

**Transport for London
Safety and Sustainability Panel**

Subject: Quarterly Health, Safety and Environment Performance Reports – Quarter 1, 2013/14

Date: 9 October 2013

1 Purpose

- 1.1 To inform the Safety and Sustainability Panel of the key health, safety and environment matters during Quarter 1, 2013/14 (1 April – 22 June 2013)
- 1.2 The Panel is asked to note the report.

2 Background

- 2.1 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. To reflect this, the quarterly business reports have been amended to provide a combined Rail and Underground Report, with the Surface Transport and Crossrail Reports as before. Any key activities related to the specialist directorates will now be highlighted on an exception basis, in this cover page.

3 Information

- 3.1 The Quarter 12013/14 Health, Safety and Environment Performance Reports for each business area are attached as follows:

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

4 Recommendation

- 4.1 The Panel is asked to NOTE the report.

5 Contact

Contact: Martin Brown
Number: 020 7027 8904
Email: martinbrown@tfl.gov.uk

London Rail and Underground Quarter 1 2013/14 Health, Safety and Environment Report

1 Summary

What went well

- 1.1 The safety, environment and health performance indicators are made up from a suite of leading and lagging indicators. Some of these are simple outcomes measures and others precursors in the major accident risk models. During the quarter these have remained stable or are improving, with the exceptions of those noted below. It has been 190 days since the last major incident on London Underground (LU) infrastructure and 491 days on London Rail infrastructure.
- 1.2 The Lost Time Injury (LTI) rate across LU's Operational staff continues to decrease and is stable for LU's maintenance staff. Action plans to further reduce these incidents are continuing to be developed through the Go Look See process, participation in safety hours and the employee engagement strategy. The LU Upgrades team covering the Bakerloo, Central and Victoria lines maintained a zero LTI rate and the Power Cooling and Communications team achieved a zero LTI rate during the quarter. The Incident Frequency Rate (incidents that have caused harm, loss or damage) in the Capital Programmes Directorate has continued to fall and is at the lowest level for 13 periods.
- 1.3 Transport for London's Occupational Health team was awarded the London Healthy Workplace Charter by the GLA, at its highest level of 'excellence'.
- 1.4 A review of the LU health and safety improvement plans show good progress was made against objectives, with all on track for delivery. 'Health tips of the month' are shown on the intranet as part of the tool kit to promoted health campaigns.
- 1.5 The environment improvement plan with a theme of "getting the basics right" currently running in LU's operations directorate was also launched in the LU Capital Programmes directorate and was well received.
- 1.6 The number of signals passed at danger, platform over runs and Train Protection and Warning System (TPWS) initiations on London Overground decreased during the quarter. The actions LOROL has put in place to manage the root causes of incidents are realising benefits. LOROL is working with researchers in the Railway Safety and Standards Board (RSSB), who are conducting work to better understand the particular human factors issues involved. LOROL want to continue to drive comprehensive and open reporting but they have now started to look at disciplinary action for repeat actions.
- 1.7 LU either recycled or recovered 95 per cent of station and depot commercial and industrial waste in the quarter. Excellent recycling rates continue to be achieved by the LU Capital Programmes stations team and the Power Cooling and Communications team. Overall 89 per cent of construction and demolition waste was recycled.
- 1.8 From the beginning of the quarter Projects are required to implement a carbon and energy efficiency plan aimed at identifying opportunities to reduce overall energy consumption and carbon emissions. LU staff who demonstrated

commitment to reducing energy consumption across the network during 2012/13 were recognised at the LU Energy Saving Challenge Awards

- 1.9 Within London Rail (LR) localised metering is being installed at those stations where it is practicable across the East London Line – Core Route. LR is also further developing localised metering at individual location level as part of the Health and Safety Improvement Plan for 2013. LR is liaising with the Climate Change team in LU, and will use the data from these meters to better drive energy reduction.

Areas for improvement

- 1.10 The major injury indicator which tracks customer and employee/supplier major injuries per million hours on LU and LR infrastructure exceeded the aim for the quarter. This remains a stretch target. Localised behaviour safety awareness campaigns are being refreshed and the locations where they are displayed reviewed. Targeted PA announcements are being made on stations to influence customer behaviour. All incidents continue to be investigated to identify if further mitigation is possible and local action plans developed.
- 1.11 The number of LU platform train interface (PTI) incidents continues to increase as a result of persons caught in doors across the network, and due to falls between the platform and train on the Metropolitan line in particular. The changing profile of the PTI following the introduction of new level access rolling stock on the Metropolitan line is receiving particular attention, with a programme of additional mitigation measures such as trialling gap fillers, different methods of highlighting the platform train interface, and enhanced customer announcements being developed and deployed to influence behaviour. The results of the trials are expected in Quarter 4.
- 1.12 There was one incidence of a passenger being hit by a train at Queens Road Peckham. This is the first suicide on part of the London Overground Infrastructure since TfL began operating the Overground. Suicide awareness training for LU and Rail station staff continued in the quarter with a number of positive interventions occurring to prevent suicide attempts.
- 1.13 A high potential environmental incident occurred at Upminster depot where the train wash was found to be discharging to surface water drains rather than the foul sewer. The breach was rectified immediately by ceasing train wash activities and rerouting the foul drainage system.
- 1.14 Despite the improving Incident Frequency Rate, the LU Capital Programmes LTI rate continues to rise, driven by increasing rates within the Stations Programme. A review of safety performance of the three main projects within this programme is underway.
- 1.15 LR received 14 complaints relating to noise and wheel squeal. This primarily relates to Holywell Curve. Work has been undertaken to modify the top of the rail friction controls to remove this.

