

Date: 13 October 2015

Item: Quarterly Health, Safety and Environment Performance Reports - Quarter 1 2015/16

This paper will be considered in public

1 Purpose

- 1.1 To inform the Safety, Accessibility and Sustainability Panel of the key health, safety and environment matters during Quarter 1, 2015/16

2 Recommendation

- 2.1 The Panel is asked to note the report.

3 Background

- 3.1 Full reports on Health, Safety and Environmental performance are produced annually. Quarterly reports are produced to update the Panel on any significant matters from the previous quarter. Transport for London (TfL) has three main delivery businesses, Rail and Underground, Surface Transport and Crossrail, with support from the Specialist Service Directorates. Any key activities related to the specialist directorates are highlighted on an exception basis, in this cover page.

4 Information

- 4.1 The Quarter 1 2015/16 Health, Safety and Environment Performance Reports for each business area are attached as appendices to this paper.

List of appendices to this report:

Appendix 1: Rail and London Underground
Appendix 2: Surface Transport
Appendix 3: Crossrail
Appendix 4: Statistical Data

List of Background Papers:

None

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London Rail and Underground

Quarterly Health, Safety and Environment Report

1 Summary

What went well

- 1.1 There were no 'in service' derailments of passenger trains during the quarter. It is now 97 months since the last 'in service' passenger train became de-railed on a running line. (At Mile End on the Central line.) The track renewal programme and improvements in track monitoring, (including enhanced techniques to find and rectify broken and crack rails) are the main contributors to this.
- 1.2 The number of work related violence incidents reduced by 1.5 per cent compared to the same quarter last year. A reduction in physical and threat incidents occurred, (a decrease of 26 per cent), however, verbal abuse towards staff increased by 18 per cent. Revenue related disputes contributed to just over half (52 per cent) of physical assaults, although the trend is reducing, whilst the number of physical assaults involving alcohol reduced by around 50 per cent.
- 1.3 The trend in objects (e.g. mobile phones) being dropped on the track by customers has stabilised. The introduction of a track retrieval device to assist station staff in retrieving these objects is complete.
- 1.4 The incident frequency rate across London Underground's capital programmes continue to fall in the quarter (by five per cent) and is now at four incidents causing injury, loss or damage per 100,000 hours worked. The main causes of incidents remain as 'not following procedures/rules' (25 per cent of incidents) and 'lack of hazard identification' (18 per cent of incidents). The benefits of the improvement programmes are continuing to be realised.
- 1.5 There have been no Dangerous Occurrences (as defined by the Reporting of Injuries, Disease and Dangerous Occurrence Regulations) for 18 consecutive periods on Docklands Light Railway (DLR).
- 1.6 There have been no reportable injuries or lost time injuries on London Overground (LO) projects, for in excess of 1,500,000 hours worked.
- 1.7 There were no serious incidents on London Trams (LT). There have been no reported customer major injuries in the last 12 months and in over 32 million passenger journeys. In addition there have been no contractor major injuries in nearly 500,000 hours of work.
- 1.8 There were no serious safety incidents on the Emirates Airline (EAL) during the quarter.

- 1.9 Rail dampers and noise barriers at Holywell Curve appear to have solved the noise issues in this location. Noise exceedances have dropped significantly and no complaints have been received.
- 1.10 The Beckton Depot train shed extension was completed with no lost time incidents.
- 1.11 The National Skills Academy of Railway Engineering (NSARE) conducted its first inspection of the DLR training school at Beckton; DLR was ranked as 'good'.
- 1.12 The DLR Secure Stations re-accreditation process was completed; all stations passed including the new Pudding Mill Lane station.
- 1.13 The DLR safety performance index (SPI) scored above target. The main drivers of the improved performances were:
 - (a) improvements in the reporting of missed maintenance by the franchisee, KeolisAmey Docklands;
 - (b) reductions in the number of lift and escalator failures;
 - (c) reductions in staff injuries (with zero lost time injuries in period 1);
 - (d) removal of all but two Temporary Speed Restrictions; and
 - (e) reductions in customer injuries, particularly in Period 2.
- 1.14 Following the inclusion of West Anglia Inners (WAI) services into the LO network, the SPI is being presented separately from the original LO network and the whole network. This is so that any changes to safety performance in the original network are not masked by the inclusion of WAI data. The SPI for the original LO network has remained steady over the quarter. The SPI including WAI is lower due to the higher number of assaults, both passenger on passenger and passenger on staff. Most assaults remain verbal with approximately 50 per cent due to ticketing issues (customers are unhappy that they now have to pay to travel) and the remaining due to anti-social behaviour issues which previously had not been challenged on the route.
- 1.15 KeolisAmey Docklands (KAD) achieved accreditation to the Freight Operators Recognition Scheme (FORS), achieving bronze certification. This is an important step in KAD implementing best practice in fleet management.
- 1.16 The modified platform access control barrier on the Emirates Airline was completed. This mitigation is designed to minimise foot trapping incidents.
- 1.17 Engineering standards covering key electrical and mechanical assets, including lighting and ventilation systems, were updated to mandate improved levels of energy efficient performance for new equipment. The changes will help drive reductions in energy consumption and CO₂ emissions from LU stations, as well as tax savings to TfL through the government's Enhanced Capital Allowances scheme.

- 1.18 Work is continuing on Greenwich Power Station; phasing for the installation of the second engine has been brought forward, doubling the capacity available and improving the benefits case. In addition, to the work being carried out at the station, the Royal Borough of Greenwich has begun feasibility work into developing a heat network to be supplied by the station.
- 1.19 LU's total electricity consumption was 304 GWh, an increase of 10 per cent on the equivalent period of 2014/15, caused primarily by Period 1 this year being four days longer than standard. The estimated traction energy per operated train kilometre decreased by 3.7 per cent.
- 1.20 Total CO₂ emissions from electricity increased by 3.2 per cent on the equivalent period of last year, as the increase in energy consumption above was balanced by the reduced intensity of grid emissions in 2015. Normalised CO₂ emissions for the quarter were 52.5g CO₂ per passenger km, a decrease of 10.6 per cent on last year.
- 1.21 As part of the programme for improved mental health thirty eight staff completed the Mental Health First Aid training and are now actively fulfilling these duties.
- 1.22 Step It Up, a campaign to help everyone achieve the target of 150 minutes of activity each week as recommended by the British Heart Foundation, Cancer Research UK, Diabetes UK and endorsed by Chief Medical Officer continued. During the quarter our physical activity campaign included:
- (a) TfL Sports and Social Club exhibition;
 - (b) Three Moves for Health Challenge (sit less, move more, take up a sport);
 - (c) inclusion of the Fit150 Challenge (150 minutes of physical activity a week) in District line health fairs and asset performance physiotherapy clinics;
 - (d) London by bike seminar and cycling lessons;
 - (e) Global Corporate Challenge has over 1,000 TfL employees participating and achieving an average of over 14,000 steps per day;
 - (f) walk to work week;
 - (g) Cycle confident training;
 - (h) 73 physical activity champions trained;
 - (i) Step it Up fairs delivered at Head Office buildings at Pierwalk, Palestra and Westferry; and
 - (j) Step it Up fairs delivered in conjunction with health fairs at Earls Court, East Ham, Barking and Blackfriars stations.

Areas for improvement

- 1.23 The trend in number of customer injuries remains stable. The majority of injuries are as a result of slips, trips and falls predominantly on escalators and stairs. A trial of a number of mitigation measures started in the period. This is aimed at

reducing the number of these incidents by influencing customer behaviour, including: encouraging customers to hold the escalator handrails; stand on the right of escalators; use lifts when travelling with luggage; and demarking the end of escalators eg by highlighting the escalator combs. The trial will run for six months and after evaluation the most successful measures will be implemented at hot spot locations on London Underground and London Rail.

