

TRANSPORT FOR LONDON

SAFETY, HEALTH AND ENVIRONMENT ASSURANCE COMMITTEE

**SUBJECT: QUARTERLY HEALTH, SAFETY AND ENVIRONMENT
PERFORMANCE REPORTS – QUARTER 3 2010/11**

DATE: 9 MARCH 2011

1 PURPOSE AND DECISION REQUIRED

1.1 To inform the Committee of the key Health, Safety and Environment matters in the Modes during the last quarter. The Committee is asked to note the reports.

2 BACKGROUND

2.1 Full reports on Health, Safety and Environmental activities and performance are produced annually. These quarterly reports are to update the Committee on any significant matters from the previous quarter.

3 INFORMATION

3.1 The Quarter 3 2010/11 Health, Safety and Environment Performance report for each Mode is attached as follows:

Appendix 1	London Underground
Appendix 2	Surface Transport
Appendix 3	London Rail
Appendix 4	Crossrail
Appendix 5	Corporate Directorates
Appendix 6	Health and Safety performance data summary

3.2 It should be noted that London Underground reports for four Periods in Quarter 3 while all other reports are for three Periods.

4 RECOMMENDATION

4.1 The Committee is asked to NOTE the reports.

5 CONTACT

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LONDON UNDERGROUND

QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT

1 SUMMARY

What went well

- 1.1 Projects in the Health, Safety and Environmental Improvement Plans continue to progress in line with the project timescales.
- 1.2 The last major incident occurred over 506 days ago measured at 8 January 2011. The last in service derailment was 43 months ago, which exceeds the previous record of 37 months. The risk of in service derailments is now around sixteen times lower than it was a decade ago.
- 1.3 All safety, environment and health performance indicators remained stable or improving, except as noted in 'areas for improvement' below.
- 1.4 The Office of Rail Regulation (ORR) confirmed the approach adopted in integrating the requirements of the Construction Design Management Regulations into the Project Management Framework (PMF) is fully compliant with the Regulations.
- 1.5 The recycling targets for commercial and industrial waste (60 per cent) and construction and demolition (C&D) waste (75 per cent) were again exceeded. 78 per cent of all commercial and industrial waste collected and 94 per cent of construction and demolition waste collected were recycled.
- 1.6 Promotion of the employee telephone helpline has resulted in referrals for support on legal, welfare, debt, general housing, social support, consumer and lifestyle support more than doubling (from 23 to 55) over the three months of the service.

Areas for improvement

- 1.7 Lost time injury frequency rates (LTIFR) rose in the Asset Performance Directorate, APD and the Capital Programmes Directorate, CPD. Incidents continue to be investigated to minimise the chances of a reoccurrence. While the rate continues to reduce in Operations, unfortunately the recent rise in staff assaults continues. Work continues to understand the causes of this trend so that action to reverse it is appropriately focused.
- 1.8 Increased surveillance of contractor's works at Neasden Depot are helping to improve the contractor's safety performance but further improvement is needed and close scrutiny will continue.

- 1.9 The targets for “Noise and Vibration complaints – Operations” (135) and Works (1.10 per 100,000 hours worked) were not met. There were 141 complaints and 1.22 complaints per 100,000 hours respectively. Analysis of root causes is being undertaken and an improved process for notifying residents of works has been implemented, which it is hoped will reduce complaints.

Significant Plans for Next Quarter

- 1.10 A new drugs and alcohol testing contract will be awarded in March 2011. Improvements in the contract include opiate reporting and access to a toxicologist.
- 1.11 The Low Carbon Stations Initiative procurement phase to source the low carbon technologies required for the showcase stations will be completed.

2 PROGRESS AGAINST HSE PLAN

- 2.1 The London Underground Executive Committee monitors progress every four weeks. All aspects of the plan continue to be delivered to the original targets except for the low carbon stations trial sites programme, which will be starting six months later than originally planned due to complications with procurement as a result of Tube Lines’ transfer to the public sector.

3 STATUS OF HSE MANAGEMENT SYSTEM

- 3.1 The Audit Team monitors compliance with London Underground’s Health Safety and Environmental Management System (HSEMS). The 2010/11 audit programme is progressing to programme (subject to controlled changes). The significant findings reported in Quarter 3 are outlined below.
- 3.2 The London Fire and Emergency Planning Authority and London Underground undertook a joint audit of tenants and their conformance with requirements for fire risk assessment. The audit concluded that 50 per cent (14 out of 28) of those audited had documented the significant findings from a fire risk assessment as required by law. Tenants in railway arches were less conformant with obligations. The work identified a number of actions which are being progressed to enable Group Property and Facilities and local managers to be more effective in ensuring the risks arising from our tenants are properly controlled.
- 3.3 An audit of signalling design management identified improvements in relation to the control of information, records and drawings, which if not properly managed could have an adverse impact. These improvements are now being actioned.

4 HEALTH AND SAFETY PERFORMANCE

Health

- 4.1 There were 60,913 working days lost to sickness absence in Quarter 3, representing an average of 3.5 days per employee. For comparison, in the

previous quarter and in the same quarter last year there were 2.1 and 3.3 days absence per employee respectively. The 2009/10 data excludes the Asset Performance Directorate. The top three categories of sickness absence in Quarter 3 were coughs and colds, gastrointestinal and musculo-skeletal.

Days lost	Q3 2010/11	Q2 2010/11	Q3 2009/10
Sickness absence	60,913	37,547	42,845
Average / employee	3.5	2.1	3.3

- 4.2 There was an average of 1,311 working days lost (0.45 per cent) per period as a result of back pain this quarter compared to 819 days (0.37 per cent) lost in Quarter 3 2009/10. On average, 157 employees (0.91 per cent of staff) were absent per period in Quarter 3 2010/11. These data include CMO employees. There was an average of 1,703 working days (0.58 per cent) lost per period due to stress, anxiety and depression this Quarter. This compares to an average of 1,322 days per period (0.61 per cent of working days) in Quarter 3 2009/10.

Safety

- 4.3 There were no accidental customer fatalities and no employee/contractor fatalities in Quarter 3 2010/11. There were three medical related and two crime related customer fatalities in the quarter.
- 4.4 The number of customer major injuries in Quarter 3 was 46 (0.13 per million customer journeys). For comparison, there were 22 customer injuries in the previous quarter (0.09 per million customer journeys) and 34 (0.13 per million customer journeys) in the same quarter last year. The overall trend remains stable.