Key deliverables in the next quarter

- 1.16 Traffic light food labelling is included on all cold food products across TfL head office canteens. Food labelling across operational canteens is being implemented over the next quarter.
- 1.17 The strategy for raising physical activity levels of LU employees based on the Shift into Sport programme is still in progress. Following the training of 78

workplace activators across LU maintenance staff and on the Metropolitan line, the feasibility of rolling this out across LU operational areas is being evaluated.

- 1.18 The development of the London Overground equivalent of the Docklands Light Rail Safety Performance Index (SPI) is complete. Work is now underway to validate and balance the SPI and to develop an index for trams.

2 Major Incidents

- 2.1 There were no major incidents in quarter 1.

Surface Transport

Quarter 1 2013/14 Health, Safety and Environment Report

1 Summary

What went well

- 1.1 Safe Streets for London, London's road safety plan, was published on 6 June, and has established a target to reduce the number of people killed or seriously injured (KSI) in London by 40 per cent by 2020, compared to the 2005-09 baseline. Provisional figures for December 2012 to February 2013 using this baseline shows that the number of KSIs fell by 13.5 per cent compared with the same period in the previous year.
- 1.2 The British Transport Police and the Metropolitan Police Service ran a week long operation in July to crack down on sexual offences on the transport system which led to nine arrests. The operation was part of Project Guardian, an initiative involving BTP, MPS Safer Transport Command, City of London Police and TfL, who are working in partnership to create an environment on the transport network which does not tolerate intimidation and sexual harassment.
- 1.3 London's lane rental scheme, which came into effect in 2012 on the busiest parts of London's road network, was hailed as a success as it helped to reduce disruption across London by an equivalent of 2,700 days. The introduction of the scheme means more than 92 per cent of utility company road works at the traffic hotspots are now taking place outside of peak traffic hours, compared to around 30 per cent before the scheme came into effect.
- 1.4 A safety awareness campaign which focuses on reducing trips and falls on buses and wheelchair and buggy related incidents commenced.
- 1.5 The review of the 2013/14 health and safety improvement plan shows good progress was made against objectives at the end of quarter one. However, three actions (5 per cent) relating to internal processes were not fully completed in the period, they will be addressed in the following quarter.
- 1.6 The health and safety assurance programme for 2013/14 was agreed and began in the quarter. No significant compliance issues were identified from completed assurance activities.
- 1.7 The average number of working days lost due to staff sickness reduced from 2.59 in the previous year to 1.78 in quarter one. A total of 5,517 working days were lost. Surface Transport is increasing its collaboration with Occupational Health Services to further encourage employees to access services.

- 1.8 The Source London charge point network continues to expand with a total of 1,365 now installed, 747 of which are fast chargers. Work to install the 200 charge points across the LUL car park estate was completed in July. However, all Source London infrastructure activities will cease because PiP (Plugged-in Places) funding has now been exhausted. The plan to transition Source London to a new operator via the OJEU procurement process commenced. TfL aims to identify a new operator and award the contract to the preferred bidder by the end of 2013. Following this, there will be a six month mobilisation period, with the new operator taking over the scheme from Summer 2014.
- 1.9 Interest in EV (Electric Vehicle) taxi and private hire schemes remains high. Representatives from Nissan, BYD, eCab, Charging Solutions and Karsan met with TfL recently to discuss their proposals for launching an EV in this market. They are all seeking TfL assistance to install a rapid network of charge points to support their proposed fleets.
- 1.10 As part of Surface Transport's energy efficiency plan to reduce CO2 emissions by 30 per cent from non-transport activities and £36m from TfL's energy bill, lighting design work is underway to propose upgrading internal and external lighting at TfL piers. Subject to funding, the improvements will result in better lighting levels, reduced energy consumption and costs. In addition, Victoria Coach Station, two Dial-a-Ride (DaR) depots, 12 bus stations and five bus garages have been shortlisted for the mini-competition under the RE:FIT framework which is a Mayoral initiative to retrofit energy-saving measures in public buildings.
- 1.11 TfL secured funding from DfT's Green Bus Fund for four pure electric buses and an additional 90 hybrid buses. TfL's target is 1700 hybrid buses by 2016.

Areas for improvement

- 1.12 A low level of awareness of the Advanced Stop Lines (ASLs) has been identified. As a safety feature that allows cyclists to get ahead and be visible at junctions, the Metropolitan Police Safer Transport Command, the Traffic Cycle Taskforce and the City of London Police have launched a summer campaign to educate motorists on the correct use of the feature. The campaign will also contribute to the Driver/ Cyclists Tips campaign being run by TfL. Enforcement phase of the campaign began in August for two weeks.

Key deliverables in the next quarter

- 1.13 An Annual Road Safety Report will be published. This report will present detailed collision and casualty information for 2012, including sections on progress to the 2020 target from the 2005-09 base line, casualty trends by different road users, selected casualty data for each London borough and a section on road safety risk that reports casualties per million journey stages.
- 1.14 Work is to be undertaken to draft three vulnerable road user action plans (cycle safety, pedestrian safety, and motorcycle safety action plans). During the quarter the action plans for motorcycles and for pedestrians will enter their final stages of development.
- 1.15 The planning work on the third annual Surface Safety Awards designed to acknowledge employees who have gone beyond the call of duty to ensure the health, safety and well-being of self and others will be continued.

