The following section focuses on the health and wellbeing of our workforce, the measures we have taken to reduce coronavirus transmission, and the support we are giving to our frontline and office-based staff.

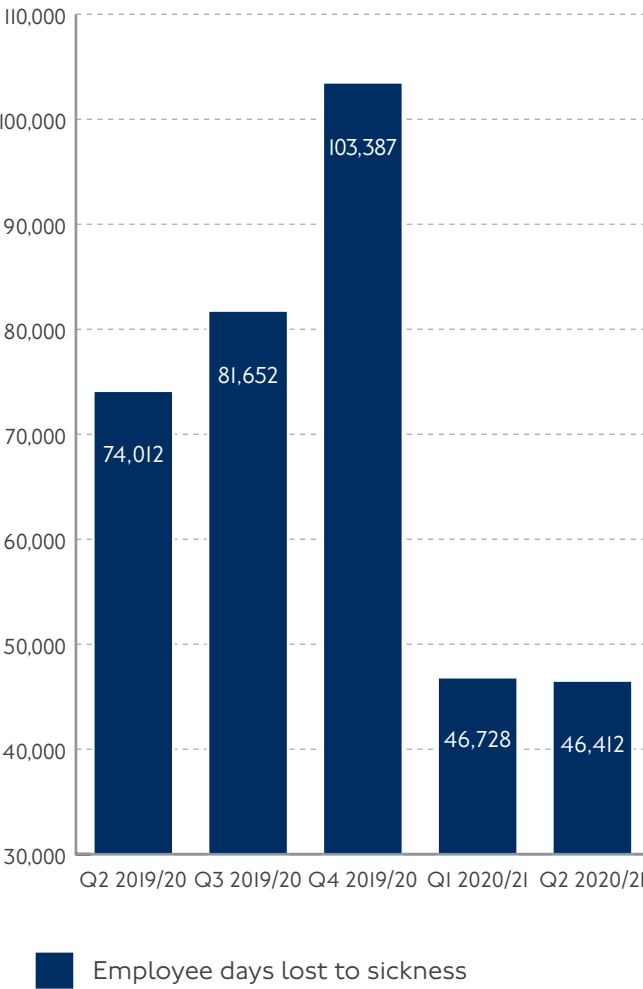
Employee days lost due to sickness reported broadly similar results to the previous quarter during the pandemic, with less than 0.1 per cent difference. Musculoskeletal and mental health conditions remain the two key reasons for staff being absent from work, accounting for 30 per cent and 33 per cent of absences

respectively. This is slightly different from Q1 during lockdown when mental health accounted for 45 per cent of total sickness absence. The various wellbeing initiatives outlined in this section and the gradual easing of lockdown with staff returning to work has contributed to fewer mental health absences being reported this quarter but more work-related sickness absence associated with performing duties such as manual handling. Figure 13 provides an overview of total days lost. Compared to same quarter last year the change in days lost due to sickness was 37.3 per cent lower.

Days lost due to sickness in Q2 2019/20 and 2020/21

	Q2 2019/20	Q2 2020/21	Variance (%)
Days lost to sickness	46,412	74,012	-37.3
Total days lost	47,516	75,564	-37.1
Rate	3.19%	5.01%	-1.82

Figure 13: Employee days lost due to sickness



Medical Advisory Services

Our occupational Health and Wellbeing activity in Q2 continued to be dominated by the response to the coronavirus pandemic. We continue to run face-to-face clinics for essential medicals such as a periodic medical and recruitment medical including night clinics. COVID-19 risk assessments are still ongoing and we continue to provide ongoing support to all employees through our 24/7 employee assistance line.

Supporting our staff's Mental Health

The Mental Health team is continuing to offer remote counselling services via video appointments. Following a successful pilot, dates have been released through to December for the 'Practical skills – Supporting the mental health of your team and yourself during the coronavirus pandemic' management training. The Stress Reduction Group has also been offering sessions to help support colleagues with the tools to effectively manage stress and improve personal wellbeing.

Mental health training for people managers is available through the 'Practical Skills - Supporting the mental health of your team' course. This course - which has been updated to include the impact of the coronavirus pandemic - provides managers with the skills they need to start conversations about mental health with their team and how to support remote workers, furloughed and shielding staff.

Training of our mental health peer supporters has also resumed online. Supporting Colleague Network volunteers complete an in-house training course which focuses on psychological first aid and listening skills. The peer supporters offer colleagues access to a confidential 'listening ear' and information to onward support.



Our training helps managers discuss team mental health

The following section looks at the wellbeing initiatives

Out of sight but not out of mind

Q2 saw the introduction of the 'Out of sight but not out of mind' campaign. This was focused on improving the physical health and wellbeing of remote and furloughed workers.

Activities have included

- 'Wellbeing Wednesday' remote classes which included home workouts, pilates, positive psychology and mental health classes
- Wellbeing Webinars – including health and wellbeing for remote home workers
- Weekly Wellbeing Videos - including pilates, warm up and physical activity workouts

The classes were well attended – there were 327 attendees for all Wellbeing Wednesday classes/webinars in Q2. There have also been more than 1,000 views of the class videos on Stream.