- 1.24 The trend in the number of Platform Train Interface (PTI) incidents on the LU network is stable. The main cause of PTI incidents (56 per cent) are customers being caught in train doors. Customer campaigns, announcements and improved platform marking are aimed at reducing these. The second cause of PTI incidents is falls between the train and platform (26 per cent). The main area where these incidents occur continues to be on the sub-surface network following the introduction of the new trains (known as S Stock trains) and level access requirements. Work is continuing to address these PTI issues, with particular attention on the sub-surface locations. The two year programme of nosing stone realignments continues, with a reduction in incidents seen at the completed locations. A programme of additional mitigation measures including targeted platform staffing, enhanced risk awareness campaigns, and different methods of highlighting the platform train interface is continuing to be implemented.
- 1.25 The trend in the number of Operational lost time injuries on London Underground is stable. The main causes of lost time injuries are assaults, trauma and incidents as a result of slip, trip and falls. This is an area where London Underground and London Rail continue to work closely with the police, our own managers, and suppliers to take appropriate action wherever we can.
- 1.26 There was an increase in the number of lost time injuries occurring across London Underground's capital programmes directorate (CPD). The overall CPD Lost Time Injury (LTI) Frequency Rate (LTIFR) at the end of the quarter stands at 0.28 LTIs per 100,000 hours worked. (for +7 day injuries) After rising in Quarter 3 of 2014/15, the LTIFR is beginning to show a fall as a result of the local joint project improvement plans between London Underground and its Suppliers.
- 1.27 The trend in total numbers of Signals Passed at Danger, SPADs, (all categories) on London Underground is stable, with an average of 44 per period occurring in the year to date. Ninety two per cent of these were Category A1 SPADs, (train operator error), the remaining were Category A2 or A4 SPADs due to signal or alleged train equipment malfunctions. Four aggravated Category A1 SPADs were recorded, which involved a train continuing without authority. All train operators were interviewed and have, where necessary corrective action plans. There was one SPAD on London Overground due to driver inattention.
- 1.28 In the quarter a total of 42,475 working days were lost to employee sickness, equivalent to an average of 2.49 days per employee. This is lower than the previous quarter when it was 3.56 days lost per employee. The main causes of absence are musculoskeletal, coughs and colds and mental health issues. TfL's Occupational Health team work with local managers to reduce the time lost. The health improvement programme is also aimed at maintaining and improving employee wellbeing.

1.29 Musculoskeletal absence continues to be the main cause of absence across the areas of asset performance. Focus on improving musculoskeletal health continues. Asset performance physiotherapy clinics were held at Ealing Common, Upminster, Stratford Market and Cockfosters depots; and have returned to Ruislip and Hainault depots, as well as Lillie Bridge. Night clinics were also held at Acton Signal House and the Railway Engineering Workshop.

Key deliverables in the next quarter

1.30 The London Trams network risk model review will be complete. The changes will be briefed to staff.

1.31 A review of platform train interface risks on the Dockland Light railway will be complete.

1.32 As part of the mental health programme the second pilot mindfulness workshop was successfully completed. The mindfulness technique is being developed to be available to the Trauma Support Group (TSG) and Mental Health First Aid training. Consideration is also being given to training mindfulness champions to deliver mindfulness more widely throughout the organisation.

1.33 A new incident reporting and action tracking tool was successfully trialled and will be brought into use across London Underground and Dockland Light Railway in the next quarter. The tool will improve the ease of reporting and provide increased data analysis, allowing more focused interventions.

1.34 Promoting and active involvement in London's Health and Wellbeing week which runs from 19 to 23 October 2015. This is a pan London event which aims to enhance everyone's understanding of health and wellbeing through four themes:

- (a) Worker – Understanding that you may experience ill health that could impact on your ability to work and that help is available to support you in managing your condition and remain in work, or return to work early while supporting your ongoing recovery;
- (b) Workplace – This is about preventing you from becoming ill as a result of the work you do, through a range of activities such as removing hazards from the workplace, providing training to all managers and employees, and putting into place monitoring and surveillance to ensure the places we work in are safe and well-maintained;
- (c) Wellbeing – Encouraging everyone to take responsibility for improving your own health and wellbeing. The benefits to you extend beyond work and into your home and family lives as well. A range of activities and information in the workplace will be provided to promote healthy lifestyles and encourage employees to make and sustain positive behaviour changes; and
- (d) Wider community – We believe we should be encouraging wellbeing not only in our own employees but those in the wider community that we come into contact with. We will strive to deliver initiatives that impact families and friends

2 Major Incidents

- 2.1 There was one accidental customer fatality at Stockwell when a customer bent down to retrieve a dropped object and was struck by a train.

Surface Transport

Quarterly Safety, Accessibility & Sustainability Report

1 Summary

What went well

Road Safety

- 1.1 Provisional data for Quarter 1 of 2015 shows that 502 people were killed or seriously injured (KSI) on London's roads, the lowest level of KSIs on record for Quarter 1. This is 39.8 per cent below the 2005-2009 baseline for Quarter 1 and 2.3 per cent lower than the same quarter last year. The figure was however above the Quarter 1 target by 3.3 per cent (see 1.45 below).
- 1.2 In June TfL launched a trial of Intelligent Speed Assistance (ISA) on London buses. The technology which limits the vehicle's acceleration to the speed of the road it is travelling on will be fitted to all buses on routes 19 and 486 (North Greenwich to Bexley Heath).
- 1.3 As part of the road safety programme two campaigns ran in the quarter aimed at drivers, they were:
 - (a) Motorists – targeting all London motorists via outdoor posters at hotspot junctions and radio adverts; and
 - (b) Young Car Drivers – targeting Young Car Drivers via cinema advert, video on demand and social media promotion.
- 1.4 These campaigns, and others similar, are part of the suite of actions arising from Safer Streets, the Road Safety Action Plan. The campaigns are aimed at positively influencing driver behaviour on London's roads, under the banner of Education (the Plan is framed around the building blocks of 3 Es, Education, Enforcement and Engineering). These two specific campaigns are targeted at accident hot spot locations and higher risk drivers (i.e. young drivers), aiming for maximum impact.
- 1.5 In June 2015, TfL commissioned a specialist company to develop an Urban Motorcycle Design Handbook for use when designing road schemes. A series of training sessions for TfL and borough engineers will also be delivered towards the end of the year as a part of the project.
- 1.6 TfL has identified seven London boroughs to be road safety 'priority boroughs'. These boroughs will receive enhanced engagement and support from TfL due to a high number of vulnerable road user KSIs and/or road safety risk. The boroughs are Lewisham, Brent, Westminster, Hackney, Wandsworth, Lambeth and Croydon.