- 1.16 Environmental Audits are programmed for a number of road construction sites, bus stations, Bus Operators' garages, DaR depots and VCS.

2 Major incidents

- 2.1 There was one accidental fatality in a road traffic collision between a route 307 bus and motorcyclist on Enfield Road, EN2 on 29 April. The incident is under investigation.
- 2.2 The investigations of three previous fatal incidents involving buses were concluded as follows:
- (a) Route N109 bus collision with a pedestrian in April 2011 on Kennington Road, SE11, in which the driver failed to take sufficient care and was charged with causing death by careless driving.
 - (b) Route 5 bus collision with a pedestrian in September 2011 on South Street, Romford, which occurred because the pedestrian stepped into the path of the bus without due care. A verdict of accidental death was recorded by the coroner.
 - (c) Route 1 bus collision with a pedestrian in May 2012 on Waterloo Road, SE1, which resulted because the pedestrian crossed the road on a red light and the driver was unable to avoid the collision. A verdict of accidental death was recorded by the coroner.

In all of the cases, there were no recommendations made by Coroner's Courts for TfL or the bus contractors involved.

Crossrail

Quarter 1 2013/14 Health, Safety and Environment Report

Summary

What went well

- 1.1 Good progress is being made on our H&S Objectives for 2013/14.
- 1.2 Crossrail focussed on its Behavioural Programme, Behaviour Influences Behaviour, with awareness sessions held across the programme between April and June. Drama-based Road shows were carried out across the programme to drive the Target Zero ethos and to continue to promote Health and Safety as an immutable value. Senior Leadership from Crossrail hosted the sessions and reiterated the need for all to work safely at all times. Feedback received from our Principal and sub contractors confirmed that the sessions were engaging, thought-provoking and innovative. A number of Principal contractors have since invited the Drama-based team to deliver more sessions on their local sites.
- 1.3 To ensure compliance with the Crossrail Works Information requirement that all Principal Contractors implement a behavioural based safety programme, improvements have been made to RIVO Safeguard® and Principal Contractors are now required to give monthly behavioural returns that enables Crossrail to evaluate the overall effectiveness of Principal Contractors' behavioural programmes.
- 1.4 The Principal Contractor's Target Zero Forum held on 18 April 2013 focussed on Occupational Health. The Health & Safety Executive was invited to give presentations on Dust. Other topics covered include Musculo-skeletal Disorders (MSDs) and fatigue with the launch of targeted campaigns. Principal Contractors gave presentations on the need to ensure all Crossrail sites have access to the services of an Occupational Hygienist to ensure proactive management of Health risks in line with the Works Information.
- 1.5 The results of the Third round of Gateway were published on 30 April and the Bond Street C411 became the first Gateway "Inspiration" site. The team's innovative practices around Communication were commended during the presentation that was attended by Senior leaders and the CEO Andrew Wolstenholme
- 1.6 Following a number of incidents involving the use of pressure systems, a working group was put together to identify best practice and communicate areas for improvement. A draft version of a best practice booklet to be used on the programme and distributed widely is currently being reviewed.

- 1.7 The CDM Verification Schedule commenced in period 2 and reviewed the preparation, prompt submission and accuracy of CDM metrics from contractors to Crossrail. A total of 2 Corrective Action Requests (CARs) and six Observations were raised from the seven verifications carried out in the quarter all of which have subsequently been closed.
- 1.8 The revised Health and Safety Assurance Audit Schedule commenced in Q1. The schedule defines an audit topic for each period and those covered in Q1 included confined space working, safe systems of work, Permits to Work, fire safety and electrical isolations. A total of 13 audits were carried out in the quarter.
- 1.9 Three Emergency Exercises were completed in Q1. These are desk top exercises carried out by the project teams to simulate significant unplanned events and review strengths and weaknesses in current response arrangements.
- 1.10 In Q1 safety banners were delivered to all sites and are now on display. Sprayed Concrete works were added to the Target Zero Golden Rules with the supporting posters and leaflets updated. Work commenced on Visual Standards which consist of a suite of one page good practice guidance sheets, which have been distributed to all sites.
- 1.11 Phase 2 of the RIVO Safeguard upgrade commenced in Q1 2013/14 with an improved incident module allowing for better data capture on activity and causation for analysis purposes, the possibility of multiple outcome events and the functionality for deadline extensions. Extensive training of Crossrail and Principal Contractor on the changes made in the upgrade of the RIVO system have been rolled out and continuous support provided via dedicated helpline and User Groups.
- 1.12 The Crossrail Frontline Leadership Programme (FLP) is designed to improve the leadership skills and qualities of Supervisors that range from Works Managers and Senior Construction Manager to Gangers and Team Leaders. The Leadership competencies that are the focus of the programme include:
- Understanding People
 - Decision-making
 - Resilience & Focus
 - Seeing the Bigger Picture
 - Motivating Others
 - Communicating Effectively
- A number of workshops have been held in Q1.
64 Supervisors and 28 Mentors from eight Principal Contractors (PC) have thus far been involved with the programme.
- 1.13 The development of a health and wellbeing strategy, fatigue policy and fatigue plan has continued. Occupational Health Service procurement process commenced resulting in a preferred supplier being selected. The first bi-annual Project wide health campaign ran in May and was a great success.
- 1.14 Crossrail has continued to run the environmental Green Line Recognition scheme with a further three contractors achieving Green Line Status.

