

Safety, Accessibility and Sustainability Panel



Date: 7 July 2015

Item 5: Quarterly Performance Report

This paper will be considered in public

1 Summary

1.1 This paper informs the Panel about key elements of performance in Quarter 4 of 2014/15 across TfL.

2 Recommendation

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

List of appendices to this report:

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

List of Background Papers:

None

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London Underground and London Rail Quarterly Health, Safety and Environment Report

1 What Went Well

- 1.1 The total number of Customer Major Injuries (CMIs) in 2014/15 was significantly lower than in 2013/14 (81 CMIs in 2014/15 compared to 130 CMIs in 2013/14).
- 1.2 The number of passenger and staff assaults on London Overground has fallen this quarter.
- 1.3 The Capital Programmes Directorate (CPD) Accident Frequency Rate has fallen 27 per cent over the year, standing ahead of comparable Crossrail and Network Rail performance. The Incident Frequency Rate (incidents that have caused harm, loss or damage) in CPD has also continued to fall and is at the lowest level for 13 periods. The rate represents a 12 per cent decrease in incidents over the year. The Capacity Optimisation Programme in CPD achieved a zero Lost Time Injury (LTI) rate and the Sub-surface Upgrade Programme had zero LTI's in the quarter.
- 1.4 In London Rail, the Beckton shed extension project on Docklands Light Railway (DLR) is nearing completion, and there have been no lost time incidents in the Quarter. A heightened level of safety monitoring has been put in place to ensure the safety record is maintained as the project closes.
- 1.5 The Capital Programme HSE Improvement Plan with the theme off 'getting the basics right' was successfully launched.
- 1.6 There were no Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) incidents for fourteen consecutive periods on DLR. There were no London Overground project major injuries. There were no major injuries to staff, passengers or members of the public this quarter on London Tramlink.
- 1.7 There were no derailments of passenger trains in service during Quarter 4. It is now 94 months since the last passenger train became de-railed on the LU running line while in service (at Mile End on the Central line). Improvements in track monitoring and increased track renewals have contributed to this. There was one non-service derailment at Ealing Common depot. This is still under investigation.
- 1.8 Safety presentations from the visually impaired safety campaigner Ken Woodward were held across the London Rail businesses. The events were very well received. London Overground staff were invited to make a commitment to something they would change to improve safety. This will be followed up next quarter to see if the commitment has made a difference.
- 1.9 London Tramlink has developed a vinyl tram wrap in black and yellow featuring TfL standard safety illustrations. Early indications are that the 'safety tram' has been successful

in raising the profile of the tram with positive feed-back from customers and in the local press.

- 1.10 This quarter included the annual maintenance shutdown week on the Emirates AirLine (EAL), when a significant amount of maintenance activity was carried out. There were no safety incidents. During the shutdown the EAL successfully conducted the annual rescue exercise, which involved removing four persons from a stationary cabin on the line and lowering them to the ground below.

Areas for Improvement in the quarter

- 1.11 There has been an increase in the absolute number of Platform Train Interface (PTI) incidents on the LU network over the past 12-18 months. The increasing trend is most noted on the SSL network following the introduction of the S Stock and level access requirements, but an increase has also occurred on the Central line. However, when normalised against customer journeys, the trend in PTI incidents is stable. During the quarter there were two incidents to note. A customer was dragged and suffered a broken limb at Clapham South when her coat was caught in the doors of a train as it moved off; prompt action by the Train Operators and Platform staff prevented a more serious accident. There was an incident in which a three year old child fell down the gap at Baker Street, receiving a minor injury. Work is continuing to address PTI issues, with particular attention on the S Stock locations. Nosing stone realignments are being undertaken, with 16 of the planned 88 locations across SSL having been completed. A programme of additional mitigation measures including targeted platform staffing, enhanced risk awareness campaigns, and different methods of highlighting the platform train interface is also being implemented.
- 1.12 The Lost Time Injury rate for operational and maintenance staff in LU was higher in 2014/15 compared to 2013/14 (488 LTIs in 2014/15 compared to 416 LTIs in 2013/14), but showed improvement in the final Quarter.
- 1.13 The downward trend in the number of employee major injuries continued. There was one major injury to an employee in the quarter. This was sustained by a Train Operator who fell and fractured his arm in Ruislip depot.
- 1.14 There has been an increase in work-related violence to members of LU staff in the quarter, and there has been a general increase over the past three years. There is better reporting of Workplace Violence, which is fully supported. Incidents related to 'revenue issues' are however falling and those linked to alcohol are not increasing. This is an area where LU and LR continues to work closely with the police, our own managers, and suppliers to take appropriate action wherever we can.
- 1.15 There was one positive alcohol 'Post Incident' test on the District line; the employee awaits a Company Disciplinary Investigation.
- 1.16 A lifting incident occurred at the Track and Signal Stores at Ruislip, while rails were being unloaded from a lorry. This incident resulted in an Improvement Notice from the Office of Rail and Road (ORR). The Improvement Notice required an improvement in the development and use of detailed lifting plans. The Notice has been complied with and is confirmed by ORR as closed.

- 1.17 There was an LTI to a Carillion member of staff (the London Overground East London Line maintainer) at Silwood compound, when some palisade fencing slipped and cut the person's leg. This is Carillion's first LTI in 5 years.
- 1.18 There were two Vehicle overshoots on DLR in the quarter. The first involved a vehicle arriving at Stratford station on Platform 16 and overshooting the stopping point by approximately eighteen metres. It was found that there was an expansion joint in the area that had recently been re-greased, and the grease was visible on the running rail. In the second incident involved a vehicle overshooting at Galleon's Reach station by approximately 12 metres. The investigation has not been completed but it is thought to be unrelated to the overshoot at Stratford.
- 1.19 The trend in total numbers of signals passed at danger (SPADs), on London Underground shows a reduction from an average of 53 per period in 2011/12 down to 39 on average at the end of quarter 4. The 514 recorded in the whole of 2014/15 represents a reduction of 93 from 606 recorded in 2013/14. It is important to note that the improvement in signalling technology, with the latest being the fitting of ATO/TBTC operation on the Northern Line, has contributed.
- 1.20 LOROL had one SPAD and Bombardier also had a SPAD within New Cross Gate Depot in the quarter. Both Overground SPADs were due to driver inattention, and while the yearly total remains below last year, LOROL did not meet their objective of a 17 per cent reduction in SPADs.
- 1.21 Road Traffic Collisions (RTCs) continue to present a risk on London Tramlink, and there are a number of work streams in place to tackle particular hot spots. These included working with Croydon Council to improve crossings and other highway assets, and working with the British Transport Police to try to reduce red traffic light jumpers.
- 1.22 On 29 December 2015, an in-service tram derailment occurred. The tram derailed at slow speed over a set of sprung points at Mitcham Junction. The incident occurred late at night and the tram was lightly loaded – there were no injuries. The incident has been independently investigated, and the investigation concluded that the failure resulted from a combination of two issues – a failed damper unit within the points mechanism and a failure of the tram driver to correctly manually move the failed points. The investigation made a number of recommendations that are being tracked to conclusion. The Rail Accident Investigation Branch (RAIB) attended the incident site but decided not to investigate further; they will issue an industry bulletin.
- 1.23 LU was served an Enforcement Notice for pigeon nuisance at East Acton station where a recently refurbished road bridge sustained vandalism damage leading to pigeons penetrating the netting. CCTV was installed by the refurbishment project as this was not the first act of vandalism leading to a similar problem previously.