- 1.7 As part of the Priority Borough Programme, TfL ran a half day 20mph workshop with speakers from boroughs that have already implemented 20mph limits on some of their roads to share best practice with boroughs that are at the start of the process. The workshop will be followed up by a 20mph conference for all London boroughs in October.
- 1.8 A number of road safety schemes were delivered in 2014/15 as part of the TfL Road Network (TLRN) Regional Improvement Programme. This programme delivers benefits contributing to a number of strategic outcomes including Reliable Roads, More and Safer Cycling, Better Places to Walk, and Reduced Casualties. As a result, a safety focused scheme at the junction of the A217 Belmont Rise with Northdown Road and the introduction of a new 20mph speed limit on Commercial Street in Tower Hamlets were successfully delivered in the quarter.
- 1.9 To improve safety for all road users at Elephant and Castle, a £25m overhaul of the northern roundabout is underway to significantly upgrade facilities for pedestrians, cyclists and motorists. The project converts the roundabout into a peninsular creating a new, more open and accessible public space. This will mean the roads around it will be converted to two-way traffic. Works commenced in April 2015 and are on target to be fully complete by summer 2016. The final work on the public space within the new peninsula will be carried out following the Northern line station upgrade in 2023.
- 1.10 The replacement of the Woodlands retaining wall along the A406 North Circular Road near Golders Green commenced. Due to deterioration, the wall needs to be replaced to ensure that it remains safe and continues to support this vital section of the road network. Since 2010, a temporary supporting frame has been in place and the footway has been closed. The improvement works will ensure the area is safe and that the ground above and behind the wall is fully supported. The drilling works for the new anchors were finished ahead of schedule in March 2015 and the concrete pour for the new wall has also been completed along with the new fencing above the wall. Works on the footway are progressing and the detailed design of the green wall frame structure is complete, this will be followed by installation in the second quarter.

Operational Safety

- 1.11 There was a rate reduction in major customer injuries (defined as injuries which require hospital attendance) from 0.31 incidents per million passenger journeys in quarter four to 0.25 in the quarter. In the quarter, a total of 294 incidents were reported across Surface Transport networks, down from 344. There are programmes of work in areas such as bus driver training and marketing campaigns to reduce injuries further especially on the bus network where most injuries are reported. The initiatives are designed to complement steps being taken by bus operators in areas such as driver monitoring and training.
- 1.12 There was a 23 per cent reduction in the number of contractors subjected to workplace violence from 419 to 341. Bus drivers accounted for the majority of contractor incidents. Forty employees were also assaulted or subjected to verbal abuse, up from 39 in quarter four. The Workplace Violence Unit (WVU) continues to work with victims of assaults to apprehend and prosecute assailants. Verbal abuse/threats accounted for 68 per cent of the total reported cases.

- 1.13 The 2015/16 assurance activity programme commenced and has 458 activities identified for completion in the year. The programme includes 36 audits which form part of the TfL Integrated Assurance Plan. Of the 12 per cent of activities already completed, no major concerns were identified internally or within the Surface Transport supply chain. The completed activities include Senior Manager safety tours, workplace inspections, management system audits (contractors) and site inspections.
- 1.14 Twenty one health and safety training courses were delivered in the quarter which were attended by 164 employees from across Surface Transport. These courses are benefitting staff identified through training needs analysis as part of risk management arrangements.

Occupational Health and Safety

- 1.15 In the quarter, a total of 6,209 working days were lost to employee sickness, equivalent to an average of 1.90 per employee. This is lower than previous quarter when it was 2.86 and the corresponding quarter of 2014/15 when the average was 2.02. Surface Transport monitors sickness absence cause trends through the pan-TfL Health Improvement Plan (HIP) meeting. In response, collaboration between the Safety Team and Occupational Health has led to the development of a training course for Line Managers. The course is intended to further enhance awareness of Occupational Health services, the referral process and the benefits of early intervention, helping managers to more effectively manage and prevent sickness absence.

Environment

- 1.16 The Mayor of London hosted a global clean bus summit at City Hall with the C40 Cities Climate Leadership Group on June 29. The aim of the event was to promote wider adoption of much cleaner bus technologies in urban areas to reduce exhaust emissions and demonstrate there is an emerging market for large-scale production of electric, diesel-electric hybrid and hydrogen buses – a precursor to normalising prices of these vehicles.
- 1.17 The event follows the Mayor's meeting with bus manufacturers in February and the announcement of the C40 Clean Bus Declaration in Buenos Aires in March 2015. Dignitaries who attended included Michael Bloomberg (the former Mayor of New York) who is President of C40, the Mayor of Oslo, Deputy Mayors of Rio and Warsaw and representatives from Madrid, Bogota, Salvador, Copenhagen and Curitiba as well as the World Bank, Green Investment Bank and European Investment Bank.
- 1.18 TfL took delivery of two single deck electric buses built by Irizar which will operate on routes 507 and 521 alongside the two existing electric buses manufactured by BYD.
- 1.19 Thirteen bus routes in London are already operating with New Routemasters with route 73 next to be converted. This will take the number of these buses to over 500 in passenger service. The conversion of route 73 will be another step towards the delivery of 800 New Routemasters on London's streets by 2016, reducing CO₂ emissions in the Capital by around 27,500 tonnes a year.

- 1.20 The introduction of New Routemaster buses is part of a comprehensive programme to reduce emissions from London's bus fleet, which includes 1,700 hybrids on the street by 2016, accelerating the introduction of ultra low emission Euro VI buses and retrofitting 1,800 older buses to reduce their NOx emissions by up to 88 per cent.
- 1.21 The effectiveness of Euro VI engines in reducing harmful emissions has been substantiated in testing by TfL that re-creates real world driving conditions in London. During this testing, a bus with a Euro VI Engine was found to have 95 per cent lower NOx emissions than a bus with a Euro V engine (down from 10 g/km to 0.5 g/km). This test result correlates with testing conducted by manufacturers.
- 1.22 All buses entering the TfL fleet since January are equipped with Euro VI engines which brings the total in service to over 500. On average, around 700 new buses enter London's fleet each year.
- 1.23 The proportion of the bus fleet served by low-carbon emission and quieter diesel-electric buses has reached 14 per cent. This means there are 1,350 hybrids in the fleet and this total will now grow to 1,700 hybrids (including 800 New Routemasters) by the middle of 2016 when they will represent around 20 per cent of the fleet.
- 1.24 As part of a programme to retrofit 1,800 Euro III generation vehicles with selective catalytic reduction (SCR) equipment by 2015, 1,490 (82 per cent) have been fitted. The SCR kit developed for London cuts individual vehicle exhaust NOx by up to 88 per cent. Any Euro III buses not included in the refit programme will be replaced with the new ultra-low-emission Euro VI engine buses. The two measures will deliver a 20 per cent reduction (equivalent to 1,000 tonnes) in NOx a year from the bus fleet by the end of 2015 compared to 2012 levels.
- 1.25 TfL published a Car Club Strategy for London in May. The Strategy has been developed to grow car clubs into a mainstream alternative to the private car to help address a number of challenges facing London in the coming years, including congestion and environmental issues. TfL worked jointly with a coalition of car club operations, key stakeholders, the GLA and London Councils to develop the Strategy.
- 1.26 Encouraging further use of car clubs was a key recommendation from the Mayor's Roads Task Force, which was set up in July 2012 to help deliver a template for world-class streets and roads fit for the future. The Strategy sets out 10 key actions, which will be delivered by all members of the coalition, to grow the membership of car clubs to one million users in London by 2025.
- 1.27 The London Low Emission Zone (LEZ) Phase 4 sees 97 per cent of HGVs, buses and coaches compliant, compared with a target of 95 per cent and for Phase 3, 99 per cent of larger vans and minibuses compliant, compared against a target of 98 per cent. The LEZ applies maximum emission standards which if not complied with result in a financial penalty. The targets have been revised upward to reflect the high levels of compliance that the scheme currently achieving.

