

Date: 20 May 2015

Item: Managing Director's Report – Rail and Underground

This paper will be considered in public

1 Purpose

- 1.1 This paper comments on the performance of London Underground (LU) and London Rail (LR), and on the status of all the major investment projects and items of special interest, particularly in Periods 11 to 13 2014/15 (4 January 2015 to 31 March 2015).

2 Recommendation

- 2.1 The Panel is asked to note the report.

3 Summary

- 3.1 LU achieved its best ever Customer Satisfaction Score (CSS) of 85 in Quarter 4.
- 3.2 Demand for LU services continues to grow, with 40.8 million or 3.2 per cent more journeys made in 2014/15 compared with the previous year. Whilst demand is growing, passengers are benefitting from improved underlying LU performance, which is on target to meet the 30 per cent reliability improvement target in 2015.
- 3.3 Underlying safety performance remains very good. There were, however, two serious (accidental) customer incidents in Period 13. These occurred at the interface between the train and the platform, at Clapham South, and at Old Street. These incidents are being investigated to understand exactly what happened (also see paragraph 4.3).
- 3.4 Good operational performance on the Docklands Light Railway (DLR) has continued in Quarter 4, ending an impressive year which included the challenge of a new timetable being introduced. The new timetable doubled the number of off-peak trains between Woolwich Arsenal and Canning Town, and between Bank and Lewisham on weekday evenings.
- 3.5 Following the transfer of Tram fleet maintenance in-house, tram availability has increased and is now the highest it has been for over a year.
- 3.6 In LU, over 20 per cent of the target number of staff have now received the new Fit for the Future – Stations (FftF-S) five-day customer service training. Station staff helpfulness and availability across all stations in the Quarter 4 CSS survey has seen an increase of three points in the year. The early signs are that our passengers are seeing more staff helping than before the change.
- 3.7 A revised arrangement was agreed with Network Rail and Southern Railways to reduce delays on London Overground (LO) during the work at London Bridge. An update will be provided at the meeting.

4 London Underground (LU)

LU performance

		2014/15 Period 13 full year	Variance to target	Variance to target excl. IA
Lost customer hours (LCH)	Millions	22.7	2.0 ▲	-1.9 ▼
Excess journey time (EJT)	Minutes	4.63	-0.27 ▼	-0.40 ▼
Passenger journeys	Millions	1305.4	-7.6 ▼	-4.1 ▼
Customer satisfaction survey	Score	84	1 ▲	n/a
Significant injuries per million hours (moving annual average - MAA)	Rate	0.32	-0.23 ▼	n/a

LU's underlying service performance met its 2014/15 target, with full year results for EJT and LCH both better than target (excluding the effects of industrial action). This is LU's best ever performance, and continues the year-on-year reduction in Lost Customer Hours to meet the 30 per cent reduction target set by the Mayor. Full year performance was impacted by industrial action in April and August last year, and also (but with negligible impact) in December and March this year. The total LCH impact of all industrial action was just over 3.8 million LCH. With industrial action excluded, LCH was 18.9 million, 1.9 million better than target. EJT for the year has averaged 4.63 minutes, 0.27 minutes better than target (including industrial action). Excluding industrial action, it was 0.40 minutes better than target.

- 4.1 Passenger journeys in 2014/15 set a new annual high at 1,305.4 million, an increase of 3.2 per cent (40.8 million journeys) from last year, although this was 7.6 million (0.5 per cent) lower than budget.
- 4.2 LU's Quarter 4 CSS score was 85, an all-time high. It reflects notable improvements in reliability and with the delivery of line modernisations, increased service frequency on some lines. Most train service scores improved significantly, with only five per cent of respondents saying they had experienced disruption or delay.
- 4.3 LU safety performance, measured as significant injuries per million hours moving annual average (MAA), was better than target.

On 28 March, there was a customer accidental fatality at Old Street. A customer was hit by a train as he tried to help another customer who was retrieving an item dropped onto the track. He suffered critical injuries and subsequently died. The person on the track suffered life changing injuries. An investigation is underway.

At Clapham South on 12 March a customer's coat was caught in the doors of a train. The customer fell under the train and suffered minor injuries. A Formal Investigation Report has been commissioned.