Key Deliverables in the next Quarter (Q1 – 2015/16)

- 1.24 As part of the PTI risk mitigation programme, blue lights will be installed at Baker Street Platform 2. Blue lights have proved to be successful in reducing the instances of passengers falling between the larger gaps at stations on the Metropolitan Line.

- 1.25 40 per cent of LU customer accidents happen on escalators, and next quarter will see further rolling out of a number of initiatives aimed at improving customer safety on escalators. These initiatives include undercomb lighting, footprints on steps, red combs, localised message speakers and 'hologram' units. The effectiveness of the initiatives will be monitored in order to judge which are worth rolling out more widely.
- 1.26 There is to be a trial of body worn video cameras by LU Operational staff, designed to assist in reducing workplace violence against LU Operational staff. The cameras will be trialled by members of the Revenue Control Team for six months from April 2015.
- 1.27 A new incident reporting and tracking tool will be brought into use in LU and later in the year in LR. The tool will improve the ease of reporting and provide increased data analysis, allowing more focused interventions.
- 1.28 A technical solution involving a modified platform access control barrier to mitigate passengers getting their feet trapped in closing cabin doors on the Emirates airline has been agreed. Operators of Urban cable cars in other countries are also interested in this development.
- 1.29 LO takes over the West Anglia lines from Liverpool Street to Cheshunt, Chingford and Enfield Town, plus the Romford to Upminster line. These lines present new safety challenges to LOROL and LOROL have been undertaking detailed assurance activities to assess the railway they will adopt. The London Overground team has been involved in joint assessment of this work.
- 1.30 Trams are planning to trial the use of solar panels at Therapia Lane depot. The solar panels will be positioned on top of the substation at the depot and will be used to feed back generated power. The trial will determine the value of installing solar panels on other structures on the network.

2 Major Incidents

- 2.1 There was one major incident on London Underground when a customer suffered a fatal injury at Old Street station, when they were struck by a train that was arriving into the station. The person leant down to pick up a bag, and appears not to have noticed how close they were to the moving train.

Surface Transport

Quarterly Health, Safety and Environment Report

1 Summary

What went well

Road Safety

- 1.1 Final data for Quarter 4 of 2014 shows that the number of people killed or seriously injured (KSI) on London's roads was 41 per cent below the 2005-2009 baseline for Quarter 4. At a figure of 556 people, this is the lowest Quarter 4 level of KSIs on record. The full year KSI reduction for 2014 was a reduction in KSIs of 40 per cent from the 2005-09 baseline, meaning that TfL met the long-term target of a 40 per cent reduction in KSIs by 2020 six years early.
- 1.2 Taking into account the KSI trend, a new stretched target of a 50 per cent reduction in KSIs by 2020 has been agreed. Expected growth in population, traffic and cycling growth mean this is challenging but realistic.
- 1.3 The second annual TfL Road Safety Conference, 'Working together to save lives on London's roads', took place in February. The conference focused on delivering in partnership and was well attended by borough officers and key road safety stakeholders.
- 1.4 TfL funded training for London boroughs, the Fire Brigade, the Metropolitan and City of London Police Services and internal TfL staff on MAST, a web-based road safety analysis tool which uses STATS19 collision data and Mosaic (socio-demographic) profiling to support an intelligence led approach to road safety. Four training sessions took place in March and were attended by 65 road safety professionals, including officers from 28 London boroughs.
- 1.5 An independent review of TfL's Road Safety Audit procedure concluded that it is internationally recognised and "may already be reflecting best practice".
- 1.6 TfL has selected AECOM to take over the management and operation of our Fleet Operator Recognition Scheme (FORS) partnership with the Chartered Institute of Logistics and Transport (CILT). Presently, more than 210,000 vehicles from 2,400 companies are accredited to FORS and TfL has worked with a range of industry stakeholders to develop the scheme. The five year concession with AECOM will see the scheme expanded across the UK, allowing more fleet operators and their clients to benefit from a consistent fleet operating standards. TfL will work closely with AECOM following the transfer to ensure a smooth transition and retain an integral role on the FORS governance board.

- 1.7 The FORS Governance Standards Advisory Group (GSAG) has now been established. 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.
- 1.8 A new advertising campaign focused on teen pedestrian safety was launched in March. The channel mix included online film formats and video on-demand, posters and social media. Posters in high streets of boroughs with higher teen road related KSIs received high priority.
- 1.9 TfL continued delivering against the actions contained in the Vulnerable Road User Action Plans. This includes continued development of road safety engineering projects and the safety camera replacement programme.
- 1.10 Construction has now commenced on Quietway 1 – Waterloo to Greenwich and Quietway 2 – Bloomsbury to Walthamstow, both Quietways are due to open in Autumn 2015 and are being delivered in partnership with the Boroughs. The first seven Quietways will be delivered by the end of 2016. Quietways form part of the Mayor’s Vision for Cycling and will provide a cross-London network of high quality quiet routes which will be clearly signed for easy use.
- 1.11 A number of road safety schemes were delivered in 2014/15 as part of the TLRN Regional Improvement Programme which delivers benefits for a number strategic outcomes including Reliable Roads, More and Safer Cycling, Better Places to Walk, and Reduced Casualties. The year saw the successful delivery of schemes such as:
 - (a) The new 20mph limits in City of London; A10 and A201 corridors
 - (b) Safety focused schemes at:
 - i. A205 Honor Oak Road
 - ii. A4/A312 Waggoners Roundabout
 - iii. A205 Dulwich Common junction with Alleyn Park
 - iv. A4 Bath Road junction with A4 Henleys Roundabout
 - (c) Completion of safety studies and feasibility optioneering for Priority One locations identified through the 2012 Road Safety Priority location lists (worst performing Vulnerable Road User collision spots in London) – 26 sub £1m projects
- 1.12 TfL prepared a trial of Intelligent Speed Assistance (ISA) on London buses. The technology, which limits vehicles to the speed limit of the road it is driving on, will be fitted to all buses on two routes, the 19 and the 486. The trial will enable TfL to better understand the benefits of using ISA in London, with a view to potentially expanding its use in the bus fleet.
- 1.13 Building on the ongoing pilots of 20mph at Waterloo IMAX roundabout and on two key routes through the City of London, TfL has announced the introduction of 20mph speed limits as trials at eight new locations. These routes across seven boroughs will help to understand the most effective means of implementation and compliance, particularly on busier roads where both place and movement functions are important. The sites were identified through assessment of a range of data such as level of pedestrian and cycle activity, collision history, network characteristics and borough aspirations.