- 1.28 With the confirmation by the Mayor that the Ultra Low Emission Zone (ULEZ) will be launched in the Capital on 7 September 2020, TfL is confident it will encourage the use of newer and cleaner vehicles which will improve the quality of life and health of Londoners. This ground-breaking scheme will require all vehicles travelling within the Congestion Charge zone to meet new emission standards and will be in operation 24 hours a day, seven days a week. Many vehicles will already need to meet these standards by 2020, however, with this announcement, the Mayor and TfL aim to accelerate the take up of ULEVs and stimulate the ULEV market.
- 1.29 As part of the ULEZ proposals, changes were proposed to taxi and private hire vehicle (PHV) licensing to reduce emissions from these fleets and increase the number of taxis and PHVs capable of operating with zero emissions. In light of concerns raised by taxi and private hire trade organisations, the Mayor asked TfL to undertake additional engagement and to bring forward revised licensing proposals before confirming these changes. Consultation commenced on 30 June on updated proposals for taxis and PHV licensing, including the introduction of a voluntary decommissioning scheme for taxis older than 10 years and a requirement that taxis and PHVs new to licensing from 1 January 2018 be zero emission capable.
- 1.30 TfL has announced the next stage of its programme to support the future of electric vehicle charging points across the Capital. The announcement came at a time when TfL was publishing a Prior Information Notice (PIN). The PIN is seeking the views and information from a broad range of charge point suppliers and partners, which will be used to progress future charging infrastructure in London. TfL recognises that the continued development of charging infrastructure is an essential process in maintaining the growth of ultra low emission vehicles (ULEVs) in the Capital.
- 1.31 In particular, the right charging infrastructure must be in place to meet the needs of the next generation of electric vehicles which will include taxis, private hire vehicles and commercial fleets. The high-mileage and intensive duty cycles of these vehicles will mean that their charging requirements will be distinct from the private drivers who use the Source London network. TfL has therefore begun to explore possible approaches to the development of charging infrastructure for taxis, private hire vehicles and other commercial fleets. Engagement with the electric vehicle charging industry will inform TfL's approach to how charging infrastructure can be deployed. This will include consideration of possible funding options and commercial operating models for new charging infrastructure.

Enforcement, Safety and Security

- 1.32 TfL continues work to combat touting, unlawful plying for hire and other illegal cab activity. This illegal activity poses a serious risk to the travelling public and undermines the legitimate, law abiding Taxi and Private Hire trades. TfL has put additional measures in place and substantially increased the levels of visible enforcement to deter and disrupt illegal minicab activity in hotspot locations in central London.

- 1.33 Launched in May, Operation Neon is a high visibility, multi-agency operation involving TfL enforcement and compliance officers, TfL funded officers in the Metropolitan Police Roads and Transport Policing Command and Local Authority parking attendants. The initiative is proving to be very effective in dealing with many of the issues identified by the trade and keeping roads and ranks clear so that the legitimate, law abiding trades can operate. In the first 33 days of the operation:
- (a) 2,864 PHV drivers were advised and moved on to keep roads clear for taxis and booked PHVs;
 - (b) 205 PHV drivers were reported for not having a badge and were stopped from working for the remainder of the evening;
 - (c) 1,717 PHV drivers were reported for not wearing their badge;
 - (d) 44 PHV drivers reported for plying for hire offences;
 - (e) 309 PHV drivers reported for parking on Taxi ranks; and
 - (f) 667 parking tickets issued.
- 1.34 Operation Neon is just one element of TfL's robust enforcement action with police partners which continues to tackle illegal and non compliant cab activity in Central London and other priority areas.
- 1.35 London moved a step closer to banning unsafe lorries from London's streets when freight operators, boroughs and transport officials met in June to discuss how safer and more efficient deliveries can be achieved. As part of this, the first of 600 signs for the Safer Lorry Scheme have been installed. The signs will remind all HGV drivers and operators that they must have essential safety equipment installed to keep vulnerable road users safe if they drive in London, or they will face fines. The scheme becomes effective on 1 September 2015.
- 1.36 Building on the successes of the Construction Logistics and Cycle Safety (CLOCS) programme to improve the design and safety of heavy goods vehicles, a three-year 'Safer Trucks' programme has been initiated. The programme will accelerate the development, supply and wider uptake of heavy goods vehicles with increased driver vision. The programme will provide the evidence and technical standards for safer heavy goods vehicle design to support proposed amendments to European regulation. It will also ensure that best-in-class safety equipment is fitted to existing fleets as standard through public and private procurement practices.
- 1.37 The Commercial Vehicle Unit and Industrial HGV Task Force (IHTF) continue to work to combat the threat of non-compliant and dangerous commercial vehicles by undertaking targeted roadside enforcement activities. The IHTF comprise MPS Roads and Transport Policing Command, City of London Police and the Driver and Vehicle Standards Agency. Between October 2013 when the initiative started and June 2015, officials of the task force stopped and checked 5,438 vehicles resulting in a 'satisfactory' stop rate of 25 per cent (no offences detected). The low level compliance is due to the targeted nature of the team's activities, it should not be seen as representative of the wider London freight population. The IHTF has so far (up to September 2015) issued 2,717 roadworthiness prohibitions, 343

driver hours prohibitions and 1,389 Fixed Penalty Notices and seized 74 vehicles over this period.

- 1.38 The FORS Governance Standards Advisory Group (GSAG) has now been established in March 2015. GSAG has a comprehensive mix of representatives from local and national transport authorities, trade associations, enforcement bodies and selected industry representatives. The role of GSAG is to ensure the FORS Standard remains relevant to the industry. It also protects the integrity and reputation of the scheme, and embeds the FORS standard across the UK as the national standard for quality fleet operations. The GSAG will meet quarterly throughout the five year lifecycle of the FORS concession
- 1.39 TfL's enforcement capability on the road network is being enhanced through the rollout of 80 new TfL Roads and Transport Enforcement Officers (RTEOs) with the first 20 officers already in place. RTEOs will predominantly be an on-street problem-solving and enforcement resource with the capability to respond to issues in real-time.
- 1.40 The officers will be deployed to 10 default priority locations which have been identified through analysis of roads reliability issues and planned works. The locations include: Marylebone Road, Baker Street, Euston Road, Kings Cross, Corner Tottenham Court Road / Oxford Street, Hyde Park, Piccadilly Circus / Haymarket, Aldgate, Millbank / Vauxhall, Elephant and Castle and London Bridge.

Transport crime

- 1.41 TfL and its policing partners announced the 2014/15 transport crime figures in May as the plans for enhanced policing on night tube services were being set out. The Metropolitan Police Service and British Transport Police crime figures showed that transport crime fell in 2014/15 by 8.3 per cent compared with 2013/14 (2,502 fewer offences) – the ninth consecutive year of transport crime reductions. The level in the year represents 7.0 crimes per million passenger journeys on the transport system, down from 7.7 in 2013/14. Bus-related crime in 2014/15 were 5.7 per cent lower (1,029 fewer offences) than in 2013/14; this provides a rate of 7.2 crimes per million passenger journeys (down from 7.5 in 2013/14) on the bus network.

Transport Accessibility

- 1.42 Bus stop accessibility has doubled since 2008 after £8.4m investment. The number of accessible bus stops in London has risen by more than 50 per cent. Latest figures show that bus stop accessibility has improved dramatically over the last few years – rising from 29 per cent in 2008 to 80 per cent at the end of the quarter, and reaching 83 per cent as of July 2015. This means the bus stop accessibility programme is on track to ensure that at least 95 per cent of bus stops on London's roads will be accessible by the end of 2016. TfL has worked closely with local authority partners to achieve this, as a significant proportion of the Capital's 19,500 bus stops are not on the TfL Road Network (TLRN). Across the TLRN 95 per cent of stops are already accessible – with a target of 99 per cent to be achieved by 2016.

- 1.43 In June 2015, TfL outlined plans for two new town centre pedestrian improvement programmes. Working with boroughs and other stakeholders, Tooting and Peckham town centres were selected as two pilot locations for a wide ranging programme of pedestrian safety improvements. Funding of £2m to 5m each will be invested over a three-year period in both town centre locations to improve pedestrian safety, improve the attractiveness of the public realm and promote walking as a mode of transport.