Kaido Health and Wellbeing Challenge

The 'Around the World in 40 days' team fitness challenge through the Kaido app was launched at the end of July. The challenge was engaging and interactive. It was designed to encourage employees to increase their activity levels and introduce them to wellbeing practices such as meditation and healthy nutrition. The winners this year were a team of Customer Service Assistants from Green Park.

In-line with the current NHS campaign for reducing obesity, support has been made available to those employees with a BMI of 28+ with the offer of access to the Slimming World 12-week weight management programme. For those employees who have type 2 diabetes there is a remote educational programme available. This is designed to help people with type 2 diabetes manage their condition more effectively through making healthier lifestyle changes.



1,228

TfL employees signed up to Kaido



4,187,411

minutes of physical activity were logged

46%

felt calmer



50%

felt more motivated after completing the challenge



Vulnerable colleague risk assessments

A working group has been set up to continue addressing what local lockdowns, or a second wave of the coronavirus pandemic could mean to those in our vulnerable persons group. This group includes all our clinically extremely vulnerable and clinically vulnerable persons. In relation to this, making sure the business and line managers have the best and correct information about their teams to correctly respond to any given issue related to the coronavirus pandemic.

We have encouraged all staff to undertake a new COVID Age Questionnaire, managed by our Occupational Health and Wellbeing team, to determine the risk categories of all personnel so we can manage the risk accordingly in the event of a local lockdown or second wave. We are in the process of enacting this strategy and have launched our communications to all relevant stakeholders.





Page 30

Asymptomatic testing

Not everyone who has COVID-19 will have any symptoms of the virus. The Department for Health and Social Care have requested certain organisations to assist in the understanding of the prevalence of asymptomatic COVID-19. We have supported this by carrying out a two-week trial in August, which would also help to identify who may be at higher risk from COVID-19, how the virus is spread between groups and to help minimise spread among high-contact professions.

We were provided with 10,000 test kits for our high-contact staff. Trial testing was undertaken on a voluntary basis, which included front line, high-contact or customer-facing staff only (no office or staff working from home).

Almost 1,000 colleagues took part in the asymptomatic testing trial. Of those who were tested, less than seven people had coronavirus. This is an important piece of work in

the efforts to tackle coronavirus nationally and has helped the Department for Health and Social Care to build on the research.

10,000

test kits were provided for our high-contact staff



Drugs and Alcohol Assessment treatment services

The Drugs and Alcohol Assessment treatment services team have seen an increase in referrals, which seem to show significant links to the coronavirus pandemic. They continue to 'case manage' safety, and timely returns to the workplace.



The following section looks how we are preparing our staff as we restart services