	Q3 2010/11	Q2 2010/11	Q3 2009/10
Customer major injuries	46	22	34
Rate/million customer journeys	0.13	0.09	0.13

- 4.5 There were nine employee major injuries in Quarter 3, a rate of 0.56 per 1,000 employees. Action to reduce the lost time injury trend continues and will be extended and strengthened in the 2011/12 improvement programme.

	Q3 2010/11	Q2 2010/11	Q3 2009/10
Employee major injuries	9	2	5
Rate/1000 employees	0.56	0.11	0.32

- 4.6 There were 162 physical assaults on employees in Quarter 3. For comparison, there were 114 physical assaults on employees in the previous quarter.
- 4.7 There were 300 verbal assaults on employees in Quarter 3. This compares to 354 verbal assaults to employees in Quarter 3 2009/10.

	Q3 2010/11	Q2 2010/11	Q3 2009/10
Employee physical assaults	162	114	118
Employee verbal abuse	300	220	354
TOTAL	462	334	472
Rate/1000 employees*	44.56	29.49	56.34

*number of employees only includes Chief Operating Officer's employees

- 4.8 Progress of actions in the 2010/11 work-related violence action plan continues to programme. This includes enhanced communications to the public to reinforce London Underground's commitment to preventing work-related violence and to follow up with enforcement action when an incident takes place, and a revised training and briefing programme for employees. It is hoped that these actions will reverse the recent adverse trend and restore the ten year downward trend achieved until last year.
- 4.9 The trend in the number of signals passed at danger (SPADs) – All categories – remains stable with an average of 51 occurring per period, the lowest for five years. There were 194 SPADs in total (all categories) during Quarter 3, of which 143 (74 per cent) were Category A (Train operator error) and 50 (25 per cent) were Category B (48 of which were due to either signal equipment malfunction or train equipment and two were attributable to Service Control). One Category 'C' SPAD was also recorded where the stop aspect was not displayed in sufficient time for the train to be stopped safely at the signal because it was returned to danger in an emergency.
- 4.10 There were 154 Platform Train Interface incidents reported during Quarter 3; the trend remains stable. Eighty five (55 per cent) incidents were persons caught in/struck by doors, 39 (25 per cent) were persons falling between the train and platform gap, and 24 (16 per cent) were contact between person and train and there were six (four per cent) falls from platforms.
- 4.11 There were 308 tests for drugs and alcohol in the quarter, 195 unannounced, seven for cause, 91 routine monitoring and 15 post incident tests. There were no positive results.

5 ENVIRONMENT PERFORMANCE

Carbon and energy management

	Q3 2010/11	Q2 2010/11	Q3 2009/10
Total electricity consumption (MWh)	359,860	250,666	347,798
Total Traction Electricity (MWh)	301,344	210,885	299,852
Traction Energy Efficiency (MWh/million passenger journeys)	838	844	835
Total CO ₂ (tonnes)	194,505	135,485	187,810
Normalised CO ₂ (g/passenger km)	65.3	68.0	66.0

5.1 A number of energy-related actions were delivered in Quarter 3 including:

- (a) The procurement exercise for the Low Carbon Stations Initiative commenced at the end of December 2010. The implementation programmes at Leicester Square and Golders Green are due to start in June 2011.
- (b) London Underground has received a total of 21 Pre Qualification Questionnaire responses for the Solar Photovoltaic (PV) project that commenced in November 2010. The Solar PV project is seeking framework contractors to install PV cells across the TfL property estate with no capital contribution from the business. The suppliers will reclaim their investments through the Government's Feed-in-Tariff scheme.
- (c) Expressions of interest for the installation of a new energy efficient heating and hot water system at Northumberland Park depot have been received from six potential suppliers. The invitation to tender will be issued in Quarter 4.
- (d) London Underground's climate change adaptation risks and plans were submitted as part of TfL's report to the Department for Environment Food and Rural Affairs.

Recycling and waste management

	Q3 2010/11*	Q2 2010/11	Q3 2009/10*
Commercial and Industrial Waste (tonnes)	3,751	2,509	4,382
Commercial and Industrial Waste Recycled (tonnes)	2,927	1,841	1,652
Commercial and Industrial Waste Recycled (per cent)	78	73	38
Construction and Demolition Waste (tonnes)	39,503	43,525	40,632
Construction and Demolition Waste Recycled (tonnes)	37,067	38,661	36,315
Construction and Demolition Waste Recycled (per cent)	94	89	89

* Quarter 3 had four periods

5.2 The amount of Commercial and Industrial (station and depot) waste collected in Quarter 3, 3,751 tonnes, was greater than that collected in Quarter 2 2010/11, 2,509 tonnes. The recycling rate for Commercial and Industrial waste was 78 per cent. This exceeded the 2010/11 recycling target for Commercial & Industrial waste (60 per cent). Recycling performance during 2010/11 has improved significantly compared to 2009/10.

5.3 Good recycling performance continues to be demonstrated for the stations and depots waste management contract; 75 per cent of station and depot waste was recycled in Quarter 3 2010/11 compared to 70 per cent in Quarter 2.

5.4 The amount of Construction and Demolition (C&D) waste generated in quarter 3 (39,503 tonnes) was lower than the previous quarter (43,525 tonnes). The proportion of construction and demolition waste recycled in Quarter 3 was 94 per cent. This exceeded the 2010/11 recycling target for C&D waste (75 per cent). Excellent C&D waste recycling rates were reported by the Power and Cooling team (98 per cent) and Permanent Way team (97 per cent). Improving C&D waste recycling rates were reported by the Stations team, increasing from 36 per cent in Period 7 to 99 per cent in Period 10.

6 MAJOR INCIDENTS

6.1 There were no major incidents in the quarter.

SURFACE TRANSPORT**QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT****1 SUMMARY****What went well**