Areas for improvement

Road Safety

- 1.44 In the quarter, KSI on London's roads were 2.3 per cent lower than the same Quarter last year but 3.3 percentage points above the Quarter 1 target (see 1.1 above). KSI casualties are usually at the lowest during Quarter 1 of each year with weather conditions associated with this reduction. Pedestrians and cyclists are more sensitive than other road users to the weather and Quarter 1 of 2015 was considerably drier than normal, with less than half the level of rainfall seen during Quarter 1 of the previous year. This is likely to have contributed to increases in the number of journeys by foot and bicycles, with levels of cycling in central London increasing by 3 per cent in Quarter 1 of 2015 compared to the same quarter last year. This increase in journeys may have had the effect of slowing KSI casualty reduction during Quarter 1 of 2015. TfL will continue to investigate why these variations may have occurred.

Transport crime

- 1.45 Despite the low levels of crime of the transport network, increases were seen in some crime types on some modes compared with the previous year. This includes reported sexual offences which rose by 34.7 per cent across the network which was anticipated as part of the work being done by TfL, BTP and the MPS to tackle unwanted sexual behaviour on public transport and encourage reporting such as Project Guardian.
- 1.46 Project Guardian aims to increase confidence in reporting of sexual offences, reduce the risk of becoming a victim, challenge unwanted sexual behaviour and target offenders. As part of this, a joint communications campaign to encourage passengers to report any unwanted sexual behaviour on the transport network was launched in April. The campaign uses a short interactive and non-interactive film which follows a woman's journey on the Tube, in which she experiences escalating incidents of unwanted sexual behaviour with a clear call to action of '*report it to stop it*' by texting 61016. It has received very positive feedback, including support from Everyday Sexism, Mumsnet, Network Rail and others, and was featured by a range of media outlets including BBC Radio 2, Metro and Cosmopolitan UK.

Key deliverables in the next quarter

Road Safety

- 1.47 TfL will continue to work closely with Wandsworth and Southwark borough councils to develop Tooting and Peckham Pedestrian Town Centre projects.

- 1.48 TfL will finalise the report evaluating the trial of pedestrian and cyclist detection technology on London buses that took place in late 2014 and considering next steps in understanding the role of the technology in improving pedestrian and cyclist safety in London.
- 1.49 The drafting of the TfL Road Safety 2014 Annual Progress Report will continue with the final report expected to be published in Autumn 2015.
- 1.50 Following a successful initial trial of Pedestrian Split Cycle Offset Optimisation Technique (SCOOT) in 2014/15, trials at a further three locations have commenced for completion in 2015/16. Equipment specifications for these have been completed and they are being sent to external traffic signal contractors to enable them to start detailed design. This technology enables the green man 'invitation to cross' period to be extended during busier times.
- 1.51 Work will be continued on the trials of cycle detection at traffic signals at eight further locations. If successful, the initiative will enable the detection of the volume of cyclists in segregated lanes/cycle tracks, moving TfL towards its goal of developing a system which enables the traffic signal timings to be adjusted to give more green time when there are high numbers of cyclists at key junctions. The trials will take place along Cable Street on Cycle Superhighway route 3. Equipment specifications have been completed and these are being sent to the external traffic signal contractors to enable them to start detailed design.
- 1.52 The Safer Lorries Scheme will come in to effect on September 1st, 2015, and will set minimum standards of safety equipment that need to be fitted to HGVs entering central London. The scheme will be enforced via a multi agency approach, with penalty notices issued to vehicles that do not comply with the minimum standards.

Operational Safety

- 1.53 Surface Transport will publish the quarter two (April – June) London bus safety data. The publication will show that there were 1,506 injuries in the quarter, up from 1,485 (1.4 per cent) in the same period in 2014. The total in quarter 1 is equivalent to 2.6 injuries per million passenger journeys. There were a total of 1,341 incidents in the quarter which have led to the 1,506 injuries.
- 1.54 Surface Transport will work on the development of a plan of actions towards reducing road traffic collisions involving buses from the current average of 2,110 collisions per month. These incidents include all collisions irrespective of liability, responsibility or severity.
- 1.55 Surface Transport will continue with the programme to rollout In The Zone, the bus driver training designed to further raise their awareness of human factors and behaviours related to road accidents. The programme will see 24,500 drivers trained by mid 2016.
- 1.56 There will be continuation of the safety campaign designed to encourage bus passengers to hold-on when travelling on buses. Surface Transport is using the campaign to augment a range of initiatives including by bus companies aimed at tackling falls on buses which account for around third of customer injuries.

- 1.57 There will be continuation of engagement with all stakeholders on the new Construction (Design and Management) (CDM) Regulations, which came into effect on 6 April 2015. With the transitional period set to end on the 6 October 2015, Surface Transport is seeking ensure the robustness of arrangements in place.

Environment

- 1.58 Work continues to make bus route 312 the London's first fully-electric bus service from September. This will see a further seven zero-emission vehicles introduced to south London. The route is currently served by two all-electric Optare MetroCity and five conventional diesel buses. These initiatives will increase the total number of pure-electric vehicles in London from eight to 17. This number will then rise steadily as TfL looks to introduce more makes and models through route tender process opportunities.
- 1.59 As part of a concurrent initiative, rapid inductive-charging infrastructure is being made ready at Canning Town and Walthamstow bus stations for use by three range-extended diesel-electric hybrid buses. The Alexander Dennis E400 buses will operate on route 69 from October as part of a trial of how hybrids can operate in all-electric mode for significant periods of passenger service. The capital and maintenance costs of the project, called ZeEUS (Zero Emission Urban-Bus System), are part funded by the European Commission.
- 1.60 TfL and the GLA will launch the Ultra Low Emission Vehicle Delivery Plan at a high level summit with stakeholders from across government, industry and automotive manufacturers. The Delivery Plan sets out a vision for London to grow as a sustainable city where ULEVs are the preferred option for all vehicle travel, not only across public transport, but also in other fleets and for private vehicle owners. Increasing ULEV uptake will be an important component of tackling London's air quality and CO₂ challenges, as well as providing the opportunity for London to be at the forefront of a technological revolution in the motor industry.

2 Major incidents

- 2.1 Four accidental fatalities were recorded in Quarter 1:

- (a) a pedestrian was fatally injured in a collision with a route 83 bus on April 14, on Uxbridge Road, Ealing. The driver took steps to avoid the collision but had insufficient time to avoid striking the person;
- (b) a pedestrian was fatally injured in a collision with a route 260 bus on April 15, on Station Approach, Shepherds Bush Green;
- (c) a pedestrian was fatally injured in a collision with a route N89 on April 19, on Prince of Wales Road, SE3. The driver had insufficient time to avoid the collision; and
- (d) A driver of a private car died in an incident where the car collided with a route 189 bus on April 29, on Temple of Avenue, Barnet. Two other bus passengers suffered minor neck injuries in the incident.