- 1.14 Analysis of the first six months of data on the City of London corridors 20mph trial has not shown any detrimental impacts for traffic congestion. Further monitoring work is continuing to determine the safety benefits of the initiative.
- 1.15 The Traffic Regulation Orders required for the Safer Lorry Scheme were made on 29 January 2015. The scheme is designed to improve cyclist and pedestrian safety, by legally requiring all vehicles in London weighing more than 3.5 tonnes to be fitted with:
- (a) Class V and Class VI mirrors giving the driver a better view of cyclists and pedestrians around their vehicles; and
 - (b) Side guards to protect cyclists from being dragged under the wheels in the event of a collision.
- 1.16 The Traffic Regulation Orders made by Transport for London, London Councils and Heathrow Airport go-live on 1 September 2015 will include a maximum fine for each breach of the ban of £1000. The scheme will be enforced by the Metropolitan Police, City of London Police and the Driver and Vehicle Standards Agency (DVSA) through their role in the Industrial HGV Task Force. 'Safer HGV Zone' signs are being installed at the Low Emission Zone (LEZ) boundary, and extensive communications are underway to ensure all lorry drivers and owners who may operate in London are informed and have sufficient time to make appropriate modifications to vehicles.

Operational Safety

- 1.17 There was a rate reduction in customer injuries which require hospital attendance from 0.39 incidents per million passenger journeys in quarter three to 0.31 in quarter four. A total of 344 incidents were reported, down from 354. Most of these injuries were to bus customers and with over half cases arising from passenger falls. The "Rails and Handles" safety campaign designed to encourage passengers to hold-on to prevent falls will continue in 2015/16.
- 1.18 The 2014/15 assurance activity programme was concluded with 81 per cent of the scheduled 387 activities completed. Activities which were not completed were either cancelled for operational reasons or were subsequently no longer required. The programme did not find any major concerns internally and within the Surface Transport supply chain, but it identified areas where further improvements could be made. The programme included 55 audits which form part of the TfL Integrated Assurance Plan.
- 1.19 The fourth annual Safety Management Maturity Model (SM3) assessments were completed. The model which is based on the Office of the Rail Regulator RM3 model but amended to more appropriately reflect the nature of Surface Transport was completed for all business areas. The assessment has helped to establish levels of management maturity for specific areas and highlighted where further improvements can be made.
- 1.20 The outcome of the assurance activities and SM3 assessment will be used to inform continuous improvement across the business, contributing to the formation of Safety Improvement Plans aimed at reducing safety risk(s) posed by our activities.
- 1.21 Twenty two health and safety courses were delivered in quarter four which were attended by 173 employees from across Surface. For the 2014/15 year, 552 Surface employees benefited from safety courses identified through training needs analysis or as part of risk management arrangements.

Environment

- 1.22 The proportion of the bus fleet served by low-carbon emission and quieter diesel-electric buses is now at 14 per cent. There are currently 1,280 hybrids in the fleet, a total which will grow to 1,700 hybrids (including a revised target for 800 New Routemasters) by the middle of 2016 when they will represent around 20 per cent of the entire fleet.
- 1.23 TfL has awarded the contract to operate route 312 as the first route in London to be operated entirely by electric buses. The new contract, running from September 2015 and operated by Arriva, will be part of a trial to help TfL develop plans for greater use of electric buses in central London in the future. Arriva is currently in talks with bus manufacturers with a view to adding a further seven electric buses to the route to the two currently in service. These buses have zero tail pipe emissions, resulting in lower carbon emissions and improved air quality.
- 1.24 The London LEZ Phase 4 sees 97.1 per cent of HGVs, buses and coaches compliant, compared with a target of 92 per cent and for Phase 3, 99.3 per cent of larger vans and minibuses compliant, compared against a target of 95 per cent.
- 1.25 Following a public consultation in this quarter, the Mayor has confirmed the introduction of the Ultra Low Emission Zone (ULEZ) in the Capital on 7 September 2020. The ground-breaking proposals 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 meet these standards in 2020, however by introducing this requirement next year the Mayor and TfL aim to accelerate the take up of low emission vehicles and stimulate the low emission vehicle market. The ULEZ will also encourage the use of more sustainable forms of transport and ensure London's air quality improves more quickly; making the capital a more pleasant place to live and work.
- 1.26 The TfL funded Construction Logistics and Cyclist Safety (CLOCS) programme held its biannual progress event showcasing the latest safety designs in heavy goods vehicles from leading manufacturers. These re-designed vehicles incorporate improved driver direct vision and reduce blind spots, providing increased visibility of vulnerable road users. The event was hosted by Sir Peter Hendy CBE and attracted over 600 delegates. A guide to Vehicle Safety Equipment and a Construction Client Compliance Toolkit was launched at the event. Both are designed to help companies implement and meet the CLOCS Standard. With London experiencing 23 per cent of the country's construction output and construction vehicles being over represented in cyclist fatalities, the new safer vehicles will be trialled by logistics operators and vehicle manufacturers in London to encourage more widespread adoption.
- 1.27 The London Boroughs Consolidation Centre (LBCC) was set up in January 2014 with EU funding as a shared resource between the London boroughs of Camden, Enfield and Waltham Forest. In Q4 TfL provided financial assistance to the London Borough of Islington to enable them to join the LBCC. This allows them to realise financial savings from procuring in bulk with other councils and to reduce the number of deliveries to their council buildings; which in turn reduces congestion, emissions and the risk of council delivery vehicles being involved in collisions. The LBCC now serves over 400 council buildings.

- 1.28 A three year waste consolidation pilot led by a central London Business Improvement District (BID) has commenced. The plan is to use private sector collaborative procurement practices to increase uptake of the initiative and reduce the number of different waste collection companies. The pilot aims to demonstrate a significant reduction in the number of waste collection vehicles in the local area, reducing congestion and emissions and improving the shopping environment. Additionally collaborative procurement may realise financial savings. The Pilot will provide evidence of the benefits of this approach to other BIDs to help encourage widespread adoption.