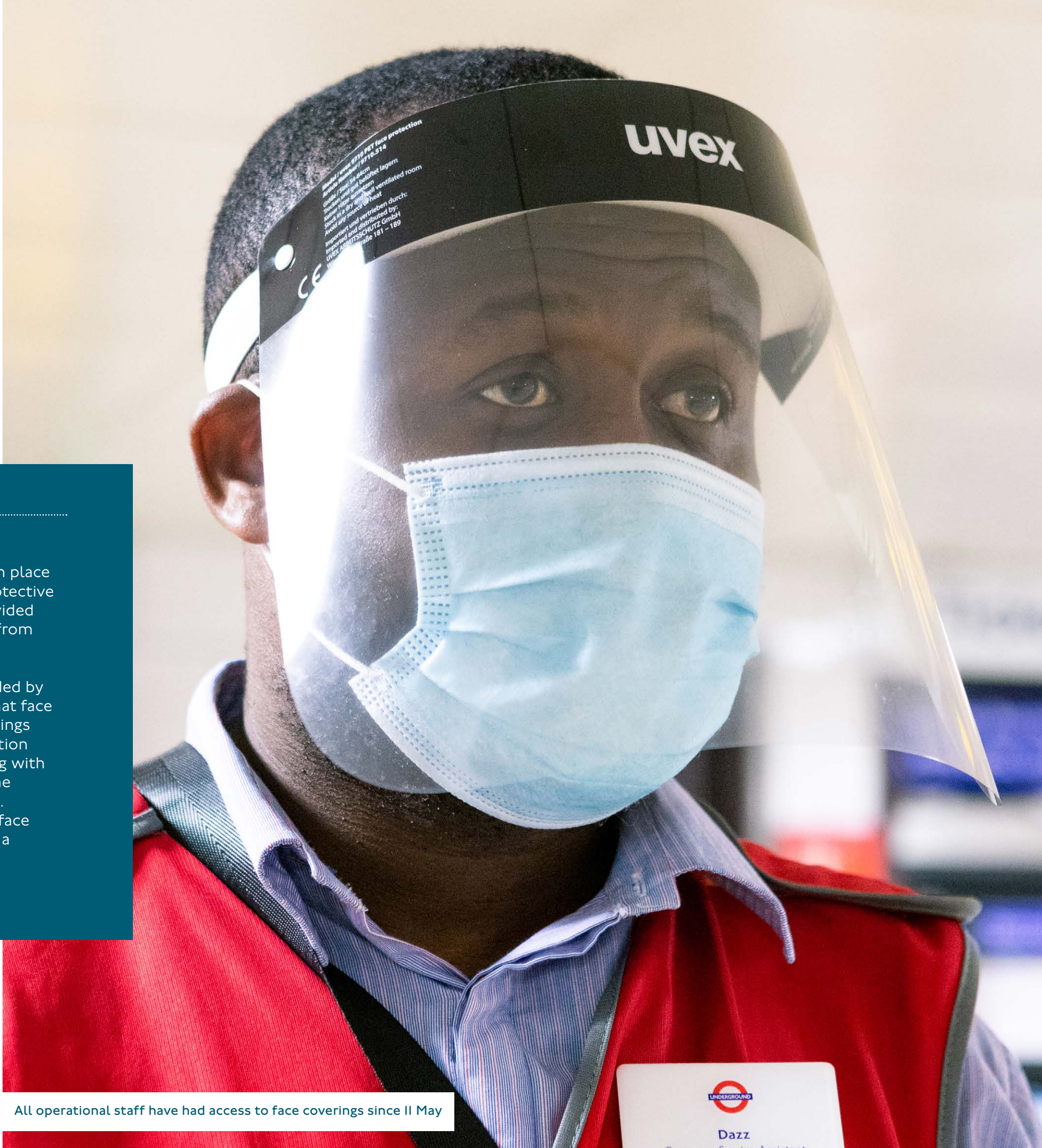
Face visor trials

From 24 August face visors became available and were being provided to those who want to wear them. Face visors are voluntary in most roles, though there are a small number of situations where they are mandatory, and these are highlighted in local risk assessments.

TfL advice is that a face visor should not be worn by staff carrying out a safety critical task where the visor may compromise their vision, such as when driving a vehicle or

operating a train, or in place of other personal protective equipment (PPE) provided to protect someone from specific hazards.

Medical advice provided by the Government is that face masks and face coverings form the best protection on our network (along with effective hand hygiene and social distancing). Therefore, wearing a face visor is in addition to a face mask/covering.



All operational staff have had access to face coverings since 11 May

Staff fatigue

Progress on the TfL-wide Fatigue Management Programme continued this quarter. We have developed and successfully piloted fatigue risk screening questionnaire and sleep health assessment tool to better understand fatigue risks across the business and prioritise action. This is now going into phased roll out. In parallel, we are also developing improved tools and guidance to enable business areas to develop and deliver fatigue management improvement plans to act on specific local issues.

For example, Fatigue Awareness Training is being rolled out across all Bus Operators. Collaboratively developed between TfL and our IO operators, the workshop-style training covers the importance of meaningful conversations with employees regarding their health and wellbeing. This is particularly important as we are seeing an increase of the bus services provided following lockdown. The lessons and content from this training will be available for other business areas to adapt and review as appropriate.



Future plans

- On-Site Health Assessments pilot – Increase face-to-face health promotion across the business (subjected to coronavirus government guidelines) performing basic health assessments for early diagnosis and help reduce modifiable risk factors among TfL employees
- Raising awareness of the effects that obesity can have on physical and mental health. This will align with the NHS Better Health campaign will provide employees with tools to address lifestyle factors
- Plan to deliver training to 60 managers and Operations Officers to our frontline staff on Trauma and Resilience. This will provide managers with tools to support staff experiencing increased numbers of workplace violence and aggression incidents
- Continue to inform and educate our supply chain in Q3 with planned, webinars and lunchtime learnings in order to discharge our legal duties with respect to safety, health and environmental legislation and ensure correct compliance to Construction Design and Management regulations

Construction restart

Most projects have now restarted, but with considerable focus on managing COVID-19 risks, with methods of work being adapted by our suppliers to manage the risk of infection. The TfL SHE night team has also returned from furlough to undertake site visits.

In August, TfL hosted its first ever virtual Zero Harm Forum with its

suppliers from capital projects with the specific aim of sharing learning and experiences with our suppliers in relation to the coronavirus pandemic. The degree of participation and open exchange of views made it very worthwhile.

Despite most of TfL projects staff still not being able to visit sites (to minimise

the risk of spreading infection), the level of engagement with workers on site is slowly increasing. There is increased use of phone conversations, virtual site tours and open discussions on matters of safety, health and the environment. An app to record these site engagements is now successfully being used, making it less time consuming and simpler.

Transforming London's environment

Environmental sustainability is a key priority for the Mayor and TfL. The main theme for this section is the continuation of actions to improve London's air quality and reduce carbon.

Air Quality Ultra Low Emission Zone and Low Emission Zone

We are continuing to support the implementation of the next phase of the Mayor's measures to improve London's air quality, following the reinstatement of the Low Emission Zone and Ultra Low Emission Zone (ULEZ) in Q1. The tougher emissions standards for heavy vehicles through the Low Emission Zone that were due to come into effect from 26 October 2020 have been delayed to 1 March 2021, to account for the impact of the coronavirus pandemic on heavy goods vehicle operators and new vehicle supply.