- 1.15 Network Rail won the Green Apple Award for its biodiversity work at Stockley Junction.
- 1.16 Crossrail carried out an environmental information campaign during the week of 3-7 June for World Environment Day on 5 June.
- 1.17 Crossrail carried out consultation with English Heritage on the proposals for archaeological post-excavation.

Areas for Improvement in the quarter

- 1.18 Behavioural Based Safety programmes are still being assessed and plans are in place to continue to engage PCs to ensure that their behavioural programmes are effective. Examples of engagement include Target Zero Road shows and periodic RIVO behavioural returns.
- 1.19 Improvements are required in the quality of accident investigations undertaken by Crossrail's supply chain. An assessment of what constitutes best practice is being carried out and will be presented at the Crossrail Safety and Health Leadership Team (SHELT) forum next quarter
- 1.20 Improvements to RIVO Safeguard Reporting Module commenced in Q1 to allow upgraded incident and KPI data analysis and provide new trending options such as human factors and risk controls.
- 1.21 Plans have started to improve the Health and Safety Performance Index (HSPI) process to allow for the creation of bespoke KPIs for each Principal Contractor – developed locally – rather than the current generic KPIs. Future indicators will be based on the maturity of an organisation and the current phase risk profile. The development is planned for Q2 with implementation in Q3.
- 1.22 During 2012-13, Crossrail set an objective to reduce energy used during construction by 5%. For 2013-14, the target energy reduction has been increased to 8%. Crossrail is working with contractors to achieve the new target.
- 1.23 As a follow up to the surveillance visits on the duty of care arrangements for excavated material, a strategy report on excavated material destinations is being prepared. In addition, a programme of 'drill-down' audits into waste are being instigated.

Key Deliverables in the next Quarter (Q2 – 2013/14)

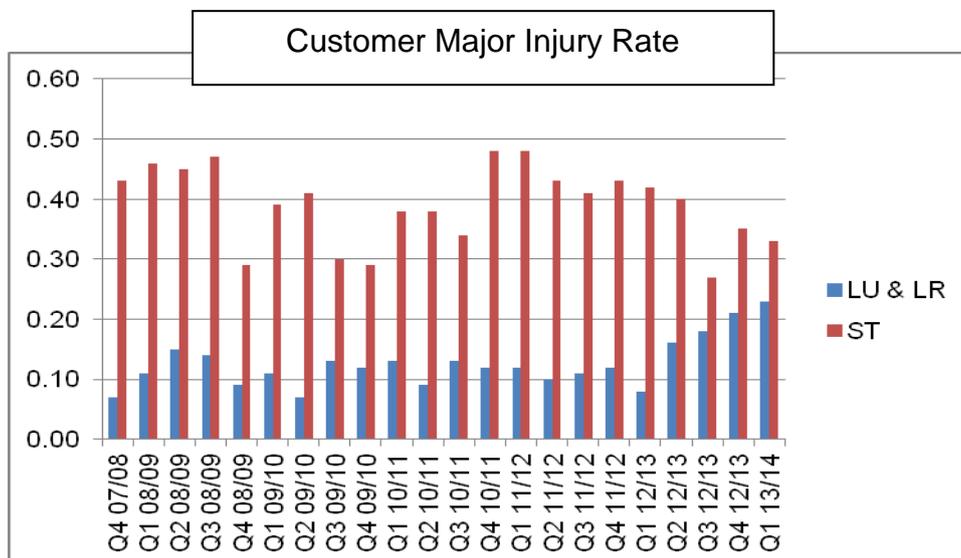
- 1.24 Commencement of the fourth cycle of the Gateway Scheme
- 1.25 Behaviour Influences Behaviour (BIB) Forum with Principal Contractors and behavioural experts to share best practice and measure the effectiveness of behavioural programmes on Crossrail.
- 1.26 Commencement of a Crossrail climate survey to help better understand Health and Safety issues on the programme and to get feedback on how improvements can be made.
- 1.27 ‘Working Well Together’ event to be hosted at Crossrail’s Tunnelling and Underground Construction Academy on 14 August. These events have been organised by Morgan Sindall, to raise awareness of key health and safety issues facing the construction/infrastructure industry, and to give practical advice on how to avoid risks on sites.
- 1.28 Modify the existing HSPI measures regarding contractor vehicle checking compliance.
- 1.29 17 audits are scheduled for Quarter 2, covering breaking ground, lifting operations, management of hazardous substances and internal assurance arrangements.
- 1.30 A programme of tunnel working surveillance activities has been finalised and will include machinery guarding in tunnels, assurance of Tunnel Safety Cards and fire suppression in tunnels.
- 1.31 A further three Emergency Exercises are planned for the quarter, including a barge collision and site protest.
- 1.32 Improved RIVO Reporting Module will commence in Quarter 2. Training on the new features will be rolled out and User Group meeting held to collect feedback and provide further support.
- 1.33 Occupational Health
 - Occupational Health service to commence in September 2013
 - Second Project wide Health Campaign to be focused on dust
 - Monthly death campaigns for Crossrail Team
 - Identify a pledge for public health responsibility deal
 - Implement health and wellbeing strategy
 - Roll out fatigue management training.
 - Commencement of NEBOSH Health & Wellbeing in Construction course
- 1.34 The Crossrail Sustainability Awards will take place on 25 July 2013.