Enforcement, Safety and Security

- 1.29 The Safer Travel at Night (STaN) campaign, which aims to eradicate illegal touting, produced successful results in 2014 by tailoring tactics to hotspot areas and using more public engagement and higher visibility. During the two main STaN phases in 2014, the Metropolitan Police Service (MPS) and City of London Police (CoLP) made a total of 94 arrests for touting, with over 3,600 minicabs and taxis stopped and checked. This is in addition to the regular enforcement operations carried out throughout the course of the year.
- 1.30 The Industrial HGV Task Force (IHTF) continues to work to combat the threat of non-compliant and dangerous commercial vehicles, by undertaking targeted roadside enforcement activities. The IHTF, which is made up of officers from the MPS Roads and Transport Policing Command, CoLP and the DVSA, continues to target the most non-compliant vehicles, drivers and operators on London's roads. Between October 2013, when the IHTF commenced operations, and May 2015, the IHTF stopped and checked 5,181 vehicles resulting in a 'satisfactory' stop rate (no offences detected) of 25 per cent. However, due to the targeted nature of the team's activities this figure must not be seen as being representative of the wider London freight population. The IHTF issued 2,579 roadworthiness prohibitions, 332 Driver Hours prohibitions and 1,309 fixed penalty notices and seized 67 vehicles over this period.
- 1.31 The MPS Roads and Transport Policing Command (RTPC) mobilised hundreds of officers each day over a six-week period starting on 16 February as part of Operation Safeway. The operation aimed to reduce risk to cyclists and other vulnerable road users by enforcing the rules of the roads and engaging with road users. Officers were deployed to priority junctions and routes in the morning and afternoon rush hour periods. Officers engaged with and educated all road users as well as enforcing the rules of the road. Results from the MPS for the first six weeks showed that officers issued 5,556 Fixed Penalty Notices (FPNs) to road users for a variety of offences, issued 618 summonses to road users and made 163 arrests.
- 1.32 Work is progressing well to bring in 80 new TfL Roads and Transport Enforcement Officers (RTEOs) to focus on road reliability and road safety issues. The 80 additional officers will significantly enhance TfL's ability to deal with issues affecting the road and transport network. They will predominantly be an on-street problem-solving resource and enforcement resource, with the capability to respond to issues in real time.
- 1.33 The RTEOs will have a range of basic traffic powers, including the ability to enforce parking contraventions on the TLRN, powers under the Home Office's Community Safety Accreditation Scheme to stop and direct traffic and the ability to enforce decriminalised moving traffic contraventions. The rollout of the enforcement officers is taking a phased approach. The first tranche of officers (20 officers) will begin training in July. The full complement of 80 officers should be in post by May 2016.

- 1.34 TfL successfully prosecuted National Grid Gas in connection with roadwork offences committed in central London in July last year, resulting in a fine of £10,000. During the works, the Road Works Enforcement Inspectors noticed that the contractors carrying out the repairs had failed to set up the worksite in accordance with the Safety Code of Practice resulting in pedestrians and wheelchair users being forced onto the carriageway, placing their safety at risk. The work was deemed unsafe and, despite repeated requests, the company failed to make amends for several hours.

Transport crime

- 1.35 TfL and its policing partners announced the 2014/15 transport crime figures. The latest figures from the MPS and British Transport Police (BTP) show that transport crime fell by 8.3 per cent compared with 2013/14 (2,502 fewer offences) – the ninth consecutive year of transport crime reductions. In 2014/15, there were 7.0 crimes per million passenger journeys on the transport system, down from 7.7 in 2013/14. The figure for bus-related crime in 2014/15 was 5.7 per cent lower (1,029 fewer offences) than in 2013/14; representing a fall in the crime rate from 7.5 crimes per million passenger journeys in 2013/14 to 7.2 in 2014/15. For comparison, the fall in LU/DLR was 12.4 per cent (1,359 fewer offences) with a crime rate of 6.8 per million passenger journeys. On the London Overground (LO) the decrease during 2014/15 was 4.9 per cent (41 fewer offences), with a crime rate of 5.7 crimes per million passenger journeys.
- 1.36 Despite low levels of crime on the network, increases were seen in some crime types on some modes compared with the previous year. Reported sexual offences 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. 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. The launch of a joint communications campaign to encourage passengers to report any unwanted sexual behaviour on the transport network is planned for the next quarter.

Transport Accessibility

- 1.37 Passengers with mobility issues who use Dial-a-Ride service to make trips to and from Uxbridge town centre now have use of a new dedicated stop on George Street. Officers from the London Borough of Hillingdon and TfL worked in collaboration to identify a suitable location for Dial-a-Ride vehicles to drop off and pick up elderly and disabled residents visiting Uxbridge town centre for shopping, entertainment or to meet friends. The new Dial-a-Ride stop on George Street is the third of its type in the Capital.
- 1.38 Bus stop accessibility has doubled since 2008 after £8.4 million investment. The number of accessible bus stops in the Capital 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 Quarter 4. 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 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.

- 1.39 In Quarter 3 of 2014/15, a survey was initiated to assess the level of accessibility at all controlled and uncontrolled crossings on the TLRN. TfL footways are currently being inspected for their compliance to Local Transport Notes, Traffic Advisory Leaflets and the Inclusive Mobility Guidance document. Prestige route (areas with high use) footway surveys have now been completed and data has been collected. Surveys of primary and secondary routes have now been instructed to start this quarter, with all other routes to follow in the next financial year. From the information gained from these surveys, a new programme of works will be created to bring accessibility up to standard at all crossings pan-London.

Areas for improvement

Road Safety

- 1.40 Slight injuries on London's roads increased by 15 per cent (24,875 to 28,618) contributing to a 13 per cent rise in overall casualties in 2014 when compared with 2013. TfL is currently undertaking further data analysis and research in order to identify the underlying factors contributing to this increase.
- 1.41 Separately reported collision data from Bus Operators (which covers all collision incidents on the bus network) shows that the number of injuries as a result of these collisions fell marginally from 929 in 2013 to 926 in 2014. Further analysis of the data to gain greater insight into contributory factors and potential causes is continuing.

Operational Safety

- 1.42 At the end of the quarter (reporting period 13), 16 of the 27 safety performance metrics forming the Surface Health & Safety Scorecard were met. The scorecard comprises leading and lagging indicators which are aligned with the four TfL Pillars (People, Value, Customers and Delivery) and Surface strategic outcomes. The scorecard measures will be reviewed in 2015/16 to ensure they are comprehensive and drive the right outcomes.
- 1.43 The year end review of the Surface Health and Safety Improvement Plan conducted in Quarter 4 shows that 78 per cent of improvement actions were successfully completed but 12 per cent were not met. The remaining 10 per cent were met in part. Outstanding actions that remain valid will be progressed during 2015/16.
- 1.44 There was a rate rise in employee assaults from 10.3 assaults per thousand employees to 11.04 in the quarter. Assaults are taken to include all cases of aggression towards transport workers including verbal abuse and threats. As most cases involve front-line staff, work is progressing well to revise the personal safety training course delivered to this cohort. Proposed changes will ensure these staff are better able to deal with confrontational situations by focusing on de-escalation techniques.

Enforcement, Safety and Security

- 1.45 TfL continues its important 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. In response to the issues raised through the London Assembly's Future Proof report, 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. As part of this, Operation Neon, a high visibility, multi-agency operation involving TfL enforcement and compliance

officers will be launched in the next quarter. The initiative involves TfL funded officers in the Metropolitan Police Roads and Transport Policing Command and Westminster City Council parking attendants. The primary focus of Operation Neon will be to effectively deal with issues identified by the trade and keep roads and ranks clear so that the legitimate, law abiding trades can operate.