- 1.1 A survey of 838 cyclists following a cycle safety campaign revealed that 49 per cent of them are now hanging back behind lorries at junctions compared with 38 per cent before the campaign. In addition, a third of cyclists claimed to recall the campaign with levels of recognition notably higher among male cyclists who are known to take greater risks.
- 1.2 Road safety campaigns are benefiting from media coverage with 12 pieces of reporting in October 2010. In addition, there were 4,200 visits to safety sections of the TfL website in the same month. The third phase of safety campaign activities is planned for March 2011.
- 1.3 The delivery of the second 'Health and Safety for Executives' training course for Directors and Senior Managers was positively received. The course covered strategic areas including safety related financial risks and developing a positive safety culture.
- 1.4 The Electric Vehicles (EV) project aims to deliver 1,300 charging points by 2013, a London wide EV user scheme (Source London), a strongly branded presence and a marketing package to encourage uptake, with the ultimate aim to have 100,000 EVs in London. The Source London brand and website were launched in November 2010 and were positively received by stakeholders and the media.
- 1.5 Casual users were able to use the Barclays Cycle Hire Scheme from December 2010 and a new 'super docking station' with 126 docking points was opened at Waterloo Station. The scheme had delivered two million journeys by December 2010, contributing to modal shift and improving health.
- 1.6 A further 50 double deck hybrid buses, funded through the DfT green bus fund, entered service during Quarter 3. This brings the total number of hybrid buses in service to 106. TfL is in the process of allocating a further £5m to fund additional buses.
- 1.7 The hydrogen fuel cell bus project was launched in December 2010. The first hydrogen bus is in service and a total of five will enter service on route RV1 during early 2011. EU funding for a further three hydrogen buses has been secured, bringing the total to eight, so that the entire route from Covent Garden to Tower Hill will be operated by zero emission hydrogen technology. Final safety checks and pressure tests of the maintenance and refuelling facilities at Lea Interchange were successfully completed.

Areas for improvement

- 1.8 There are no areas where significant improvements are required this quarter.

Significant plans for next quarter

- 1.9 London has been successful in reducing road casualties and has exceeded the targets set in the London Road Safety Plan 2001-2010, except those for pedal cyclists and powered two-wheelers. In both these cases, there has been a steady reduction in the number of KSIs while there has been a significant increase in modal use.
- 1.10 Analysis of casualty data has highlighted where further action to improve road safety in London is needed and a draft Road Safety Plan covering the period to 2020 is in preparation. The Plan will target specific audiences, including young car drivers and young people living in areas of deprivation and in BAME communities, who are known to suffer disproportionately higher levels of road casualties. Particular attention will also be paid to the vulnerable road user groups – pedestrians, cyclists and powered-two-wheeler riders.
- 1.11 The draft London Road Safety Plan will be taken forward to public consultation, with engagement with all relevant delivery partners (DfT, boroughs, police) and wider stakeholders (such as road safety groups). Building partnerships with other delivery agencies for road safety in London is fundamental to the success of the new Plan.
- 1.12 The Committee will be provided with a copy of the draft Plan in advance of the public consultation and there will be an opportunity for any key issues to be raised before we proceed to consultation. Further comments will also be welcomed throughout the period of consultation. A final report on the consultation process will be brought to the Committee at its next meeting.
- 1.13 To support the Mayor's strategic aims on safety and walking, research using police investigation files and STATS19 data (Police road casualty database) will be undertaken into pedestrian and motorcycle fatalities. The research will seek to provide additional information on factors contributing to collisions and fatal injuries.
- 1.14 The 2011/12 programme of works for road safety campaigns and education will be finalised.
- 1.15 Changes will be made to incident reporting and analysis for the Barclays Cycle Hire Scheme. Injury categorisation will also be changed to bring it in line with STATS19 definitions.
- 1.16 Following the decision to provide additional powers, accredited by the police, for the Operational Support Team within the Revenue Protection Inspectors workforce, a risk assessment review will be undertaken to identify any additional risks and controls.

2 PROGRESS AGAINST HSE PLAN

Priority 1: Road casualty reduction

- 2.1 Five road safety engineering schemes were added to the programme of work aimed at further reducing the number Killed and Seriously Injured (KSI) on the Transport for London Road Network (TLRN); this brings the total to 120 schemes. The 2010/11 programme has £7.5m allocated and is aimed at locations with high collision levels.
- 2.2 Two phases of the HGV/Cycle campaign, with the strapline 'Undertaking at junctions can be fatal', were undertaken in the quarter. In addition, two short films portraying a collision between a cyclist and a goods vehicle were shown in the new Certificate of Professional Competence (CPC) freight driver training as part of efforts to educate lorry drivers.
- 2.3 A campaign aimed at car drivers with the strapline 'Look out for motorcyclists in bus lanes' was undertaken as well as a successful re-run of the 'Teens' campaign.
- 2.4 Figures for the twelve months to September 2010 show KSIs fell to 2,994 and are now 55.2 per cent below the 1994-98 average (the baseline) compared with the target of 50 per cent by the end of 2010. The KSIs are 5.8 per cent less than those reported for the corresponding period of 2009. In the same period in 2010, 134 people were killed on roads, 32 per cent less than in the equivalent period in 2009. However, 'all casualties' rose slightly to 28,651, 3.9 per cent higher than the previous twelve month period.
- 2.5 Thirteen cyclists died on roads in the twelve months to the end of September 2010, a reduction of two deaths when compared with the previous twelve months. In total, there were 3,909 cyclists injured in the twelve months ending September 2010, 10.9 per cent more than the previous twelve months. Between July 2010 (when the Barclays Cycle Hire Scheme was launched) and September, 12 injuries were reported by cyclists using the scheme, four seriously. The general increase in cyclist injuries is thought to be accounted for by the continued growth in cycle use in the capital.

Priority 2: Safety of highways and the TLRN (including tunnels)

- 2.6 All of the actions from an internal audit of the risk identification and mitigation processes for the 13 road tunnels managed and operated by TfL were closed.
- 2.7 Specialist consultants have been appointed to undertake a programme of principal inspections in tunnels. Three inspections will be completed by the end of 2010/11 and the programme for 2011/2012 developed.
- 2.8 Four hundred Surface Transport staff were trained in the use of a new data storage system to be used for Construction, Design and Management (CDM). Training is also being provided to external project partners.

- 2.9 The Safer Transport Command Roads Response team conducted a traffic operation in the Blackwall Tunnel. The team stopped 92 over-height and un-roadworthy vehicles which were deemed to be at risk of causing an incident in the tunnel.
- 2.10 Following the completion of a programme of 34 Stage 1 (outline design) Road Safety Audits for proposed changes to the Olympic Route Network within London, a Stage 2 (detailed design) programme has commenced. All audits are scheduled for completion by the end of March 2011.

Priority 3: Health and safety of staff and contractors

- 2.11 Personal safety training for 126 customer facing staff was delivered in the quarter.
- 2.12 A review of best practice in relation to the safe management of vehicle movements within bus garages was produced and issued to all bus operators. This follows the successful completion of safety improvement workshops attended by representatives of bus operating companies. The Health and Safety Executive has expressed interest in garage safety.
- 2.13 The quarterly review of Health and Safety objectives for 2010/11 showed good progress had been made with meeting agreed objectives.