2. Major Incidents

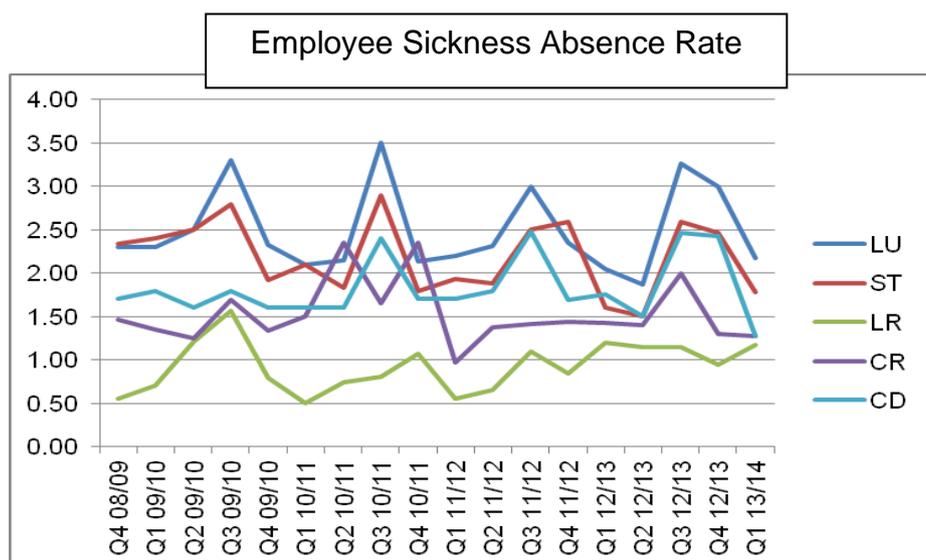
2.1 There were no major incidents in Quarter 1.

Statistical Details

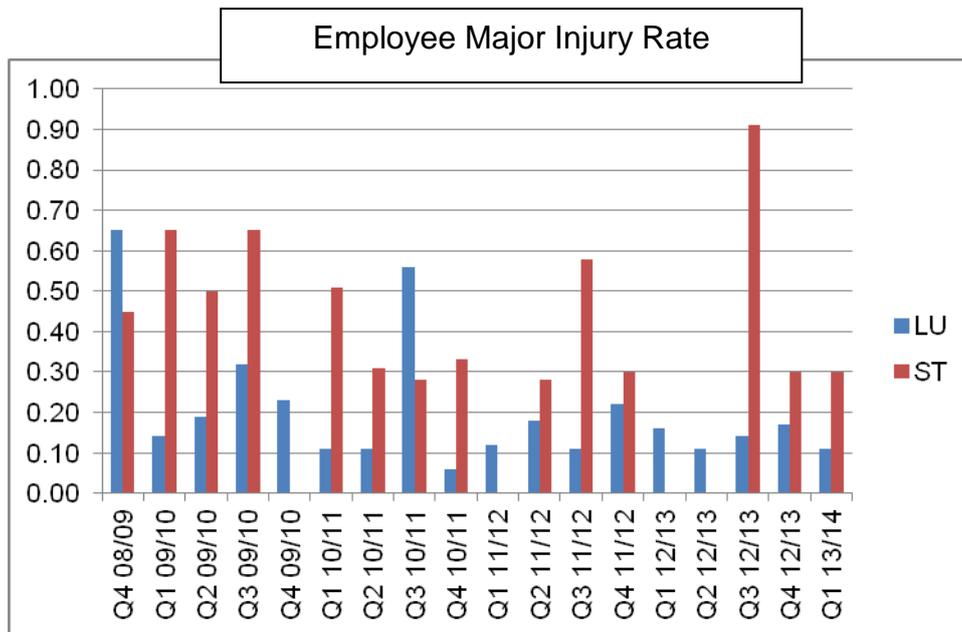
Quarterly Health, Safety and Environment Report



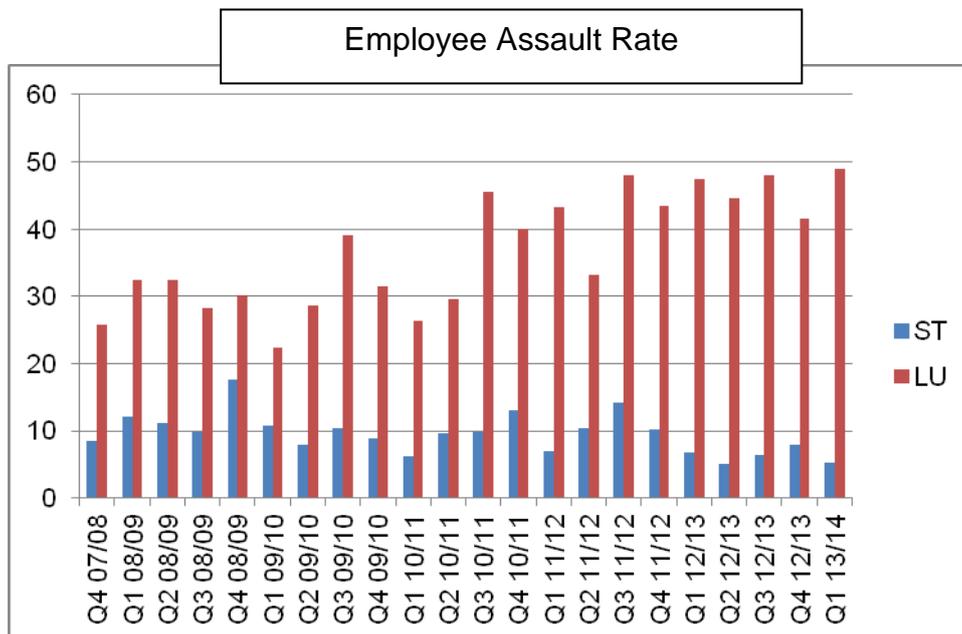
This chart provides the rates for Customer Major Injuries in Rail and Underground and Surface Transport, per million passenger journeys. Customer Major Injuries on LU and Rail again increased during Quarter 1, with over 80 per cent of the total being related to slips, trips and falls, which is a key part of the safety Improvement plan for 2013/4. ST continues to show an overall reducing rate.