- 4.4 Preparations for the start of Night Tube services on Saturday 12 September continue. Progress includes training staff and recruiting for part time station staff, instructing suppliers to make necessary changes to signalling and control systems, and engaging with stakeholders such as the London boroughs.

Industrial relations

- 4.5 There was an LU strike on Saturday 7 March called by the RMT leadership after one of its members, a train operator, was dismissed after failing two alcohol breath tests. Participation was negligible and the impact was not noticeable. LCH recorded as a result of the strike was only 0.3 per cent of the period total.
- 4.6 LU pay talks are in progress. The current four-year settlement ends this year.

LU investment

New S stock trains

- 4.7 New S stock trains are now in passenger service on the Circle, Hammersmith & City and Metropolitan lines, and rolling out on the District line. The spacious and accessible new trains bring increased capacity, plus air conditioning, wider doors and walkways and automated visual displays. They also feature onboard station announcements, CCTV and dedicated wheelchair areas.



The first of the 450 D stock carriages have been taken out of service on the District line. It is 35 years since the fleet was introduced on 28 January 1980. D stock trains will be gradually phased out until the entire fleet has been replaced by the end of 2016.

When all the S stock trains are in service, a total of 191 will be operating on the four lines,

which together represent 40 per cent of the entire LU network. The new trains form the first part of LU's investment programme on these four lines which will, when completed, increase capacity on these lines by 33 per cent.

Upminster depot transformed for S stock

- 4.8 The 55 year-old maintenance shed at Upminster has been renovated to accommodate S stock trains. The onsite works took 17 months and over 260,000 man hours. While up to 150 people worked both day and night shifts, all the works were delivered without a single lost time injury.

To accommodate S stock trains, the entire shed was lowered by over a metre and 15,000 tonnes of excavated spoil were removed. LU also made significant track layout changes and major structural alterations. This was needed because of the extra weight of over 12km of cables, replacement overhead power supplies, new lighting, heating, power and communication equipment.



Barking train operator facility modernised

- 4.9 A new facility for 180 train operators, managers and support staff has opened at Barking. It provides much improved facilities for staff including new training space.

Tottenham Court Road – major improvements continue

- 4.10 Works to improve station capacity are being completed at locations across the network to provide more space to accommodate growth in demand, as well as improve step free access.

LU completed, and successfully opened the first new part of Tottenham Court Road station as planned on Monday 12 January. The station now has a new spacious ticket hall, plus an entrance on Oxford Street and six new escalators. By 2016, the station will be fully accessible, with five new lifts providing step-free access from the ticket hall to the platforms.

Improvements to Vauxhall station

- 4.11 Vauxhall station serves a key area of regeneration and is a major interchange with bus, National Rail and river services. We are reconfiguring and refurbishing the ticket hall to create more space, adding extra ticket gates and providing step free access. Additional space has recently been created by successfully relocating the staff facilities.

Preparing for Crossrail at Bond Street

- 4.12 Work taking place at Bond Street station includes a new station entrance on Marylebone Lane, step-free access to all platforms, a connection with Crossrail and new escalators serving the Jubilee line to ease congestion. These improvements will prove vital when Crossrail starts to serve the station in 2018.

Construction has recently been completed on a number of interchange passageways and space has been reopened to the public at the base of escalators 6, 7 and 8

Victoria station modernisation

- 4.13 Victoria station is one of London's busiest interchanges; the number of people passing through the station has increased 20 per cent in 10 years. LU is opening a new ticket hall and enlarging the existing ticket hall to improve connections with National Rail services, and nine new escalators and seven lifts are being added. LU completed the civils works for the north ticket hall on 12 March 2015.

Getting ready for more trains at King's Cross

- 4.14 LU begun a programme of track renewal on the north side of the Circle line. Over two weekends, LU installed or strengthened more than 900 metres of track drainage between Euston Square and Farringdon. This was done to better manage the ingress of groundwater and reduce the signal failures it can cause. Because the area was



bombed in the Second World War it offers particular challenges. There are concrete beams built into the track to support the tunnel walls, and digging out the old track is more difficult than normal.

The work also prepares the ground for installing a new crossover west of King's Cross next year. The new tracks will give us greater operational flexibility to enable us to resolve incidents more quickly and reduce any resulting disruption. When it is complete it will be possible to reverse over 20 trains an hour east to west from the two King's Cross platforms. This is more than double the capacity available today.