Priority 4: Safety and security of the public transport network and its users

- 2.14 Between January 2009 and December 2010, 1,700 cases were notified to the workplace violence unit (WVU). All of these cases are reported to and 'owned' by local borough police but the WVU provides full support on investigations. To date, the WVU has taken a lead on 599 cases of which 271 received judicial disposals (such as charged, summonsed, cautioned etc) and 152 cases are ongoing.
- 2.15 As part of delivering the objectives of the Safer Travel at Night initiative, a new night shift team of taxi inspectors has been established to target illegal and unsafe vehicles at night.
- 2.16 An annual programme of "party boat" monitoring revealed that boat operators are complying with the agreed Code of Practice at London River Service piers and there is evidence of significant improvement compared with the previous year. The Port of London Authority has indicated they are satisfied with the level of improvement and compliance.
- 2.17 The 2010/11 bus operators' safety assurance audit programme has not identified any issues of major concern.
- 2.18 An audit of the management systems of the Barclays Cycle Hire Scheme operator, Serco, did not identify any major concerns and recommendations made are being addressed.

- 2.19 Safety workshops were held with a panel of bus operators to review operating processes, including interfaces for drivers and conductors for the New Bus for London project. An extensive programme of stakeholder engagement, including with specific user groups, was also undertaken.

Environmental objectives

- 2.20 Environmental objectives have been set for relevant parts of Surface Transport. Particular focus will be placed on reducing CO₂ emissions, reducing emissions to air, ensuring legal compliance and improving environmental performance reporting. Progress against these priority areas will be provided in future reports.

3 STATUS OF HSE MANAGEMENT SYSTEM

- 3.1 Work to produce a Surface Transport wide HSEMS audit process is progressing well and will be completed by the end of 2010/11. This will ensure a common systematic approach across all business areas.

4 HEALTH AND SAFETY PERFORMANCE

Health

- 4.1 There were 10,331 working days lost due to sickness absence in Quarter 3, representing an average of 2.9 per employee. For comparison, the previous quarter's average was 1.8 days absence per employee and the corresponding quarter of last year was 2.8. The top three categories of sickness absence were coughs and colds, mental health and musculoskeletal.

A higher than normal number of staff had operations, leading to absence for pre and post operative recovery.

Days lost	Q3 2010/11	Q2 2010/11	Q3 2009/10
Sickness absence	10,331	6,436	10,160
Average / employee	2.9	1.8	2.8

Safety

- 4.2 The number of accidental customer major injuries in Quarter 3 was 188 (0.34 per million customer journeys). For comparison, there were 200 accidental customer major injuries in the previous quarter (0.38 per million customer journeys) and 163 (0.30 per million customer journeys) in the same quarter last year. All customer major injuries recorded were on the bus network where the long term trend shows a steady decline.

	Q3 2010/11	Q2 2010/11	Q3 2009/10
Customer major injuries	188	200	163
Rate/10 ⁶ customer journeys	0.34	0.38	0.30

- 4.3 There was one accidental employee major injury in Quarter 3. For comparison, there was also one employee major injury in the previous quarter and two in the same quarter last year.

	Q3 2010/11	Q2 2010/11	Q3 2009/10
Employee major injuries	1	1	2
Rate/1000 employees	0.28	0.31	0.65

- 4.4 There were 24 physical assaults on employees in Quarter 3. For comparison, there were also 24 physical assaults on employees in the previous quarter and 19 in the same quarter last year. There were 11 reported verbal assaults on employees in Quarter 3. For comparison, there were seven verbal assaults on employees in the previous quarter and eight in the same quarter last year.

- 4.5 Measures being taken to reduce assaults on Revenue Protection Officers are proving effective with a notable reduction in incidents rate. So far this year, there have been 0.37 assaults per 1,000 hours worked compared with 0.47 in 2009/10 and 0.53 in 2008/09.

	Q3 2010/11	Q2 2010/11	Q3 2009/10
Employee physical assaults	24	24	19
Employee verbal assaults	11	7	8
Rate/1000 employees	9.77	9.58	10.47

- 4.6 There were 93 physical assaults on contractors (mainly bus drivers) in Quarter 3. For comparison there were 131 physical assaults on contractors in the previous quarter and 70 in the corresponding quarter of last year.

	Q3 2010/11	Q2 2010/11	Q3 2009/10
Contractor physical assaults	93	131	70

5 ENVIRONMENTAL PERFORMANCE

Air Quality

- 5.1 Staff numbers in the Low Emission Zone (LEZ) call centre have been increased to process the expected increase in enquiries as the public learn more about future LEZ changes. TfL has been working towards the Operator Information Go-Live in Quarter 4. This will inform potential operators of the change to the policy and the arrival of Phases 3 and 4 in January 2012 (to comply with Euro standards for particulate matter) and encourage relevant vehicle owners to take action and reduce the emissions of their vehicles.

- 5.2 A road cleaning and dust suppressant trial started in November and will run for six months to spring 2011, the period when particulates (PM₁₀) are most likely to exceed EU limits. The trial locations are between Victoria Embankment and Tower Hill and on Marylebone Road/Euston Rd. These locations are at risk of exceeding EU limits on particulates. The carriageways are being treated during the night with a fine coating of calcium magnesium acetate which binds dust to the road surface without adverse environmental impact and no effect on road surface friction or vehicle safety. Air quality is being monitored constantly by road-side particulate monitors. The results will be published in autumn 2011 and, if the initial trial proves successful, this measure may be extended to other air quality priority locations.
- 5.3 A survey to assess measures currently being implemented by bus operators to improve fuel efficiency has started and is due to report in Quarter 4 2010/11. The survey will assess equipment fitted to vehicles to monitor fuel consumption, driver feedback mechanisms and driver training programmes. A best practice guide will be developed for operators to highlight the best measures identified by the survey.

Waste and recycled materials

- 5.4 The Highway Maintenance and Works Contractors (HMWCs) recycled and reused 99.0 and 98.1 per cent of excavated and non-excavated materials respectively in Quarter 3, against annual targets of 97 and 95 per cent.

HMWC waste and recycled materials	Q3 2010/11	Q2 2010/11	Q3 2009/10
Excavated waste recycled and reused - percent (tonnes of total volume)	99.0 (20,422 of 20,625)	98.8 (21,168 of 21,418)	96.4 (11,303 of 11,724)
Non-excavated waste recycled and reused – percent (tonnes of total volume)	98.1 (546 of 556)	97.5 (522 of 535)	91.9 (718 of 781)
Recycled and green material procured – percent (tonnes of total volume)	12.6 (1,108 of 8,776)	16.7 (4,577 of 27,377)	17.7 (2,299 of 13,007)

- 5.5 The HMWCs procured 12.6 per cent of recycled and green material in Quarter 3, against a target of 15 per cent for 2010/11.
- 5.6 In Quarter 3, the Traffic Control Equipment Maintenance and related Services (TCMS) contractors recycled 56.7 per cent of generated waste. One of the contractors was only able to supply partial data for Quarter 3, which may explain the decrease in percentage of recycled waste in the quarter.