Crossrail

Quarterly Health, Safety and Environment Report

1 Summary

What went well

- 1.1 There was good progress against our Health and Safety Objectives for 2015/16 in this quarter. Following the introduction in Period 1 of more challenging measures for the Health and Safety Performance Index (HSPI), 14 contracts out of 18 (77 per cent) have achieved a Health and Safety Performance Index (HSPI) score of 2.00 (scale of 0 to 3 with 1.0 reflecting contractual compliance) or above.
- 1.2 The RIDDOR (including 3+ day lost time case) AFR was 0.14 at the end of the quarter, a 22 per cent reduction on the Period 13 (2014/2015) rate of 0.18, exceeding the corporate objective (20 per cent reduction) for 2015/16.
- 1.3 The Lost Time Case (LTC) AFR was 0.29 at the end of the quarter, a 16 per cent reduction on the Period 13 (2014/2015) rate of 0.32, narrowly short of the corporate objective for 2015/16 of a 20 per cent reduction.
- 1.4 Cycle 6 Gateway assessments were completed in Q1. These assessments assess and recognise elements of 'good practice' and 'inspiration' and share these across the programme for wider learning. Provisional scores have been issued and are being used in HSPI scoring. Final Gateway Scores and full Gateway reports will be issued in Q2.
- 1.5 A generic Programme Wide Induction (PWI), for use on all contracts was rolled out across the project. Over 100 people have been trained to deliver the Programme Wide Induction and almost 3000 members of staff working on the project have attended the training. The new induction provides a consistent approach to induction across the programme, eliminating the need for individuals who move between contracts to be re-inducted whilst ensuring the material is delivered in an informative and engaging manner.
- 1.6 Crossrail's updated Golden Rules and High Risk Activities were launched in Q1. These new rules are based on behaviours and are applicable to all situations. Surveillance process for monitoring contractor on site compliance and behaviour has been updated to reflect the changes to the Golden rules.
- 1.7 Crossrail was recertified by LRQA as compliant with the OHSAS 18001 standard. The audit took place week commencing June 29th 2015 and identified several areas of good practice. However, 2 Minor Nonconformities were also identified relating to the communication of risk assessments (Lone Working procedures) and the induction of visitors at Canada Square. These Minor Nonconformities are being rectified prior to the next audit.
- 1.8 Research on air quality in tunnelling environments was presented as a scientific paper at the International Occupational Hygiene Association conference in April. A series of presentations were delivered across the programme to share the findings and ensure ongoing compliance with air quality management.

- 1.9 A small scale research project on fatigue, within the Executive Committee and key leadership roles in Delivery was completed. Ongoing research is being conducted at Crossrail by TfL Human Factors specialist and a Middlesex University student to assess the Day/Late/Night and 7-3/7-4 shifts with a potential to identify and assess the 5-2/5-2 shifts. Report expected in September.
- 1.10 The programme of Assurance Assessments on Fire Safety for 2015/16 commenced in quarter 1. The assessments are being carried out by the London Fire Brigade Crossrail Liaison Officer.
- 1.11 By the end of Q1, 40 supervisors from the Principal Contractor population had been recruited to the Frontline Leadership Programme (FLP) to improve their leadership skills. This is on track to achieve the annual target of 100 additional entrants to FLP.
- 1.12 A “Noise and Neighbours” campaign was held during the week of 1-5 June (culminating in World Environment Day on 5 June), with the aim of promoting best practice construction noise management on Crossrail sites. 64 events were held across the central section of the programme.
- 1.13 Two Open City Green Sky thinking events were hosted in Crossrail’s offices at Canary Wharf and Farringdon station, giving an insight into sustainable design and construction at Crossrail. The events were well attended and very well received.
- 1.14 Connaught Tunnel has now received its final CEEQUAL score, and has been confirmed as an Excellent rating with a score of 87.6 per cent.

Areas for Improvement in the quarter

- 1.14 New, more challenging, KPI measures were implemented for the Health and Safety Performance Index (HSPI) at the start of Quarter 1, As anticipated, this has resulted in a decrease in the overall HSPI score, but Crossrail continues to work with our site teams to drive a subsequent recovery (the overall HSPI score improved by 8% from Period 1 to Period 3) and an associated improvement in overall health and safety performance.
- 1.15 As reported last quarter, there will remain a continued focus on noise management, including encouraging contractors to achieve “world class” levels of noise management as defined in the supplier performance process. Noise management remains an important issue during 2015/16 because of the use of extended hours and night time working at some locations.

Key Deliverables in the next Quarter

- 1.16 Action plan is to be submitted to Lloyds Registry Quality Assurance to confirm that the Minor Nonconformities identified during the audit are being addressed by Crossrail.
- 1.17 The Crossrail ‘Have Your Say’ health and safety survey is being rolled out from the 28 August. This survey will have an increased focus on Health and Wellbeing.

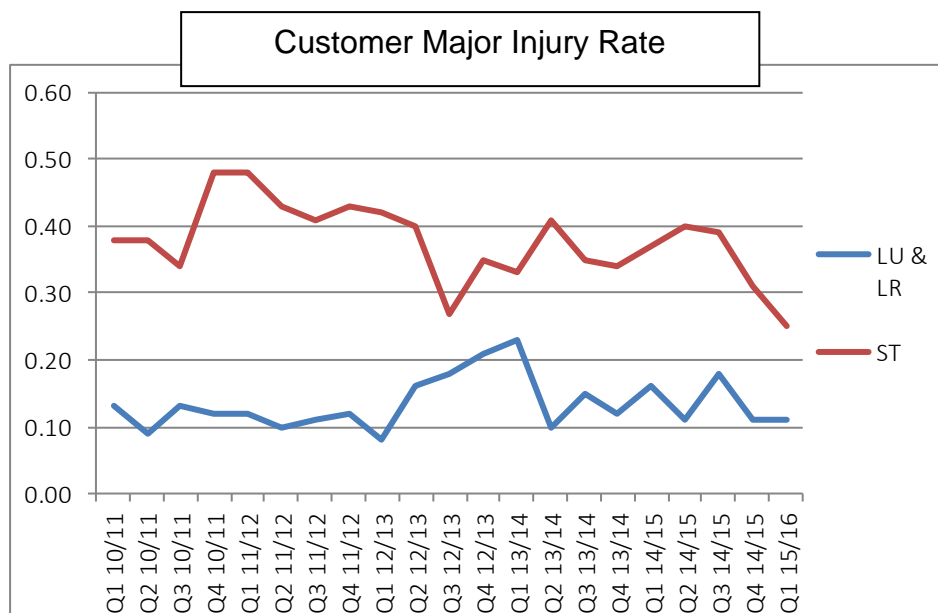
- 1.18 Two research projects, to be conducted by Middlesex University Masters students will commence in September 2015. The projects will analyse the impact of H&S communications across a diverse workforce and also the effectiveness of Behavioural Based Safety initiatives on Crossrail.
- 1.19 An Incident Investigation Course, available for Crossrail and contractors, will launch on the 30 July 2015 at Crossrail's Training and Underground Construction Academy (TUCA).The course is aimed at upskilling the workforce who assist with incident investigations and who have only a basic knowledge of incident investigation.
- 1.20 A short communication on the research conducted by Institution of Occupational Medicine (IOM): "Occupational exposure to respirable dust, respirable crystalline silica and diesel engine exhaust emissions in the London tunnelling environment" has been developed and is to be submitted to the Annals Of Occupational Hygiene in August.
- 1.21 The last of three courses to attain the NEBOSH certificate in the management of health and wellbeing is booked for August.
- 1.22 The Annual Sustainability Report and Annual Health and Safety Report will both be published and the annual sustainability awards will also be held in July 2015.