All done at Russell Square

- 4.15 After 28 months of work at Russell Square, the refurbishment of three lifts is complete. The lifts were last overhauled in the early 1980s, and after 30 years of constant service a major overhaul was required.

The work has resulted in a 12 per cent increase in capacity, equivalent to an extra 10,000 passengers per day. The lifts are 20 per cent faster too, now running at 1.5 metres per second.

Improvements to Hammersmith (Hammersmith & City line) station

- 4.16 Modernisation work at Hammersmith station is now complete and includes a new exit and entrance on Beadon Road, an extended platform for longer trains and a new gateline. In addition, the ticket hall has been retiled and the flooring refurbished.



Ruislip cleaning shed transformed into new signalling fitment centre

- 4.17 Construction work on the old cleaning shed at Ruislip depot is now complete, transforming it from a storage area into a brand new automatic train control (ATC) fitment facility that will be used to install the onboard equipment on the engineering vehicle fleet.

5 London Rail (LR)

London Overground (LO) performance

		Period 13 full year	YTD variance to target
Passenger journeys	Millions	139.8	-5.2 ▼
Public performance measure (MAA)	Per cent	95.2	-0.8 ▼
Customer satisfaction survey	Score	83	2 ▲

- 5.1 London Overground (LO) carried 139.8 million people in 2014/15, 3.0 per cent more than 2013/14, although this was 5.2 million (3.6 per cent) lower than budget.
- 5.2 LO's full year CSS score of 83 was two points ahead of target.

- 5.3 LO's operational performance, as measured by the public performance measure (PPM) moving annual average (MAA) was 95.2 per cent at the end of P13. This was significantly higher than the national average for train operators of 89.7 per cent, and secured LO's third place in the national PPM league. It was, however, off target by 0.8 per cent as punctuality on the East London Line continues to be a concern.

Performance on all routes except the East London Line has improved over the past year but the impact of Southern's under-performance and ongoing engineering works at London Bridge have pulled the East London Line PPM down by around three per cent.

LO has been working with Network Rail and Southern Rail to improve regulation of trains at four key conflict points where trains are often stopped, and have agreed a revised arrangement to reduce delays.

Docklands Light Railway (DLR) performance

		Period 13 full year	YTD variance to target
Passenger journeys	Millions	110.2	2.8▲
On time departures	Per cent	99.3	0.5▲
Customer satisfaction survey	Score	89	3▲

- 5.4 DLR passenger numbers in the year were 110.2 million, 2.8 million higher than budget and 8.5 per cent higher than the corresponding position last year.
- 5.5 DLR departures and service reliability performance for the year was 99.3 per cent. On time departures were 0.5 per cent better than target.
- 5.6 DLR customers are benefitting from the new timetable introduced on 2 February. This gives them quicker journeys, shaving a minute (or 3.4 per cent) off the Lewisham to Bank route.
- 5.7 At 88, the DLR CSS score in Quarter 4 was two points better than target. This was enough to secure the DLR's highest ever full year score of 89, three points better than target.
- 5.8 KeolisAmey Docklands began operating the franchise for the DLR on Monday 8 December 2014. Operational performance since this change has remained high.

Trams performance

		Period 13 full year	YTD variance to target
Passenger journeys	Millions	30.9	0.6▲
Percentage of scheduled kilometres operated	Per cent	97.9	-1.1▼
Customer satisfaction survey	Score	89	0▲

- 5.9 Full year Tram passenger journeys were 30.9 million, 2.0 per cent higher than budget.

- 5.10 The full year scheduled kilometres operated measure was 97.9 per cent, 1.1 per cent lower than target. Performance issues throughout the first three quarters of the year can largely be attributed to issues with fleet maintenance. This has been successfully addressed by the transfer of tram fleet maintenance in-house on 7 December 2014.
- 5.11 Since the transfer of tram fleet maintenance, tram availability has increased and is now the highest it has been for over a year. The scores associated with the overall service have also increased by three points, whilst customer satisfaction is also on an upward trend.
- 5.12 Quarter 4 and full year CSS scores for trams were both 89, achieving the target.