TCMS waste and recycled materials	Q3 2010/11	Q2 2010/11	Q3 2009/10
Waste recycled – percent (tonnes of total volume)	56.7 (9,950 of 17,548)	59.8 (11,319 of 18,905)	(monitoring not started)

- 5.7 In Quarter 3, 2.91 tonnes of office waste was recycled at bus stations and 4.76 tonnes of office waste was recycled at Dial-a-Ride depots.

Recycled waste (tonnes)	Q3 2010/11	Q2 2010/11	Q3 2009/10
London Buses office waste	2.91	3.23	0.27
Dial-a-Ride office waste	4.76	4.79	6.00

6 MAJOR INCIDENTS

- 6.1 There were two pedestrian fatalities involving buses in Quarter 3. They resulted from collisions with buses operating on Route N5 on 30 September at Haverstock Hill, NW3 and Route 349 on 28 October at Fore Street, N18. The incidents are under investigation.
- 6.2 The investigation into an incident where a pedestrian suffered fatal injuries following a collision with a Route 264 bus at Mitcham Road, SW17 on 7 November 2009 was concluded with the Coroner recording a verdict of accidental death. The Coroner made no recommendations for TfL or the bus operating company.

LONDON RAIL

QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT

1 SUMMARY

What went well

- 1.1 Construction works have continued on the site for the new Docklands Light Railway (DLR) Control Centre. The ground works and the building structure are now complete. Landscaping and the interior fit out are progressing well. The stringent safety arrangements remain in place while activities take place within a fully operational depot. To date there have been no safety incidents to report. In association with this work, various environmental initiatives have been introduced including a green roof and solar heating.
- 1.2 The works on the DLR Stratford International Extension and the Three Car Project (which are mainly snagging works) have progressed well and in terms of safety both performed well over the last quarter. The Stratford International Extension has moved to the test train stage. There have been no reportable accidents and the minor accident rate is very low. The intensive programme of close monitoring with both DLR project safety and the Skanska Volker Rail Joint Venture contractors' safety team have been successful to date and will be continuing.
- 1.3 Construction works have started and are progressing well on the new Tramlink Office building in Therapia Lane tram depot. To date, there have been no safety incidents to report.
- 1.4 The required changes to Tramlink health and safety arrangements in preparation for bringing in-house the infrastructure maintenance contractors were completed during this quarter. The move took place successfully just after the end of this reporting quarter.
- 1.5 The London Overground Phase 1A works to connect Dalston - Kingsland to Highbury and Islington progressed well. The main works undertaken in the quarter related to signalling and power. There were no significant incidents during this phase of works.

Areas for improvement

- 1.6 On London Overground, the number of passenger slips/trips and falls is slowly rising. Initiatives planned to address this trend include enhancing the accident reporting and investigation process, re-briefing key staff to improve the quality of investigation reports and undertaking a detailed analysis of all boarding/alighting accidents to identify hot spots and specific risks. These initiatives will be completed by the end of the next quarter.

- 1.7 Instances of graffiti and stone throwing on the core section of the East London Railway continued in Quarter 3. London Overground and Network Rail staff have been working closely with the British Transport Police (BTP) to combat these problems and are now looking to replace and enhance fencing and to use covert policing to catch offenders.
- 1.8 Just outside this reporting period, Docklands Light Railway Limited (DLRL) were issued with an Improvement Notice by the Office of Rail Regulation (ORR). The notice relates to the West India Quay derailment investigation report and the failure to complete enhancements to the management of alarms in the control centre as fast as the ORR felt they should have been. DLRL are responding to the ORR setting out how they will address the issues raised.

Significant plans for the next quarter

- 1.9 The London Rail Health and Wellbeing plan will be launched during the next quarter.
- 1.10 The 2011/12 Safety Improvement Plans for London Overground, DLR and Tramlink will be formulated and presented to the London Rail Safety Committee for endorsement during the next quarter.
- 1.11 DLR will be finalizing the review of their Safety Performance Index. This has involved workshops with DLR stakeholders including key operational and engineering managers. The objective of the review is to assess the current indicators to determine if they are providing the right measures, to identify if there are other measures that should be included and to propose future targets for the index.
- 1.12 London Overground Rail Operations Limited's (LOROL) independent external safety auditors will undertake an audit of London Overground station safety management. Also, LOROL will be undertaking a safety audit of the station upgrade works taking place on many of their stations.
- 1.13 London Rail will commence the roll out of computer based Display Screen Equipment (DSE) assessments using the DSEasy system, which has been used in Surface Transport and Corporate Directorates for a number of years.

2 PROGRESS AGAINST HSE PLAN

- 2.1 The London Rail HSE improvement plan commenced during Quarter 4 2009/10. The plan is monitored quarterly and all modes report that they have made good progress. The plan runs for a calendar year and the next quarterly report will indicate the end of year status of the plan.

3 STATUS OF HSE MANAGEMENT SYSTEM(S)

- 3.1 DLR and London Overground have established safety management systems in place. The DLR system recently underwent external independent auditing. No

critical issues were identified, however, a number of recommendations for improvement were made and these will be actioned. The system in London Tramlink has been revised in preparation for bringing in-house the infrastructure maintenance contractor.

4 HEALTH AND SAFETY PERFORMANCE

Health

- 4.1 There were 161 working days lost due to sickness absence in Quarter 3 by employees of London Rail, an average of 0.81 days per employee. For comparison, in the previous quarter there was 151 days lost equating to 0.74 days absence per employee and in the same quarter last year there was 357 days lost, equating to 1.57 days absence per employee. The top categories of sickness absence in Quarter 3 were coughs and colds, gastrointestinal and mental health. Overall absence rates remain low in London Rail.

Days lost	Q3 2010/11	Q2 2010/11	Q3 2009/10
Sickness absence	161	151	357
Average / employees	0.81	0.74	1.57

Safety

- 4.2 There were no employee major injuries this quarter in London Rail.
- 4.3 There were four accidental customer major injuries for London Overground in Quarter 3 (in 15.5 million journeys). For comparison, there were two accidental customer major injuries in the previous quarter and zero in the same quarter last year. The slight increase is associated with the increased numbers of slips, trips and falls (see section 1.6). Recent benchmarking by the Association of Train Operating Companies shows that for major passenger accidents LOROL is one of the better performing Train Operating Companies (sixth out of 21).