In October 2021 the ULEZ will expand up to, but not including, the North and South Circular roads, and we are progressing with works to support this. This has included the start of on-site works on camera infrastructure to support the scheme and upgrades to back office systems. A multi-channel marketing campaign started in early October to raise awareness of the expansion and prepare drivers.

Ultra low
emission

ULEZ

ZONE

At all times



The report includes new data from the Environmental Research Group now at Imperial College London. The key findings are:

- The number of state primary and secondary schools located in areas exceeding legal pollution limits (NO₂) has fallen by 97 per cent
- 94 per cent reduction in number of Londoners living in areas exceeding legal limits for nitrogen dioxide (NO₂)
- London ULEZ has contributed to a reduction of 44 per cent in roadside nitrogen dioxide (NO₂) in the central London ULEZ area
- 44,100 fewer polluting vehicles being driven in the central zone every day with 79 per cent of vehicles in the zone now meeting the ULEZ emissions standards – up from 39 per cent in February 2017
- CO₂ emissions in the central ULEZ zone are estimated to have reduced by 12,300 tonnes, a reduction of six per cent, compared to a scenario with no ULEZ in place

Air quality in London

In early October new data was published showing dramatic improvements in London’s air quality since 2016. New modelling of pollution in 2019 shows that, even before lockdown, measures implemented since 2016 helped transform London’s air.

There are two main air pollutants of concern in London, based on their impact on human health: nitrogen dioxide (NO₂) and particulate matter (PM_{2.5}). Poor air

quality stunts the growth of children’s lungs and worsens chronic illness, such as asthma, lung and heart disease.

Research shows that those exposed to the worst air pollution are more likely to be deprived Londoners and from black, Asian and minority ethnic communities. There is also emerging evidence linking air pollution with an increased vulnerability to the most severe impacts of COVID-19.

Improving air quality remains a high priority with 24 per cent of roads in inner London still exceeding the legal limits for NO₂. For dangerous particles (PM_{2.5}) the challenge is particularly acute with only one per cent of London meeting WHO recommended limits. This underlines the need to expand the ULEZ to the North and South Circular roads in 2021 as 3.8 million people live within the expanded ULEZ zone.

The success of the existing central London ULEZ and other action taken by the Mayor gives confidence that expansion of the ULEZ will help deliver wider benefits for London, including saving the NHS around £5 billion and preventing more than one million hospital admissions over the next 30 years.



We are helping to expand the number of charging points in London

Go Ultra Low City Scheme

As a result of London receiving funding from the Office of Low Emission Vehicles, the GULCS initiative has supported the boroughs in installing more than 1,800 residential charging points to date, with 2,500 expected to be delivered by 31 March 2021.

In April, works came to a Safe Stop on Phase 2 of GULCS, due to the coronavirus pandemic. Phase 2 represents investment in standalone residential charging points, community 'hub' sites that contain multiple chargers in a single location, as well as some

rapid charging infrastructure. GULCS is jointly sponsored by TfL, London Councils and the Greater London Authority. Work has now recommenced, with the original deadline for Phase 2 extended to the end of the financial year.

Additionally, a joint £2.1m bid for the London boroughs has been submitted to the Office of Low Emission Vehicles for a new On-street Residential Chargepoint Scheme – so further residential charging infrastructure can be delivered to encourage and

support the growing demand for electric vehicles. Subject to the outcome of the bid, boroughs would combine any On-street Residential Chargepoint Scheme funding with their GULCS allocations, to ensure the procurement and delivery process is as efficient as possible. This On-street Residential Chargepoint Scheme funding could deliver a further 720 residential charging points, to further encourage the switch to electric vehicles.

TfL Rapid Charging Infrastructure Project

As a consequence of the coronavirus pandemic, delivery of the Rapid Charging Infrastructure project came to a Safe Stop in April 2020.

The project remobilised in the summer, and despite the delay caused by the pause, we remain on track to meet the target of 300 rapid charging points installed by 31 December 2020. In order to meet the target, efforts are being focused on installing a total of 308 sites, with the two remaining 'hubs' at Baynard House Car Park (City of London) and Glass Yard (Greenwich) providing an additional 14 charging points between them. While not included in the 308 target, Baynard House is due to be operational by December 2020, subject to the City of London completing some essential upgrades to the ventilation system in the car park. The hub site at Glass Yard is due to be operational by March 2021.

Zero emission bus fleet

We currently have the biggest fleet of zero emission buses in the UK and one of the biggest in Europe. As of September 2020, there were 235 zero-emission (electric) single-deck buses and 140 zero-emission (electric) double-deck buses, totalling 375 zero-emission buses operating in London. An additional 84 zero-emission (electric) buses are on order, and by the end of the financial year there will be around 450 zero-emission buses in the fleet.

Subject to funding, we aim to have 2,000 zero-emission buses in service by March 2025, and our overall aspiration is to achieve a zero-emission bus fleet no later than 2037.