2 Major Incidents

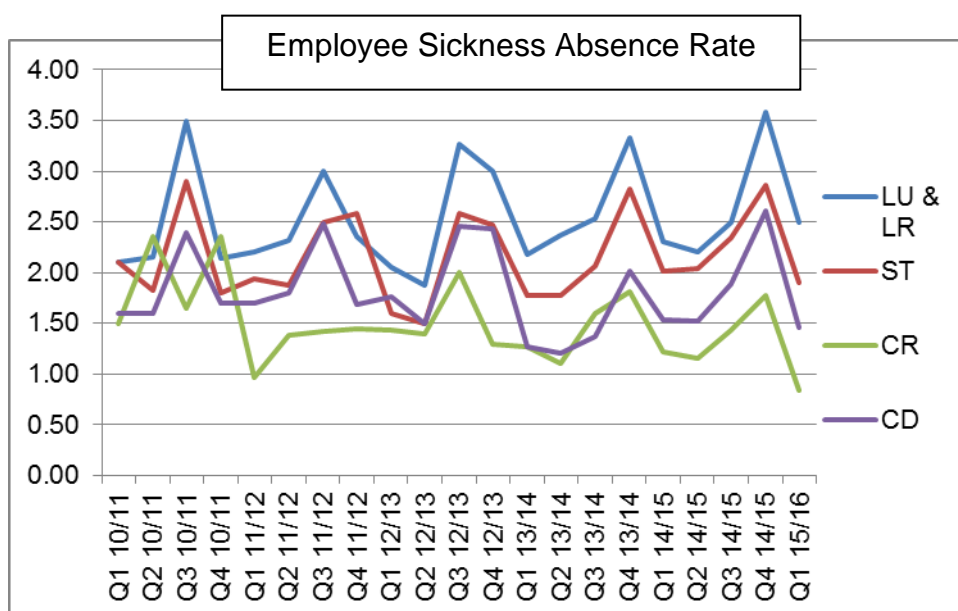
- 2.1 There were no major incidents in Quarter 1.

Statistical Details

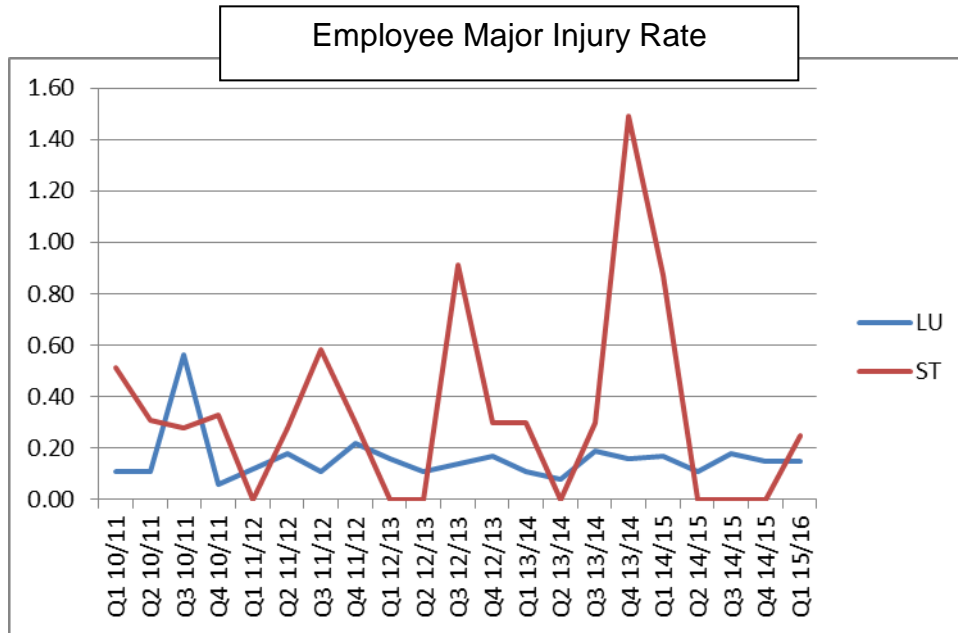
Quarterly Health, Safety and Environment Report



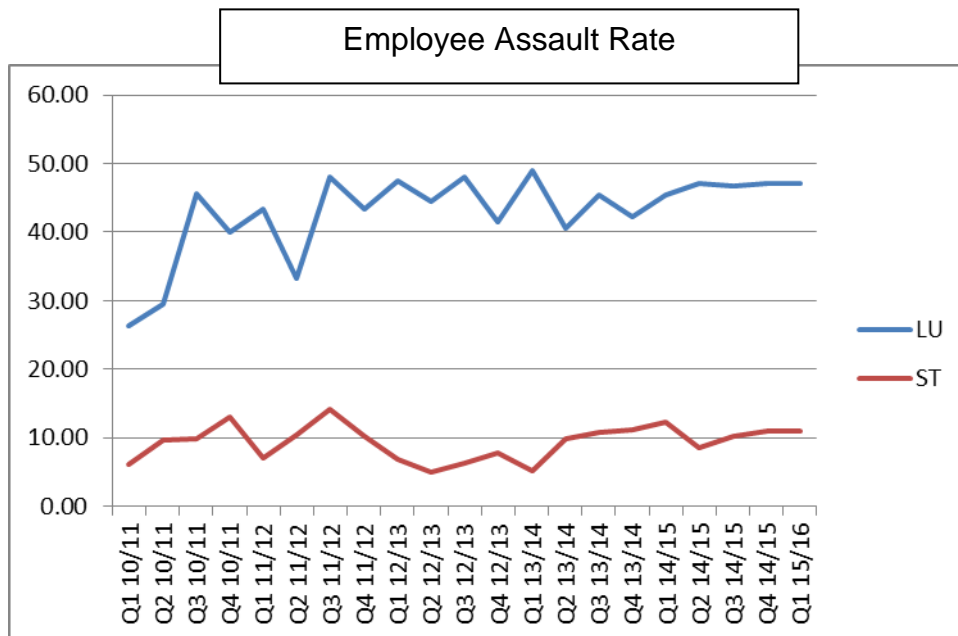
This chart provides the rates for Customer Major Injuries in London Rail and London Underground and Surface Transport, per million passenger journeys. Surface Transport is continuing to see a downward trend, with LU at a consistent and lower rate.



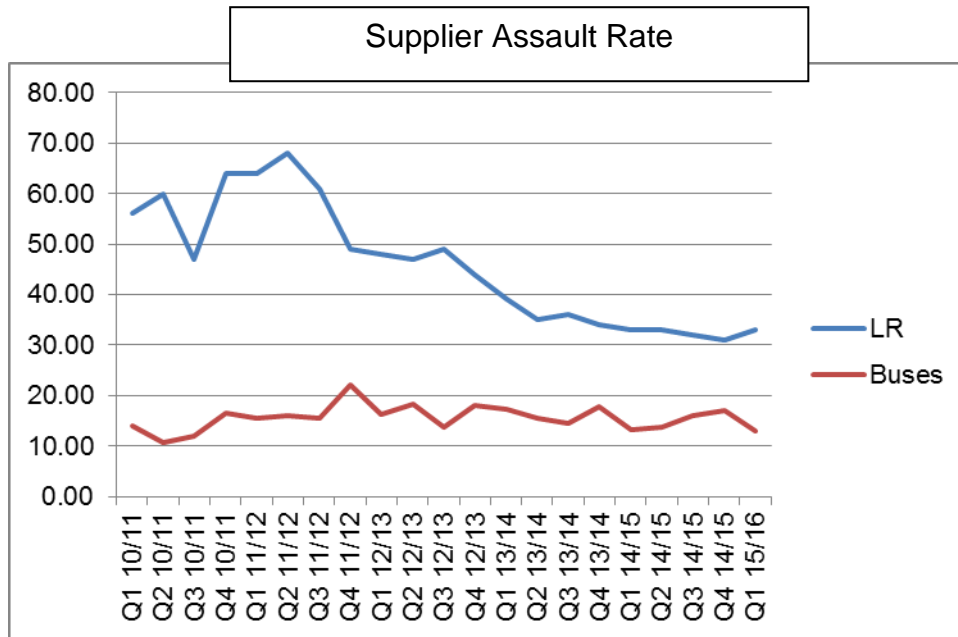
This chart provides the details of sickness absence per 1000 employees. The seasonal trend continues. There are no particular sickness trends, with Gastrointestinal, Musculoskeletal and coughs and colds remaining the major elements.