London Overground	Q3 2010/11	Q2 2010/11	Q3 2009/10
Customer major injuries	4	2	0
Rate/million customer journeys	0.26	0.16	0

- 4.4 There were no TfL employee assaults this quarter on London Overground. The number of LOROL employees who suffered workplace physical and verbal assaults in Quarter 3 was 10 and 18 respectively. For comparison, there were five and 18 in the previous quarter. Analysis has revealed that most assaults are associated with service disruptions and revenue collection. LOROL are working with the BTP to target specific locations. Most of the incidents of physical assault are 'minor' i.e. pushing or spitting.

LOROL	Q3 2010/11	Q2 2010/11	Q3 2009/10
Physical assaults	10	5	5
Verbal assaults	18	18	13
Rate/1000 employees	24	20	17.9

- 4.5 There was one accidental customer major injury on DLR in Quarter 3 (19.5 million customer journeys). For comparison, there were no accidental customer major injuries in the previous quarter and three in the same quarter last year.

DLR	Q3 2010/11	Q2 2010/11	Q3 2009/10
Customer major injuries	1	0	3
Rate/million customer journeys	0.05	0	0.18

- 4.6 There were no TfL employee assaults this quarter on DLR. The number of employees of our franchisee Serco, who suffered workplace physical or verbal assaults in Quarter 3, was five and 27 respectively. The rates are lower than the previous quarter. All assault incidents continue to be reviewed by the Assaults Working Group. The majority are directly related to revenue protection issues. BTP are working with Serco to address these issues.

DLR	Q3 2010/11	Q2 2010/11	Q3 2009/10
Physical assaults	5	9	0
Verbal assaults	27	28	21
Rate/1000 employees	47	60	31

- 4.7 There was one accidental customer major injury for London Tramlink in Quarter 3 (6.7 million customer journeys). For comparison there were no accidental major customer injuries in the previous quarter and one in the same period last year.

Tramlink	Q3 2010/11	Q2 2010/11	Q3 2009/10
Customer major injuries	1	0	1
Rate/million customer journeys	0.15	0	0.16

- 4.8 In London Tramlink, there were no TfL employee assaults this quarter. The number of workforce physical and verbal assaults in Quarter 3 for our contractor Tram Operations Limited (TOL) on London Tramlink was four and 10 respectively. For comparison, there were five physical and five verbal assaults in the previous quarter and two and five in the same quarter last year. The upward trend is being carefully monitored and TOL are working with the BTP to target particular hotspots and times of the day. TOL employs a relatively small number of staff thus changes in the rate per 1000 employee figures that are not sustained need to be treated with caution.

TOL	Q3 2010/11	Q2 2010/11	Q3 2009/10
Physical assaults	4	5	2
Verbal assaults	10	5	5
Rate/1000 employees	86	62	43

- 4.9 On London Overground Infrastructure, there was one contractor RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations) reportable accident during the quarter. The 13 period rolling accident frequency rate is 0.28 per 100,000 hours. This is an increase from the last quarter – accounted for by the incident mentioned above and the significant drop in hours worked as projects come close to completion.
- 4.10 On DLR Major Projects, there was one contractor RIDDOR accident in Quarter 3. The 13 period rolling accident frequency rate is 0.34 per 100,000 hours worked at the end of the quarter.

5 ENVIRONMENT PERFORMANCE

Carbon and energy management/Carbon emissions

- 5.1 The total CO₂ emission rates for London Rail have been relatively stable during previous quarters and this continues. The previous quarter saw significant engineering works and thus a reduction in passenger km. London Rail is looking at how energy use can be reduced but with a significant increase in services and rolling stock later this year this will be a significant challenge. We will establish the current baseline performance and then set improvement targets.

	Q3 2010/11	Q2 2010/11	Q3 2009/10
Total CO ₂ (Tonnes)	15,373	14,440	12,958
Normalised CO ₂ (g/passengers km)	59.9	60.8	56.4

Waste Management

- 5.2 The main works contractor building the new DLR control centre and office complex had achieved a 99 per cent recycling rate for all site waste by the end of Quarter 3.
- 5.3 Construction work on Phase 1A of the East London Line Project has now finished. Throughout the works, Birse Metro achieved very good performance in terms of waste management constantly beating its target of 80 per cent recycling for construction and demolition waste.
- 5.4 On London Overground, significant efforts are being made to improve the amount of commercial and industrial waste from trains and stations that is recycled. LOROL have set a target of recycling 60 per cent of station waste by December 2012. At the end of Quarter 3, the figure was just over 44 per cent, an increase of three per cent since the last quarter.

- 5.5 The new office development at the Tramlink depot will have comprehensive recycling arrangements and parallel improvements will be made to manage waste from the depot and trams better. This will be operational from Quarter 1 2011/12.
- 5.6 At the end of Quarter 3, compared to the previous year, DLR Serco had increased the amount of waste recycled from 31 per cent to 39 per cent. While this is an achievement, there is still a significant opportunity for improvement. Serco have continuous improvement targets in place to ensure that the percentage of total waste to landfill reduces. By far the greatest quantity of recycled waste is paper. In Quarter 3, 67 tonnes of paper was recycled.

Other environmental items

- 5.7 LOROL has received its certificate for ISO 14001:2007 accreditation following a Lloyds Register Quality Assurance internal technical review. LOROL is now fully certified to both ISO 14001:2007 and OHSAS 18001:2004.
- 5.8 During the next quarter, London Overground Infrastructure will be working with the Phase 2 contractor to obtain Section 61 consent, under the Control of Pollution Act 1974, from the London Borough of Lewisham for works involving noise and vibration. In addition, they plan to progress work on the development of an environmental management system and to set up environmental monitoring programmes for noise and dust.

6 MAJOR INCIDENTS

- 6.1 On 15 November 2010, a child was in collision with a tram at Fieldway tram stop while retrieving an object on the tram crossing. A joint Tramlink /Tram Operations Limited investigation is under way. After preliminary investigations, both the Rail Accident Investigation Branch and the Office of the Rail Regulator have decided not to pursue any further enquires. BTP investigations remain ongoing.