We are working to secure funding for garage power infrastructure upgrades to enable the roll out of zero-emission buses, with charging infrastructure now in 15 of the 76 bus garages across London. We will be working alongside our bus operators to increase this number further to meet our zero-emission bus targets over the coming years.

Energy and carbon

Operational CO₂ emissions (excluding buses) track closely to our energy consumption, with year-to-date emissions around 20 per cent lower than the equivalent period of last year.

CO₂ emissions from our support functions (head office buildings and support vehicles) are on track to meet the London Environment Strategy target for the GLA Group to reduce its CO₂ by 60 per cent by 2025. While carbon emissions from our rail

services are continuing to decrease, we can only meet the ambition for TfL services to be zero carbon by 2030 by ensuring our energy consumption comes from renewable sources.

Figure 14:
Breakdown of TfL electricity consumption (giga watt hours)

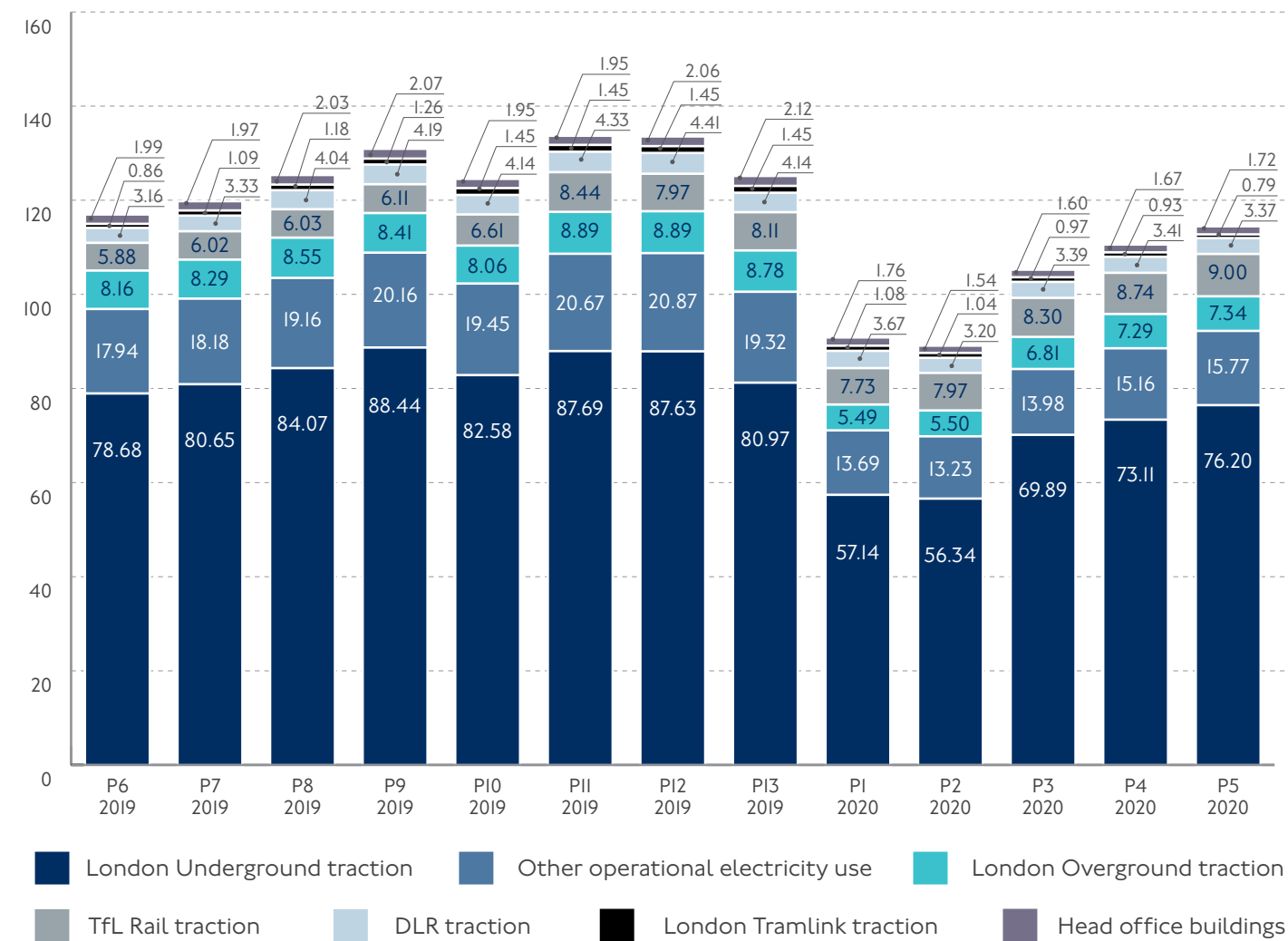
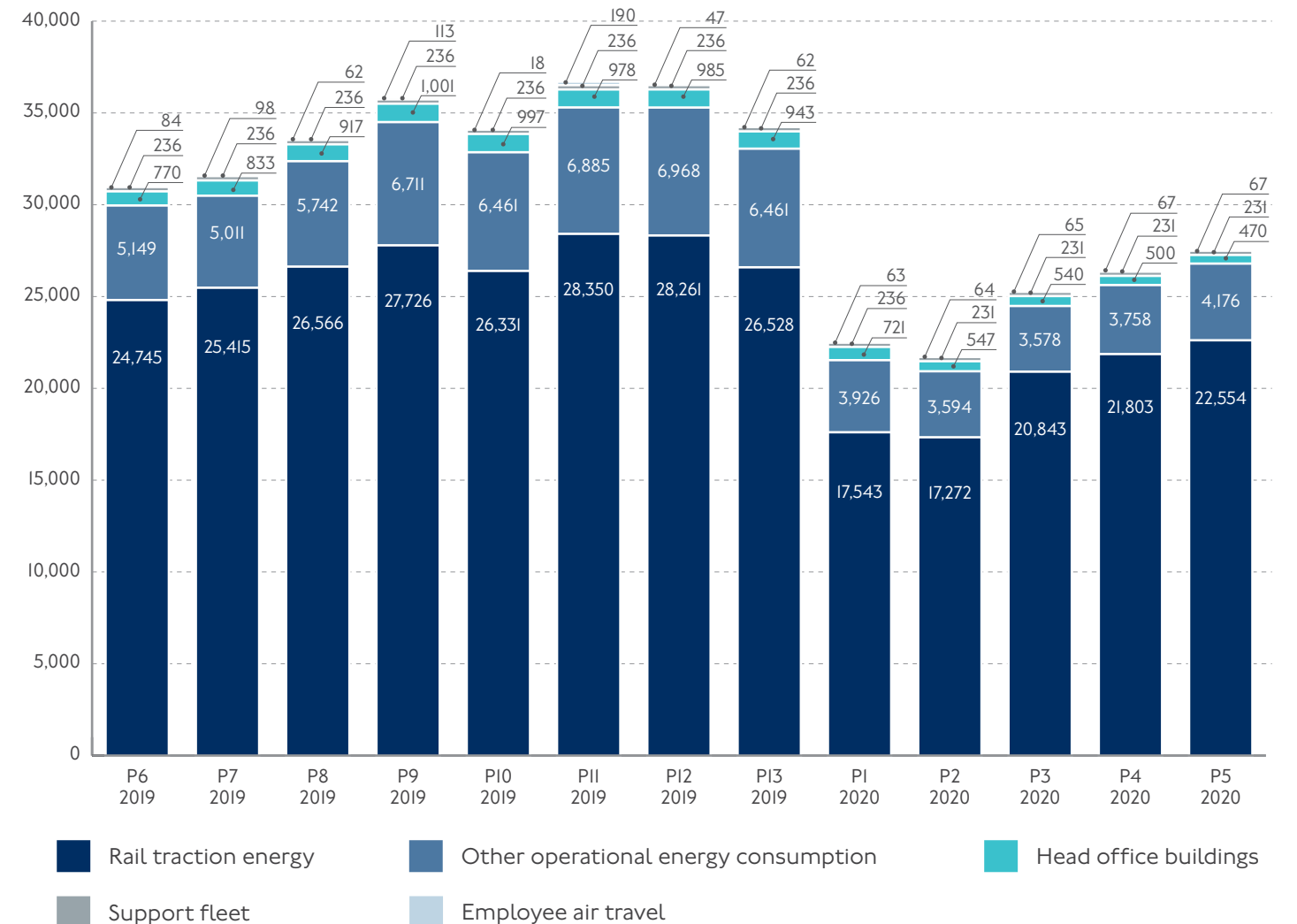