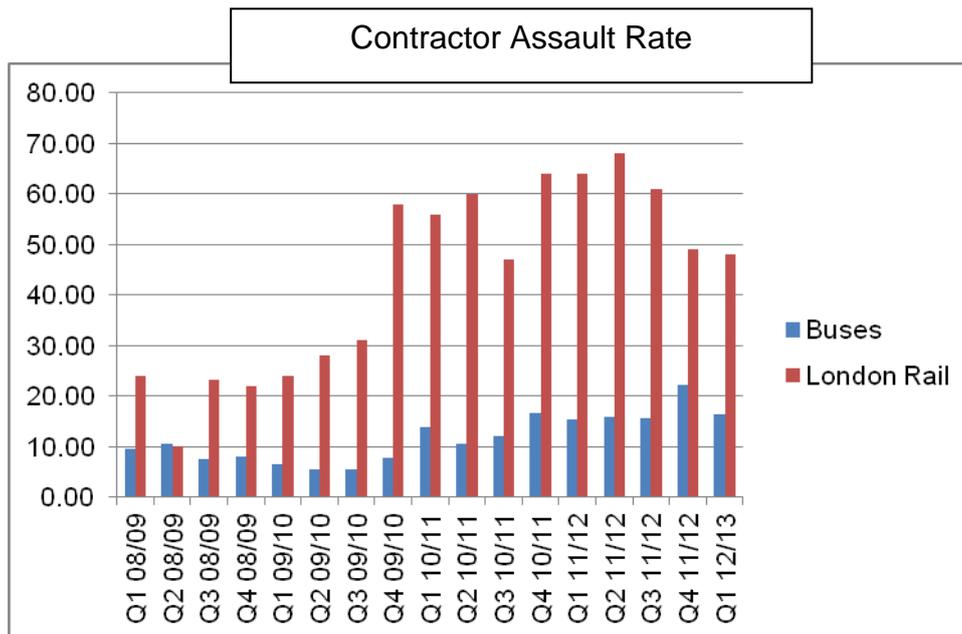
This chart provides the details of sickness absence per 1000 employees. As has been the case for a number of years there is clear seasonal pattern. The rates within the five businesses show a relatively consistent rank order too. The most common causes of staff sickness absence were Coughs and Colds,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



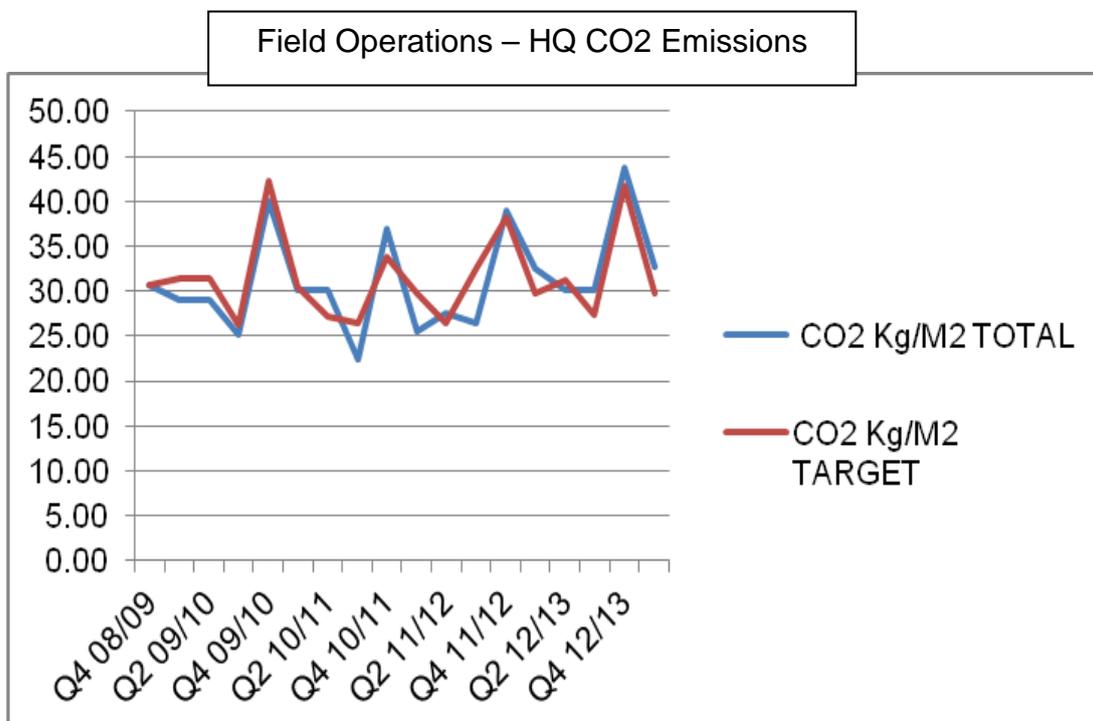
This chart provides the rate of major Injuries per 1000 employees. This is a rate per quarter, and is not a moving average. As can be seen there are some quarters were with no Major Injuries, there is a zero rate. As the employee numbers are smaller in ST, there is a slightly greater volatility. There are no particular trends in this data.