Occupational Health and Safety

- 1.46 In the quarter, a total of 9,191 working days were lost to employee sickness, equivalent to an average of 2.86 per employee, and higher than previous quarter when it was 2.34 and the corresponding quarter of 2013/14 when the average was 2.83. 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.
- 1.47 In addition, new pages on the TfL management system, called 'Managing my Team's Health' and 'Managing my Health' will raise awareness through the guidance provided. The pages give information on the services available from Occupational Health for managers and their teams. The overall goal is to provide clear and consistent guidance for everyone in TfL on managing their health and that of their team, while raising awareness of the support on offer to employees across the organisation.

Key deliverables in quarter one

Road Safety

- 1.48 TfL is finalising 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 Drafting of the TfL Road Safety 2014 Annual Progress Report continues; with the final report expected to be published in Autumn 2015.
- 1.50 Following a successful initial technology trial of Pedestrian Split Cycle Offset Optimisation Technique (SCOOT) in 2014/15, trials at a further three locations are proposed for 2015/16. This technology enables the green man 'invitation to cross' period to be extended during busier times.
- 1.51 Following a successful trial of cycle detection at traffic signals in 2014/15, further detection trials at up to eight locations during 2015/16 are planned. If successful, this will enable TfL to detect 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. Trials will be taking place along Cable Street on the CS3 Cycle Superhighway route.

- 1.52 The cycle detection trials are testing two types of new technology (one radar based and the other thermal based) to measure their effectiveness in detecting cyclists and assess the possibility of introducing them across London. This continues to demonstrate TfL's position as world leaders in developing innovative traffic signals; building on the pedestrian SCOOT trials, which provide more time to cross the road when there are large volumes of pedestrians.
- 1.53 Major regeneration schemes such as Elephant & Castle, Oval and Stockwell will continue. The schemes which will be concluded in 2015/16 will deliver substantial safety benefit as part of the Mayors vision of cycling.

Operational Safety

- 1.54 Work continues on a re-organisation of the health and safety support function within Surface Transport to bring it in line with the principles of the Surface Integration Plan. A senior manager has been seconded from the TfL Health, Safety and Environment Directorate to drive forward the change and deliver a consistent approach to health and safety which draws on best practice within and outside TfL.
- 1.55 Engagement with all stakeholders on the new Construction (Design and Management) (CDM) Regulations, which take effect from 6 April 2015, will continue, to ensure that Surface Transport capitalises on the risk reduction opportunities that this significant shift in the health and safety regulatory regime for procurement, design and delivery of construction projects is designed to deliver.
- 1.56 Work will commence in May 2015 to build a rapid inductive-charging infrastructure at Canning Town and Walthamstow bus stations. This infrastructure will enable three range-extended diesel-electric hybrid buses to top up their battery charge wirelessly via magnetic field. The Alexander Dennis E400 buses will operate from October on route 69 between the bus stations. Part of the evaluation will look at their ability to operate in all-electric mode for a significant period 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.

2 Major Incidents

- 2.1 Four accidental fatalities were recorded in Quarter 4:
- (a) A child pedestrian (13 years old male) was fatally injured in a road traffic collision involving a route 149 bus on January 15 on Fore Street, Edmonton. The ongoing investigation shows that the child entered the road from between parked cars into the path of the bus.
 - (b) A male moped rider was fatally injured in a road traffic collision with a route 63 bus on February 10 on Willbrook Road, Southwark. The bus was manoeuvring around a parked lorry when the rider lost control and slid into the bus. A full investigation is underway.
 - (c) A male motorcyclist was fatally injured in a road traffic collision with a route 423 bus on February 27 on Great Southwest Road, Hounslow. The collision occurred as the bus driver took a right turn into the road. A full investigation is underway.

- (d) A male pedestrian was fatally injured in collision with a route 176 bus on March 29 on Grove Vale, SE22. The operator's investigation is focusing on a situation where the pedestrian was knocked into the path of the bus by a private car after it had collided with the male. A full investigation continues.

2.2 The investigations into three previously reported fatal incidents were concluded as follows:

- (a) A Route 124 bus collided with a female pedestrian (68yrs old) on 11 September 2012 on Dunkery Road SE9 when the lady emerged from the rear of her car and was proceeding towards the front when she was hit by the front near side of the bus. The Coroner recorded a verdict of 'accidental death' and made no recommendations for TfL or bus operator.
- (b) A Route 252 bus collided with two male pedestrians in their 60s in November 2013 on Western Road, Romford when the driver pulled away from a bus stop towards a pedestrian crossing where the bus hit the pedestrians. The bus driver was prosecuted and found guilty and sentenced to 2 ½ years imprisonment.
- (c) A Route 130 bus collided with a car driven by a 39 years old female in August 2014 on Homestead Way, Croydon after the car was seen travelling at speed and collided with the bus. The Coroner recorded a verdict of 'accidental' death and in summing up stated that the female was under the influence of alcohol. The Coroner made no recommendations for TfL or bus operator.

Crossrail

Quarterly Health, Safety and Environment Report

1 What went well

- 1.1 There was good progress against the Crossrail Health and Safety Objectives for 2014/15 in this final quarter.
- 1.2 15 contracts out of 16 (94 per cent) 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 at the end of quarter, exceeding our corporate objective of 85 per cent.
- 1.3 The RIDDOR (including 3+ day lost time case) accident frequency rate (AFR) was 0.18 at the end of the quarter, a 45 per cent reduction on the Period 13 (2013/14) rate of 0.33, exceeding the corporate objective (40 per cent reduction) for 2014/15.
- 1.4 The Lost Time Case (LTC) AFR was 0.32 at the end of the quarter, a 35 per cent reduction on the Period 13 (2013/14) rate of 0.49, narrowly missing the corporate objective for 2014/15 for a 40 per cent reduction.
- 1.5 Cycle 6 Gateway assessments commenced in Q4. These assessments assess and recognise elements of 'good practice' and 'inspiration' and share these across the programme for wider learning. Full reports and final scores will be issued to all contracts upon completion of the cycle in May.
- 1.6 Analysis from the Crossrail Health and Safety Climate Survey was shared with all contracts. Each contract has reviewed their results and developed action plans specific to these. The next survey is planned for late 2015.
- 1.7 A common Programme Wide Induction (PWI), for use on all contracts has been developed. From 5 May 2015, new starters working on site will undergo this induction. It provides a consistent approach to induction across the programme, eliminating the need for individuals who move between contracts to be re-inducted. This is especially beneficial for those installing and commissioning railway systems who will be required to work at multiple contract locations.
- 1.8 Crossrail have reviewed their current Target Zero programme resulting in the introduction of five new behavioural-based golden rules and nine common high risk activities relevant to the programme. The new Golden Rules and the High Risk Activities have been communicated through a variety of workshops across the programme.