Figure 15:
Operation TfL CO₂ emissions – excluding buses (tonnes CO₂ equivalent)



Renewable energy procurement

On the 30 September we presented our strategy to procure renewable energy to the Finance Committee. This paper outlined the steps to meet our ambition for our rail services to be zero carbon by 2030, with the aim of launching a procurement for up to 18 per cent of TfL's electricity volume in Spring 2021. TfL is London's single largest consumer of electricity and our initial procurement would target the equivalent consumption of over 85,000 homes, demonstrating our commitment towards a green recovery.

We want our rail services to be zero carbon by

2030



We are committed to using green energy across our network

Recycling rates for construction works in London remain high



Waste and recycling

Construction, Demolition and Excavated waste volumes remain significantly lower than in previous years due to the pausing and gradual restart of construction works in response to Coronavirus restrictions. Recycling rates for Construction, Demolition and Excavated waste remain consistently high, in excess of 98 per cent recycled throughout 2020/21.

More than **98%** of our construction waste is recycled



Engagement with regulators

Working with our external
regulators to ensure the
safety of the network



Our engagement

Engagement with external regulators is fundamental to running a safe and sustainable service. We work with regulators through regular contact with our SHE team, joint workshops and the attendance of staff safety forums, with the ORR sharing outcomes. We will continue to engage with our regulators to improve safety for our customers and staff.