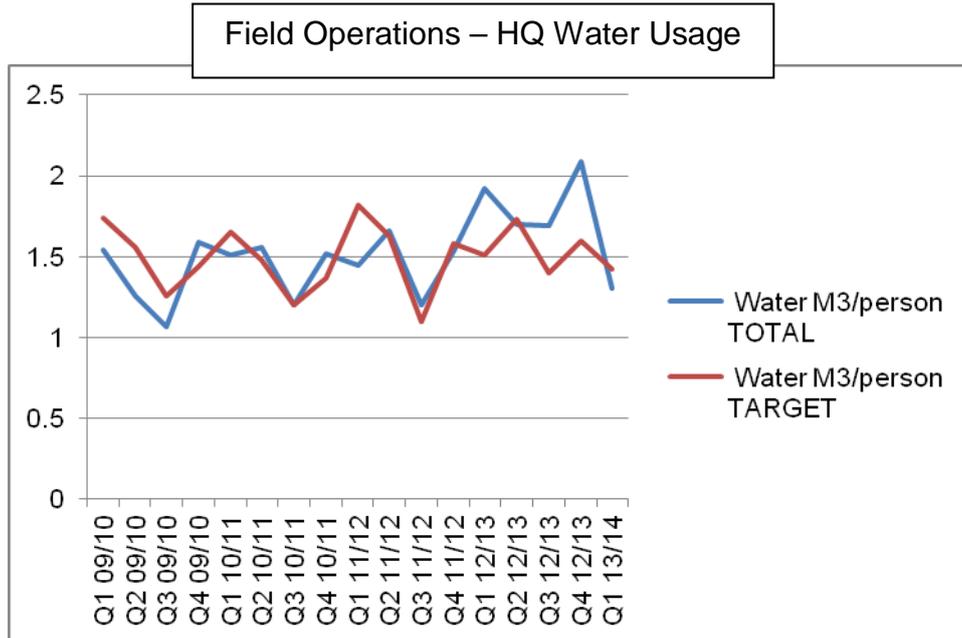
This chart shows employee assault rates per 1000 staff, for Surface Transport and LU. The main difference in the rates is explained by a significantly higher rate reporting of verbal assaults in LU. There is not a significant change in the trend for either LU over the past seven quarters or the past five for ST.



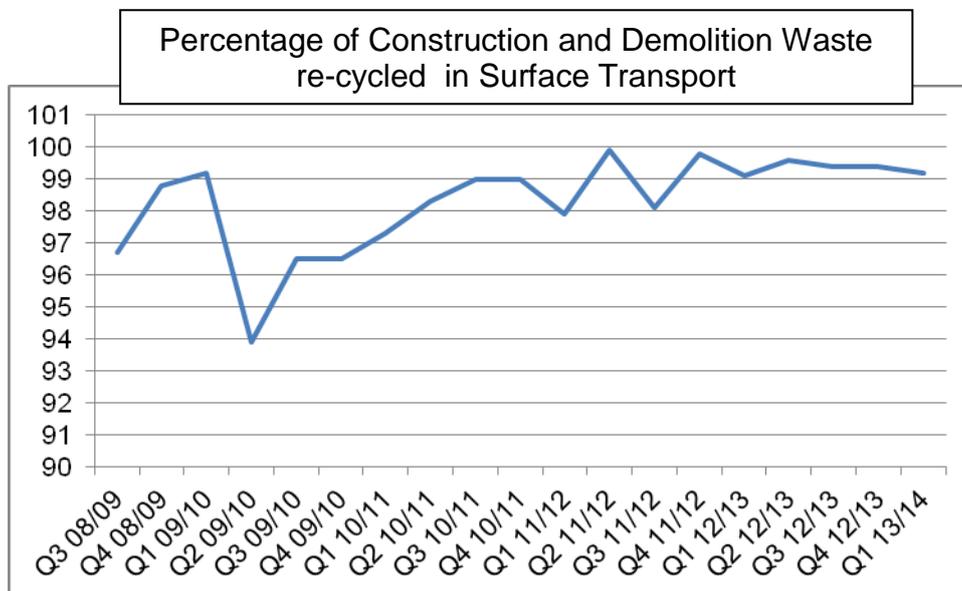
This chart shows the rates for Assaults (both physical and verbal) per 1000 Contractors. These staff are primarily those in London Rail (with those involved in revenue protection a significant proportion) and London Buses (primarily the Bus Operators), where most customer facing staff are contractor staff. The reporting of verbal assaults is known to be much higher in London Rail businesses, than it is in Surface Transport. While the Buses rate has been static for some time, Rail is showing some signs of falling.