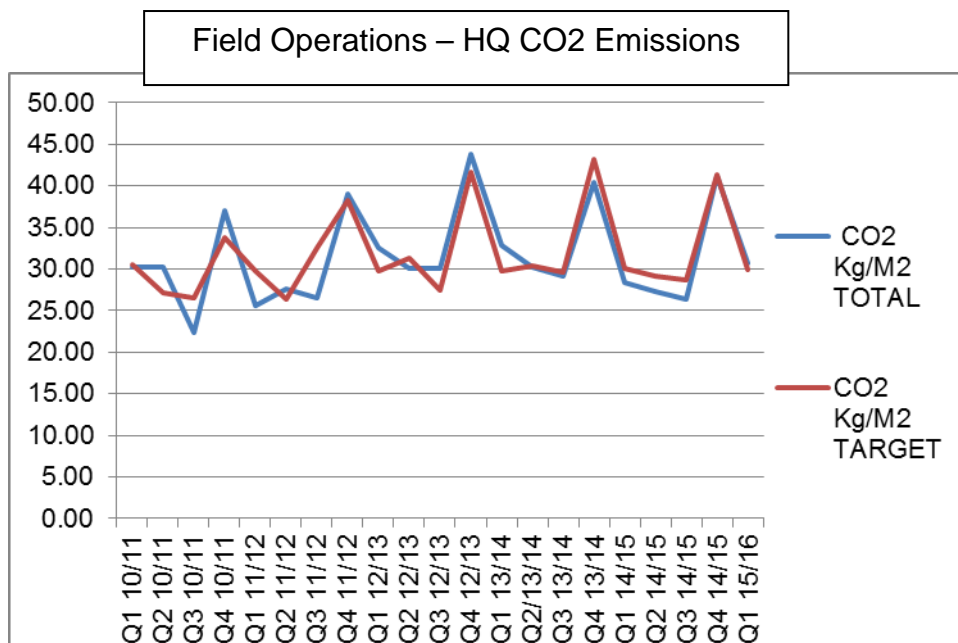
This chart provides the rate of major injuries per 1000 employees. This is a rate per quarter, and is not a moving average. The Surface Transport rate shows a much higher volatility.



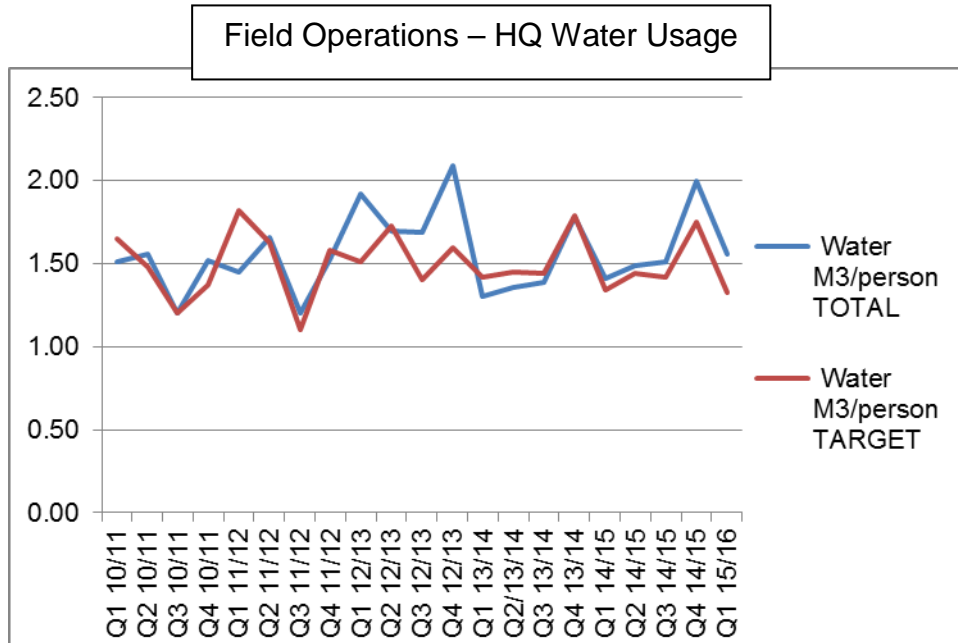
This chart shows employee assault rates per 1000 staff, for Surface Transport and London Underground. The trend is stable.



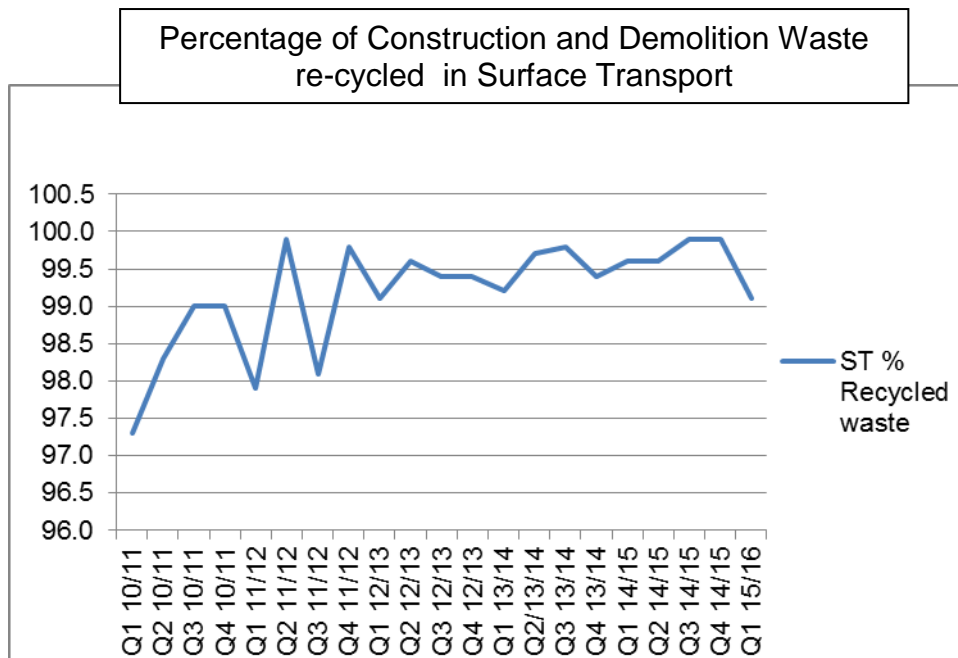
This chart shows the rates for Assaults (both physical and verbal) per 1000 Supplier employees. These staff are primarily those in London Rail and London Buses (primarily customer facing staff). The Surface Transport position is relatively stable, but there was a slight rise in LR, although the longer term trend remains down.



This chart shows the carbon emissions at the HQ buildings that make up the TfL estate, and over which we have direct control. They are measured in Kg of CO2 per square metre. As might be expected there is a clear seasonal trend. The targets are also shown, and in this quarter the actual emissions were just above target.



This chart shows the water usage measured in cubic metres measured against the numbers of persons in the various TfL HQ buildings over which we have control. The targets which have been set are also shown, and in the quarter actual water use per person was above target but broadly in line with previous seasonality.



This chart shows the percentage of construction and demolition waste recycled in Surface Transport. The amount can vary significantly depending on the nature of the work undertaken in the quarter, so the rate of recycling has been provided. Recycling rates remain high with the tonnage being about twice the previous quarter and approaching four times the average for the five quarters before that.