London Fire Brigade

The London Fire Brigade issued a Notice of Deficiencies to the DLR maintainer Keolis Amey Docklands. The reason for the notice was due to the failure to maintain an item of critical firefighting equipment to the required standard. The appliance was subsequently repaired within 48 hours of the notice being issued.



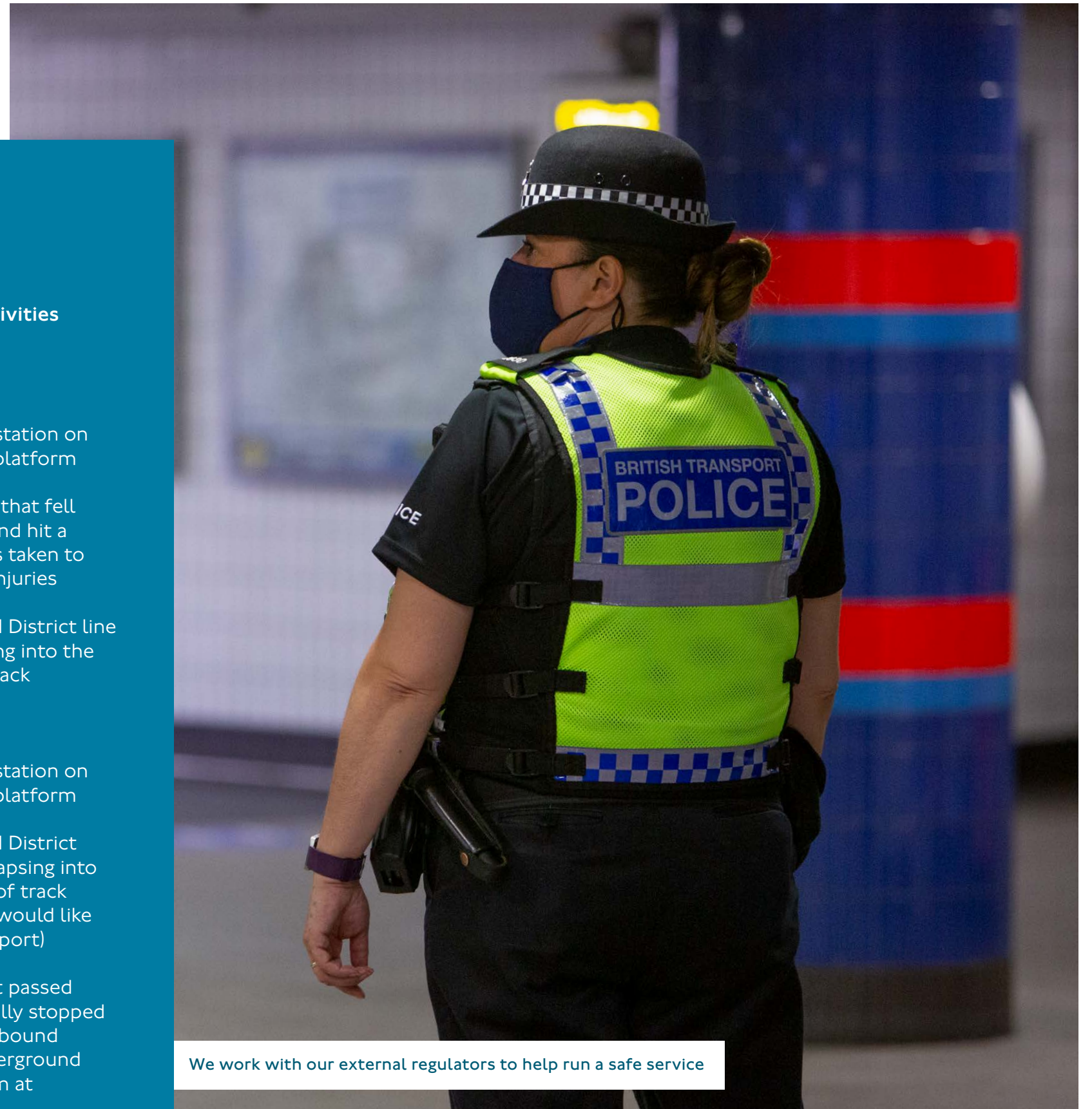
A list of current engagement activities with our regulators:

ORR are investigating

1. The fatal incident at Waterloo station on the northbound Bakerloo line platform
2. The part of an illuminated sign that fell outside Kentish Town station and hit a member of the public who was taken to hospital for treatment for his injuries
3. The wall next to the eastbound District line near East Ham station collapsing into the recess and on to a section of track

RAIB are investigating

1. The fatal incident at Waterloo station on the northbound Bakerloo line platform
2. The wall next to the eastbound District line near East Ham station collapsing into the recess and on to a section of track (RAIB are not investigating but would like us to share our investigation report)
3. The Chiltern Railways train that passed three signals at danger and finally stopped 23 metres short of a Chesham bound Metropolitan line London Underground service that was in the platform at Chalfont & Latimer station



We work with our external regulators to help run a safe service

Investigations

The following investigations were initiated in Q2. Their outcomes will be considered at safety governance meetings.