CROSSRAIL

QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT

1 SUMMARY

What went well

- 1.1 The Lloyd's Register Quality Assurance (LRQA) six month surveillance visit of the Health and Safety Management System (HSMS) took place this quarter. No issues were identified and all actions identified following the March 2010 visit were closed.
- 1.2 The new Crossrail website was launched with a specific page for Health, Safety and Security making information on Crossrail's requirements available to organisations wishing to work on Crossrail.
- 1.3 The audit of occupational health providers commenced and discussions were held with Manchester University and Constructing Better Health to identify occupational health data capture requirements. Capturing the correct data will ensure that the benefits of the Crossrail occupational health programme can be assessed.
- 1.4 A surveillance visit of Crossrail's Environmental Management System (EMS) was undertaken by LRQA in November 2010. The surveillance concluded that the EMS was effective at providing assurance of the key environmental requirements and that it continues to meet the requirements of ISO 14001.
- 1.5 A series of workshops to develop an environmental vision for Crossrail were held involving staff throughout the programme, culminating in a workshop involving the senior leadership. The vision will be finalised early in 2011.
- 1.6 Canary Wharf Contractors (CWC) won a Gold Green Apple Award for their work on the Canary Wharf Crossrail Station. The Green Apple Awards is an annual international campaign to recognise, reward and promote environmental best practice. The award related to CWC's use of silent piling and to the reduced CO₂ emissions associated with reduced excavated material generation and the use of barges rather than lorries.

Areas for improvement

- 1.7 The HSMS for the new Crossrail organisational structure requires further development.
- 1.8 Further work will be undertaken to improve the speed and accuracy of reporting of environmental information from contractors, including amendments to the software used to collect the data.

Significant plans for the next quarter

- 1.9 The Crossrail guide to health and safety for construction supervisors will be launched.
- 1.10 Work will continue on the train operating risk model.
- 1.11 The 2011/12 Health, Safety and Security improvement objectives will be finalised.
- 1.12 Crossrail has been working with the GLA to arrange a demonstration site for the retrofit of particulate filters to non-road mobile machinery. The details are being arranged but it is likely to occur during Quarter 4 2010/11.

2 PROGRESS AGAINST HEALTH AND SAFETY PLAN

- 2.1 Good progress is being made on all the objectives for 2010/11 and all will be completed by the end of Quarter 4.

3 STATUS OF HEALTH AND SAFETY MANAGEMENT SYSTEM

- 3.1 The HSMS is being updated to reflect the new Crossrail operating model.

4 HEALTH AND SAFETY PERFORMANCE

Health

- 4.1 There were 473 working days lost due to sickness absence in Quarter 3, which represents an average of 1.65 days per employee. The top two categories of sickness absence in Quarter 3 were coughs and colds and mental health.

Days lost	Q3 2010/11	Q2 2010/11	Q3 2009/10
Sickness absence	473	396	459
Average/employee	1.65	1.36	1.69

Safety

- 4.2 There were no employee major injuries in Crossrail in Quarter 3 and none in the previous quarter or in the same quarter last year.
- 4.3 There was one contractor major injury in Quarter 3. For comparison, there was one in the previous quarter and two in the same quarter last year.

	Q3 2010/11	Q2 2010/11	Q3 2009/10
Contractor major injuries	1	1	2
Rate/1000 contractor employees	3.50	3.42	7.00

Note: London Underground major injuries associated with the Crossrail Programme are excluded to avoid duplication.

- 4.4 There were no physical and verbal assaults on employees in Quarter 3. There were no assaults in the previous quarter and none in the same quarter last year.

5 ENVIRONMENTAL PERFORMANCE

Carbon and Energy Management

Construction Activities	Quarter 1 2010/11	Quarter 2 2010/11	Quarter 3 2010/11
Site Electricity Consumption (kWh)	20,367	24,977	13,772
Site Fuel Consumption (litres)	61,981	139,052	82,555
Total CO ₂ (tonnes)	174	379	224

- 5.1 The electricity and fuel use on site in quarter 3 was recorded as lower than in Quarter 2, but because contractors are not inputting their data promptly at the end of the quarter, the Quarter 3 data is likely to be an underestimate of the fuel used.

Office Activities	Quarter 1 2010/11	Quarter 2 2010/11	Quarter 3 2010/11
Office Electricity Consumption (kWh)	423,033	439,314	430,256
Total CO ₂ (tonnes)	227	236	231

- 5.2 Crossrail office electricity consumption was 430,256 kWh for the quarter.

Recycling and Waste Management

- 5.3 Of the 15,245 tonnes of construction and demolition waste recorded over the third quarter, 98 per cent was reused or recycled, which is above the 90 per cent target and the 95 per cent stretch target. The cumulative recovery rate for construction and demolition waste (i.e. the amount of waste reused or recycled over the whole of the project life) is 96 per cent.
- 5.4 Of the excavated material arising during the quarter, 85 per cent was recovered. The cumulative recovery rate for excavated material is 91 per cent which is below the target of 95 per cent. Performance will improve once excavation activities increase across the project (eg from the main tunnelling activities) as the material should be clean and ideal for re-use.

Construction Activities	Quarter 1 2010/11	Quarter 2 2010/11	Quarter 3 2010/11
Construction and Demolition Waste (tonnes)	5,222	25,928	15,245
Construction and Demolition Waste recovered (tonnes)	4,877	25,715	14,943
Construction and Demolition Waste recovered (per cent)	93	99	98
Cumulative Construction and Demolition Waste recovered (per cent)	93	96	96
Excavated Material (tonnes)	198	10,381	12,644
Excavated Material recovered (tonnes)	186	10,037	10,866
Excavated Material recovered (per cent)	94	97	85
Cumulative Excavated Material recovered (per cent)	94	97	91

Site Inspections

5.5 During the quarter, Crossrail planned and carried out 21 environmental site inspections; these inspections identified nine site corrective action requests (SCARs), 18 observations and 10 areas of good practice. There are no overdue SCARs.

6 MAJOR INCIDENTS

6.1 There were no major incidents in Quarter 3.

CORPORATE DIRECTORATES

QUARTERLY HEALTH, SAFETY AND ENVIRONMENT REPORT

1 SUMMARY

What went well

- 1.1 A joint Group HSE – TfL Occupational Health review of sickness absence patterns within Corporate Directorates for musculo-skeletal disorders was completed and next steps agreed.
- 1.2 An IM reasonable adjustment matrix, used by both DSE assessors and Access to Work to provide disabled members of staff with IM solutions to enable them to fulfil their roles more readily was updated and re-issued.
- 1.3 A programme of safety inspections was completed as part of the October 2010 European Safety Awareness Week.
- 1.4 Monitoring of sickness absence from flu was initiated alongside the Occupational Health flu vaccination programme.
- 1.5 Mike Brown presented the Environmental Awards to colleagues from across TfL who developed or delivered an initiative with environmental and cost benefits that are beyond the expectations of their role.