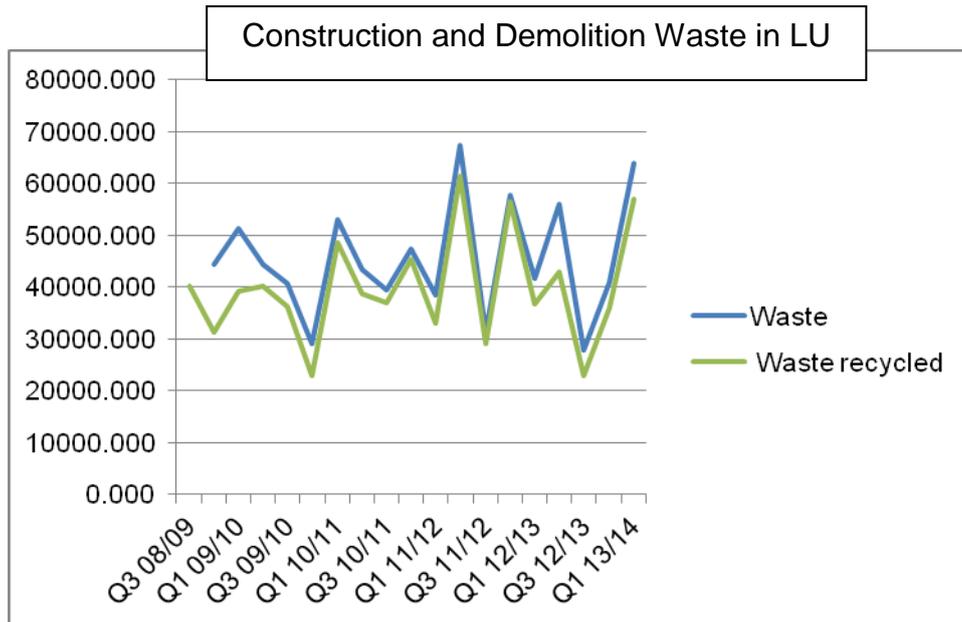
This chart shows the carbon emissions at the HQ buildings that make up the TfL estate, and over which we have direct control. They are measured in Kg of CO2 per square metre. As might be expected there is a clear seasonal trend. The targets are also shown, and in this quarter the actual emissions were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



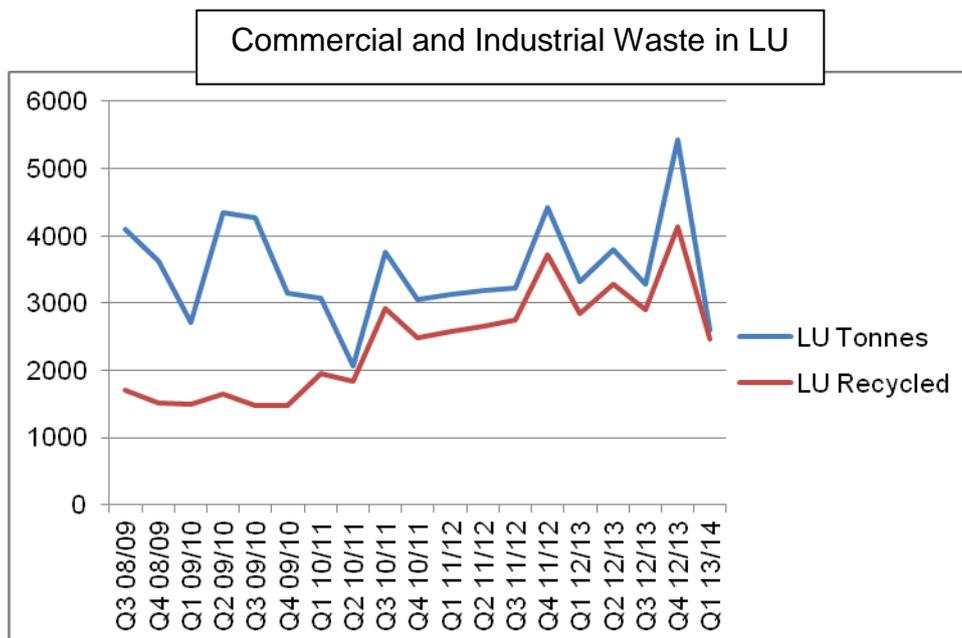
This chart shows the water usage measured in cubic metres measured against the numbers of persons in the various TfL HQ buildings over which we have control. The targets which have been set are also shown, and in the quarter actual water use per person was below the target.



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 but quantities are currently quite low. The low quantities may be influenced by this being Q1 of year 1 of a new 8 years contract, with the new contractors not yet at full capacity.



This chart shows the quantity of construction and demolition waste produced and the amount recycled in LU in Tonnes. The rate of recycling and reuse remains high, but has dropped in the past few months as the changes in the definition of the Land Fill Tax have occurred. Work continues to see if other recycling schemes can be developed to raise this number.



This chart shows the tonnage of Commercial and Industrial waste produced and recycled and reused in LU in Tonnes. This percentage has been increasing over time as the business has become more effective and recycling, although the amounts can be quite volatile depending on actual work in the quarter. This quarter saw 95per cent recycled.