- 1.9 Research on air quality in tunnelling environments was completed. The final report has been developed and findings will be presented as a scientific paper at the International Occupational Hygiene Association conference in April. A communication plan, to share the findings and ensure ongoing compliance with air quality management has been developed.
- 1.12 Twenty H&S Audits were carried out during the quarter, in accordance with the Health and Safety Assurance audit schedule. No audits were overdue. All CARs raised in the period were closed on time.
- 1.13 A programme of Assurance Assessments on Fire Safety commenced in Q4 which will continue into 2015/16. The assessments will be carried out by the London Fire Brigade Crossrail Liaison Officer. All tunnelling contracts will be included in the programme.
- 1.14 By the end of Q4, 120 supervisors from the Principal Contractor population (against a target of 100) had been recruited to the Frontline Leadership Programme (FLP) to improve their leadership skills.
- 1.15 The final load of excavated material was sent to Wallasea in March 2015 and the Docklands Transfer Station has now closed. 3 million tonnes were transported by rail and water to Wallasea Island to create the first phase of the RSPB's new wetland nature reserve. The sea walls are due to be breached in July of this year, to create the new reserve.
- 1.16 Tottenham Court Road station has now received its Design Stage BREEAM certificate, and has been confirmed as a 'Very Good' rating. This means that Paddington, Tottenham Court Road, Liverpool Street, Whitechapel and Custom House stations all have design stage 'Very Good' certification.
- 1.17 C310 were the first contract to gain a Green Line Recognition Scheme Commendation Award, for implementing workforce environmental inspections. This idea was generated by one of HOCHTIEF Murphy Joint Venture's (HMJV's) operatives during a Green Idea Tree event for World Environment Day. Environmental inspections are carried out by different operatives each week and this has improved environmental performance on the site.

Areas for Improvement in the quarter

- 1.18 The Health and Safety Performance Index (HSPI), new KPI measures will be implemented at the start of Q1, 2015/16. Crossrail anticipates an initial decrease in the HSPI scores, as the new measures are more challenging. A subsequent recovery and an associated improvement in overall health and safety performance is thereafter expected.
- 1.19 The Crossrail health and wellbeing strategy will support the Institution of Occupational Health and Safety 'No Time to Lose' campaign and focus on non-ionising radiation and sun safety during the summer months.
- 1.20 A pilot for the revised Incident Investigation training course will take place on the 6th of May. The course is aimed at improving the quality of incident investigation on the programme. The final product will be launched for all contractors by July 2015.
- 1.21 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 2014/15 due to the use of extended hours and night time working at some locations.

Key Deliverables in the next Quarter (Q1 – 2015/16)

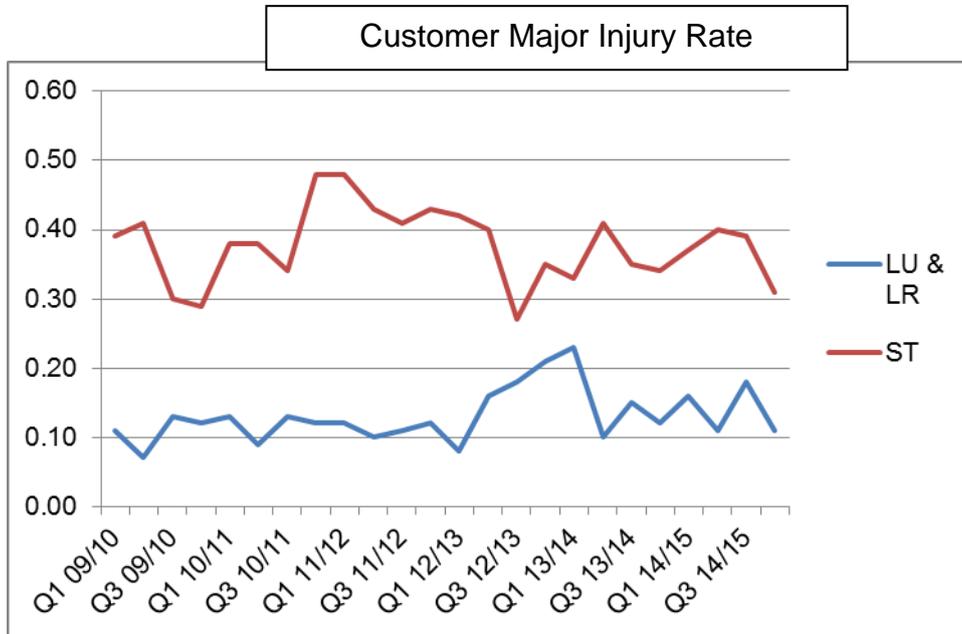
- 1.22 The common, Programme Wide Induction, developed and aligned to the revised Target Zero program and Golden Rules will be launched at the start of May 2015.
- 1.23 The Crossrail Fire Safety Best Practice Guide will be issued to all project teams and contractors. The purpose of the Best Practice Guide is to provide information to users which will assist in the prevention of fires and promote high standards of fire safety management on Crossrail contracts.
- 1.24 The final report on the Dust and Diesel Engines Exhaust and Emissions research will be published.
- 1.25 A “Noise and Neighbours” campaign will be run during 1-5 June (culminating in World Environment Day on 5 June), with the aim of promoting best practice construction noise management on Crossrail sites.

2 Major Incidents

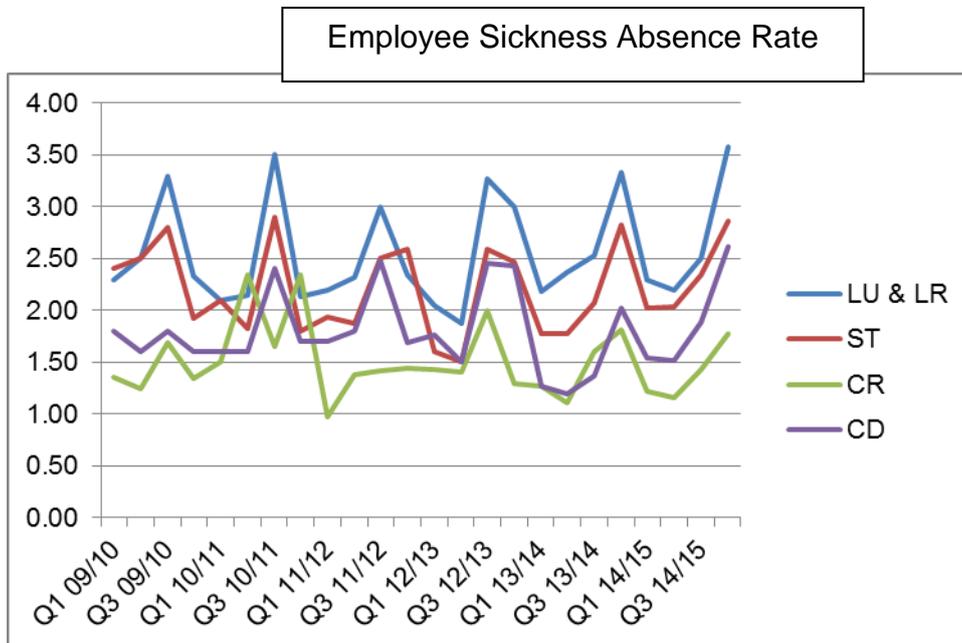
- 2.1 There were no major incidents in Q4.