Areas for improvement

- 1.6 Work continues with HR Learning and Development to deliver an improved approach to HSE training for Corporate Directorate managers and to align this training with the requirements of the TfL Group HSE Competency Framework.

Significant plans for the next quarter

- 1.7 Joint Group HSE – TfL Occupational Health work will commence to improve the management of musculo-skeletal disorder-related sickness absence. Work will involve targeted Group HSE engagement with line managers, TfL Occupational Health, Physiotherapy and People Management Advisers.
- 1.8 Monitoring of sickness absence for flu will be continued alongside monitoring of the incidence of flu in the UK via Health Protection Agency reports.
- 1.9 The ongoing joint TfL-Cubic Transportation Systems ergonomic review will be extended to include gate array operation.
- 1.10 HSE MS Standards relating to Accident and Incident Reporting will be updated to incorporate changes in information required by the Health and Safety Executive (HSE) related to RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations).

- 1.11 A delivery plan for 2011/12 will be prepared that brings HSE training for managers in the Corporate Directorates into alignment with the requirements of the TfL Group HSE Competency Framework.

2 PROGRESS AGAINST HSE PLAN

- 2.1 Corporate Directorate HSE Management System.
- (a) Revised and augmented Group Property and Facilities Departmental Health and Safety Procedures now reinforce specialist Standards within the Corporate Directorates HSE Management System.
 - (b) Priorities and plans for 2011/12 are in place.
- 2.2 Specific areas of risk.
- (a) Work to support customer and workplace risk assessment is underway focusing upon gate arrays and Travel Information Centres.
 - (b) Controls are being strengthened to minimise risks associated with processing hazardous items taken into the Lost Property Office.

3 STATUS OF HSE MANAGEMENT SYSTEM(S)

- 3.1 Necessary amendments to the Corporate Directorates HSE MS, arising from changes made to Group HSEMS Standards, will be completed during 2010/11.

4 HEALTH AND SAFETY PERFORMANCE

Health

- 4.1 There were 5,780 working days lost to sickness absence in Quarter 3, representing an average of 2.4 days per employee. This represents a 50 per cent increase on the previous quarter and an increase from the same quarter last year (2.1 days).

Days lost	Q3 2010/11	Q2 2010/11	Q3 2009/10
Sickness absence	5780	3930	5068
Average / employees	2.4	1.6	2.1

The top three sickness absence categories were coughs and colds, mental health and musculo-skeletal.

Safety

- 4.2 There were no accidental customer major injuries, employee major accidental injuries or any physical assaults on employees during Quarter 3 or during the same quarter last year. The Corporate Directorates consist mainly of non-operational staff and periodic workplace assessments and the implementation of adequate controls help to maintain this low risk environment.

5 ENVIRONMENT PERFORMANCE

Carbon emissions

- 5.1 The target for CO₂ emissions in head office buildings was met this quarter. Emissions were 15 per cent below the target for Quarter 3 and 11 per cent down on 2009/10 figures. The buildings energy efficiency retrofit initiative at 22 head office buildings (RE:FIT), ongoing staff engagement and the 10:10 campaign works have contributed to the efficiency improvements.

CO ₂ kg/m ²	Q3 10/11	Q2 10/11	Q3 09/10
Target	26.5	27.1	26.2
Emissions	22.4	30.2	25.2

Water consumption

- 5.2 The water consumption target for Quarter 3 for the head office buildings was met. Consumption at 1.2m³/person, is 15 per cent below last year's figures and well below the best practice guidelines issued by DEFRA (6.4m³/person/year).

Water use (m ³ /person)	Q3 10/11	Q2 10/11	Q3 09/10
Target	1.2	1.5	1.3
Performance	1.2	1.6	1.4

6 MAJOR INCIDENTS

- 6.1 There were no major incidents.

QUARTER 3 2010/11 HEALTH AND SAFETY – DATA SUMMARY*

LU – London Underground; ST – Surface Transport; LR – London Rail;
 CD – Corporate Directorates; CRL – Crossrail; DLR – Docklands Light Railway;
 LOROL – London Overground.

n/a - not available

Note: The data for London Underground for Quarter 3 are for four Periods all other data are for three Periods.

Health

	Sickness absence days lost			Average days lost / employee		
	Q3 2010/11	Q2 2010/11	Q3 2009/10	Q3 2010/11	Q2 2010/11	Q3 2009/10
LU	60,913	37,547	42,845	3.5	2.1	3.3
ST	10,331	6,436	10,160	2.9	1.8	2.8
LR	161	151	357	0.8	0.7	1.5
CRL	473	396	459	1.4	1.5	1.3
CD	5,780	3,930	5,068	2.4	1.6	2.1

Employee major injuries

	Employee major injuries			Rate / 1000 employees		
	Q3 2010/11	Q2 2010/11	Q3 2009/10	Q3 2010/11	Q2 2010/11	Q3 2009/10
LU	9	2	5	0.56	0.11	0.32
ST	1	1	2	0.28	0.31	0.65
LR	0	0	0	0	0	0
CRL	0	0	0	0	0	0
CD	0	0	0	0	0	0

Employee assaults (Total)

	Employee assaults			Rate / 1000 employees		
	Q3 2010/11	Q2 2010/11	Q3 2009/10	Q3 2010/11	Q2 2010/11	Q3 2009/10
LU*	462	334	472	45	30	56
ST	35	31	27	9.8	9.6	10
LR	0	0	0	0	0	0
CRL	0	0	0	0	0	0
CD	0	0	0	0	0	0

* Only includes Chief Operating Officer staff.

Customer Major Injuries

Customer major injuries				Rate / 10 ⁶ customer journeys		
	Q3 2010/11	Q2 2010/11	Q3 2009/10	Q3 2010/11	Q2 2010/11	Q3 2009/10
LU	46	22	34	0.13	0.09	0.13
ST	188	200	163	0.34	0.38	0.30
DLR	1	0	3	0.05	0	0.18
LOROL	4	2	0	0.26	0.16	0
TRAM	1	0	1	0.15	0	0.16

Contractor Staff Assaults (Total)

Contractor staff assaults				Rate / 1000 staff		
	Q3 2010/11	Q2 2010/11	Q3 2009/10	Q3 2010/11	Q2 2010/11	Q3 2009/10
BUSES	93	131	70	n/a	n/a	n/a
LOROL	28	23	18	24	20	18
DLR	32	37	7	47	60	31
TOL	14	10	10	86	62	43