25 June 2020 East Ham wall collapse

An investigation has been commissioned into two similar incidents. First, a wall next to the eastbound District line near East Ham station collapsed into the recess and on to a section of track. There were no injuries sustained, but there was significant damage to assets and disruption to the service as a result of this event. Secondly, a wall next to the eastbound District line near Bromley-by-Bow station has a section that is resting on the cable posts which are leaning towards the track.

21 August 2020 Kentish Town sign incident

An investigation has been commissioned into the circumstances where during high winds part of an illuminated sign outside Kentish town Underground station fell and hit a member of the public. The man was hurt and was taken to hospital for treatment.

The following investigations were concluded in Q2.

17 May 2019 Newbury Park incident

A London Underground customer ran to board a train as the doors were closing, leaving their dog on the platform with the lead caught in between the doors. The dog was dragged for 750m. The dog was taken immediately to an emergency vet, but sadly died shortly after as a result of its injuries. The investigation reviewed the train, platform, customer and drivers' actions. No issues were found with the train or platform. The findings of this investigation is a reminder of how important human factors are in preventing incidents. This specifically relates to behaviours, fatigue, visual observations, communications and the correct implementation of emergency procedures.

3 February 2019 Turnpike Lane incident

A driver of a Piccadilly line train reported a rough ride near Turnpike Lane. Upon investigation, a loose block joint was discovered between Turnpike Lane and Wood Green. A subsequent inspection of the area found that three bolts had fallen out of a fishplate that joins the

bullhead running rails. It was found that although the design and manufacture of the plates were in line with acceptable tolerance parameters, the different requirements for its installation were not filtered down effectively enough. The investigations highlighted flaws within the work instruction and training, quality control, approved parts registers and stores catalogues. It also identified some best practice in terms of management of stores.

23 May 2019 District line breach Victoria Coach Station

Some temporary repairs were required in the Arrivals terminal at Victoria Coach Station. The patch repair had been cut into four segments, when pulling away the last segment the District line soffit was exposed. When the last segment of concrete pavement was removed, the corner section fell onto the District line below. No trains were passing at the time. Work was stopped. The investigation identified several areas of failures in compliance and inadequate management of resources that lead to the incident.

18 September 2019 Waterloo fatal injury

On 18 September 2019 a team of operatives started a clean of moving walk C2 at Waterloo Station. The Site Person in Charge moved the moving walk in a slow speed maintenance mode to assist in setting up the worksite. One of the team (Mr Christian Tuvi) was cleaning the moving walk machinery inside the gap created by the removed pallets. Mr Tuvi received fatal injuries from the moving machinery and was sadly pronounced dead at the scene. The investigation identified the potential for an unsafe or non-compliant system of work to be created on-site and that the generic method statement had not identified the moving walk as a risk by the reviewing parties.

9 November 2016 Sandilands tram incident

On 9 November 2016, seven people were killed when a tram derailed as it approached the Sandilands Junction in Croydon. In 2019, the CPS announced that the driver will not be prosecuted for gross negligence manslaughter and that no other criminal proceedings will be taken. The inquests resumed and were expected to begin on 19 October. However, following introduction of Tier 2 coronavirus restrictions in London, the Senior Coroner has adjourned the inquests. We will continue to support the inquests and offer support to the families of those who died.



Reference datasets

The following is a list of reference data sets where additional data can be found on the TfL website for accessing additional safety incident data.

Road Safety data

Includes fact sheets, reports, data extracts and other publications concerning road safety.

Bus safety data

Contains reports and research on bus safety. Quarterly bus incident data and the bus safety standard executive summary can be found on this page.

Coronavirus publications

All publications and reports relating to our response to the coronavirus are contained on the following page of our site. The page also contains network demand reports and data.

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' and helping to create a safer, fairer, greener, healthier and more prosperous city. The Mayor's Transport Strategy sets a target for 80 per cent of all journeys to be made by walking, cycling or using public transport by 2041. To make this a reality, we prioritise sustainability, health and the quality of people's experience in everything we do.

We run most of London's public transport services, including the London Underground, London Buses, the DLR, London Overground, 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 and making more stations step

free, we can make people's lives easier and increase the appeal of sustainable travel over private car use.

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

During the coronavirus pandemic we have taken a huge range of measures to ensure the safety of the public. This includes enhanced cleaning using hospital-grade cleaning substances that kill viruses and bacteria on contact, alongside regular cleaning of touch points, such as poles and doors, and introducing more than 1,000 hand sanitiser points across the public transport network.

Working with London's boroughs we have also introduced Streetspace for London, a temporary infrastructure programme providing wider pavements and cycle lanes so people can walk and cycle safely and maintain social distancing.

At the same time, we are constructing many of London's most significant infrastructure projects, using transport to unlock much needed economic growth. We are working with partners on major projects like the extension of the Northern line to Battersea, Barking Riverside and the Bank station upgrade.

Working with Government, 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 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.

By working together, we can create a better city as London recovers from the pandemic and moves forward.

[page left intentionally blank]