Statistical Appendix

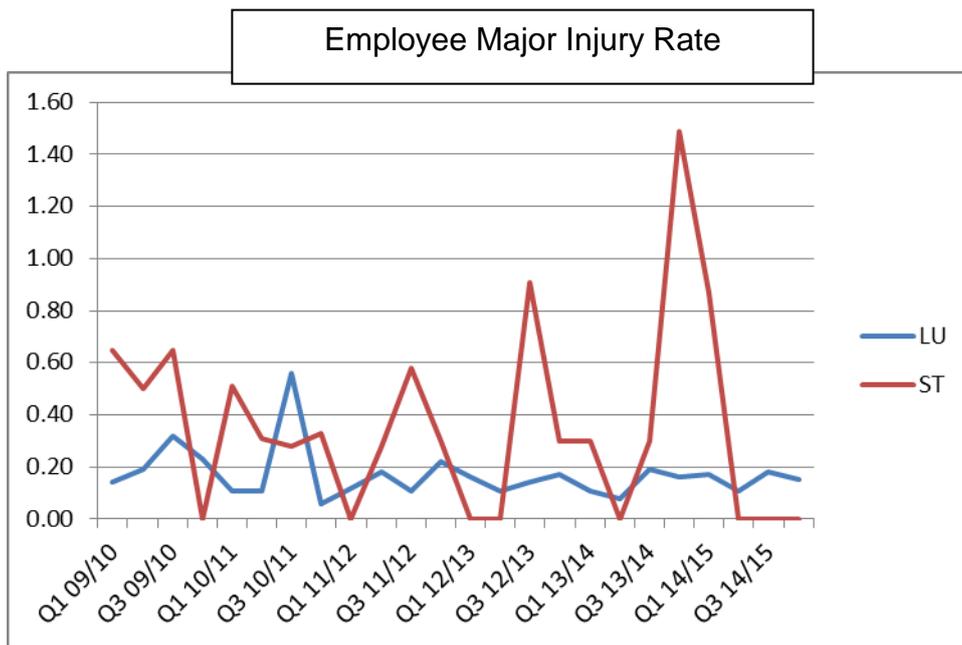
Quarterly Health, Safety and Environment Report 2014/5 Q4



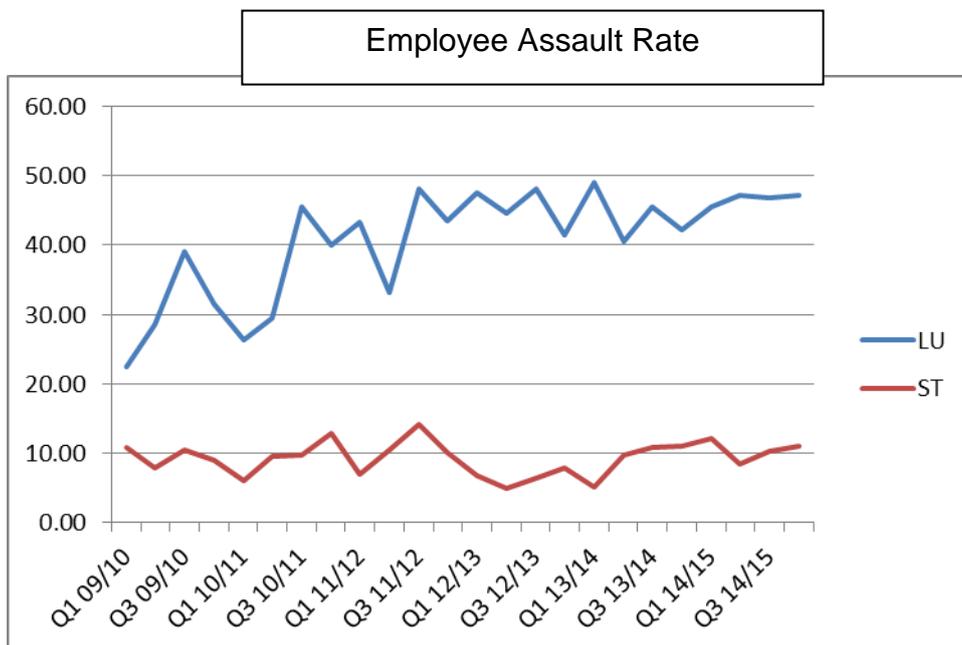
This chart provides the rates for Customer Major Injuries in Rail and Underground and Surface Transport, per million customer journeys. There is a positive trend developing in LU/LR and Surface over the year.



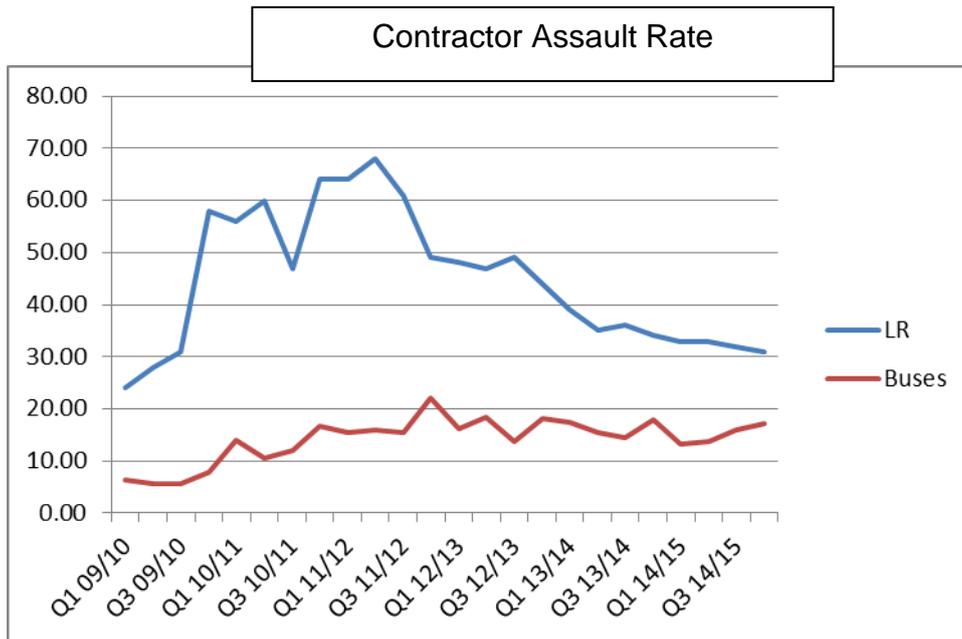
This chart provides the details of sickness absence per 1000 employees. As has been the case for a number of years there is clear seasonal pattern. The rates within the 4 businesses show a relatively consistent rank order too. Sickness was slightly higher against the trend in Q4. The most common causes of staff sickness absence were Coughs and Colds, Gastrointestinal and Musculoskeletal.



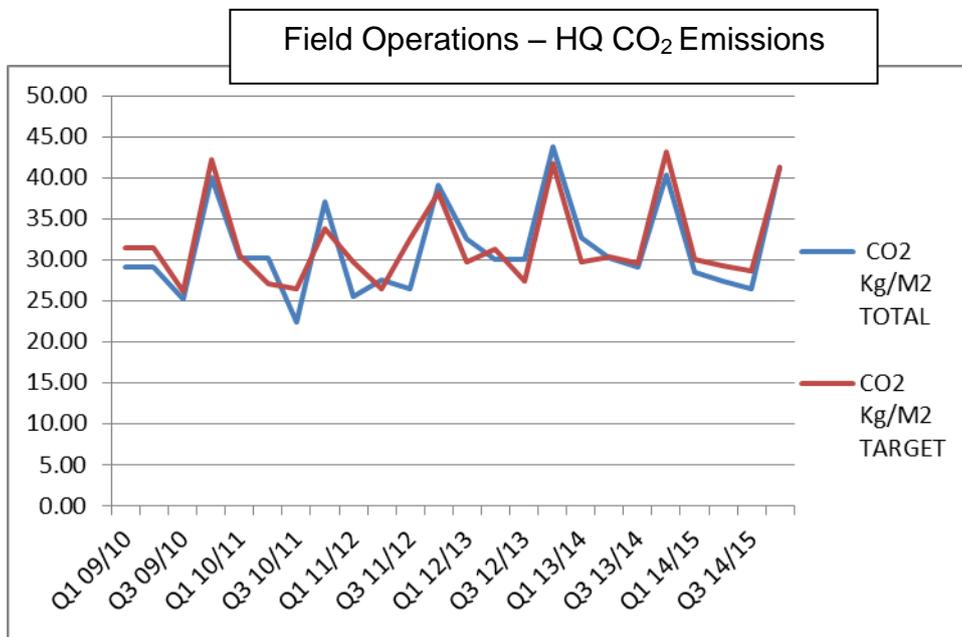
This chart provides the rate of major Injuries per 1000 employees. This is a rate per Quarter, and is not a moving average. As can be seen where there are no Major Injuries in a Quarter, it is a zero rate. As the employee numbers are smaller in ST, there is a greater volatility.



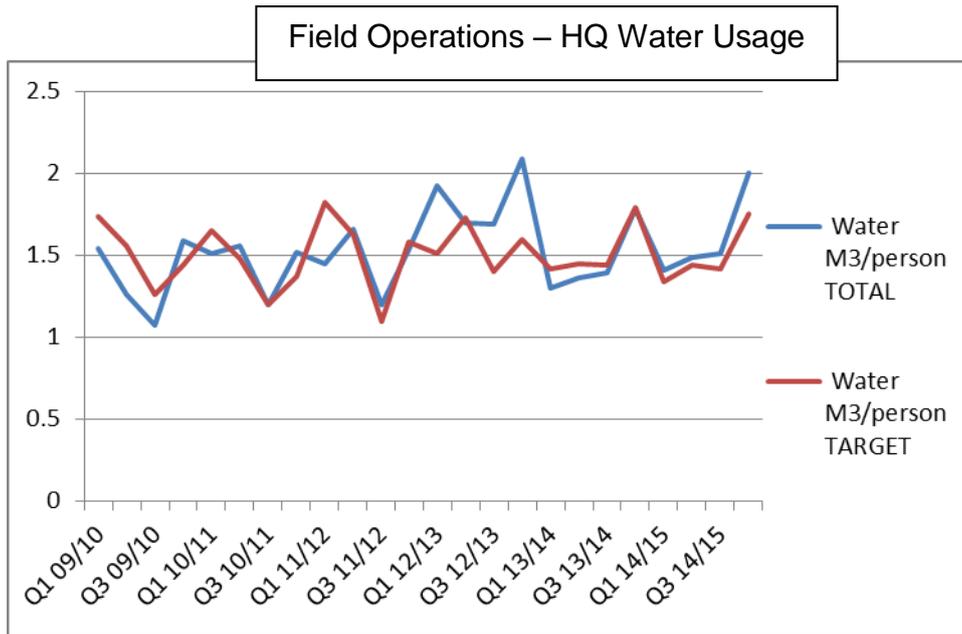
This chart shows employee assault rates per 1000 staff, for Surface Transport and London Underground. The main difference in the rates is explained by a significantly higher rate reporting of verbal assaults in LU. The more recent trend for LU has shown a small rising trend, with ST also showing a slight rise.



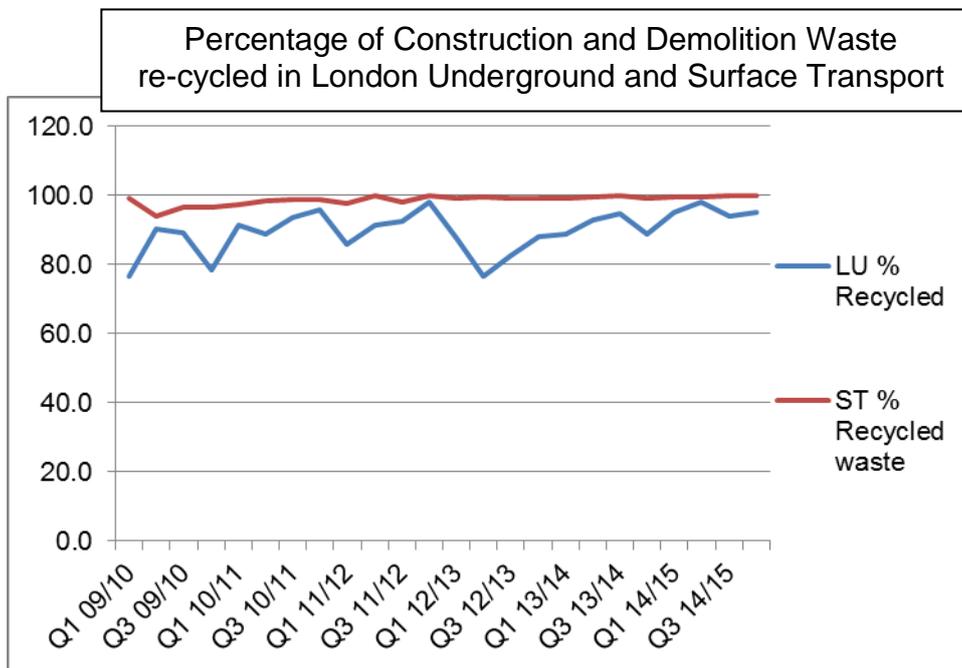
This chart shows the rates for Assaults (both physical and verbal) per 1000 Contractors. These staff are primarily those in London Rail (with those involved in revenue protection a significant proportion) and London Buses (primarily the Bus Operators), where most customer facing staff are contractor staff. The reporting of verbal assaults is known to be much higher in London Rail businesses than it is in Surface Transport. The two rates are converging slightly, but there is no particular reason.



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 for the seventh Quarter running the actual emissions were below the target set.



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 again above the target for the fourth period, a trend for the whole year



This chart shows the percentage of construction and demolition waste recycled in London Underground and 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 for Construction and Demolition Waste have been recalculated since the last quarter and the figures now show that this figure remains high.