Emirates Air Line (EAL) performance

		Period 13 full year	YTD Variance to target
Passenger journeys	Millions	1.54	-0.26 ▼
Availability	Per cent	96.3	1.5 ▲
Customer satisfaction survey	Score	93	0 ▲

- 5.13 Full year demand on EAL was 1.54 million passenger journeys; this was 32k more than last year, representing year on year growth of 2.1 per cent.
- 5.14 Full year availability was 96.3 per cent, up 1.3 per cent from 2013/14. Quarter 4 availability was affected by high gusting winds.
- 5.15 The Quarter 4 CSS score of 94 is the highest since the Air Line opened, enabling EAL to meet its annual target of 93.

LR investment

Five-car trains on the East London line

- 5.16 The programme to equip all 20 trains on LO's East London line with an extra car, making five car trains, is complete. This programme is now being extended to the North London and West London lines.



Customer numbers up on Sunday trams

- 5.17 Increasing numbers of tram customers are taking advantage of the more frequent Sunday service between Wimbledon and New Addington via Croydon town centre.

The new services were introduced on 14 December 2014. Trams now run every seven to eight minutes on this route (line 3), compared to every 15 minutes before.

One month after we introduced the extra services, the number of passengers using



the line on Sundays had already risen by almost 10 per cent. The average rose from 39,834 to 44,330.

West Anglia and Great Eastern plans on track

- 5.18 Our plans for the takeover of the lines from Liverpool Street to Enfield Town, Cheshunt and Chingford are progressing well. The operational budget has been agreed, service plans are being put in place and we will be ready to take the lines over on 31 May, given final budget agreed with the Department for Transport (DfT).

Projects to install gates at four stations are on target. Eventually every station on these lines will have ticket gates.

On 31 May, we will take control of services running from Liverpool Street to Shenfield, the Great Eastern suburban lines, which will, in due course form part of Crossrail; in the meantime this service will be known as TfL Rail. Stations will be staffed when trains are running and we will introduce a 'turn-up-and-go' accessible service. The stations will also be thoroughly cleaned, properly maintained and added to the Tube map. New trains will be delivered in 2017.

6 Customers

Fit for the Future: transforming LU customer service

- 6.1 In a phased programme, station by station, LU staff are moving to ticket halls, gate lines and platforms to take up more visible roving roles helping customers. Since 1 February, staff at 39 LU stations have moved out of ticket offices and back office areas to public parts of the station.

FftF-S includes a highly innovative training programme, involving situational role-play, putting staff in a range of customer scenarios and learning new ways of dealing with common situations. Feedback from the courses has been excellent. Under the programme nearly 5,000 staff will have the opportunity to take part in this powerful learning experience. To date, 1,376 staff have been trained.

7 People

Steve Griffiths, Chief Operating Officer (COO)

- 7.1 Steve Griffiths will be taking up the role of Chief Operating Officer (COO) of LU from the beginning of May and will be responsible for all the operations and maintenance across all LU lines. Steve previously worked at Virgin Atlantic where he led significant changes to transform the company and improve customer service. Nick Brown, who joined the team as LU's Interim COO in December, will stay in the post until June, allowing for a smooth transition.

Three UK Rail Industry Awards go to LU

- 7.2 LU has received three UK Rail Industry Awards. The Northern line won in the competitive Signalling and Telecommunications category, recognising the close collaboration between LU and Thales. This collaboration played a crucial role in ensuring the re-signalling of the line was delivered six months ahead of schedule.

LU also won in the Traction and Rolling Stock – Platform Train Interface category.

There was a Lifetime Achievement Award for Malcolm Dobell for his 45 years of service. Malcolm rose from an engineering trainee to the Head of Train Systems, in which he had responsibility for rolling stock, signalling, track and power assets and their associated standards.

Success at the London Transport Awards

7.3 At the annual London Transport Awards, LU and its partners were winners in five categories:

- (a) Transport Team / Partnership of the Year, LU – Bond Street;
- (b) Excellence in Technology, Bombardier and LU – Metropolitan, Circle, District and Hammersmith & City lines fleet;
- (c) Transport Supplier of the Year, Thales – Northern line;
- (d) LUL Station Customer Service Team of the Year, Ickenham; and
- (e) Frontline Employee of the Year, James O'Reilly, Station Supervisor, Victoria Line South (of the seven highly commended employees, six were from LU and one from LO)

S stock shines at Rail Business Awards

7.4 LU's new rolling stock for the Metropolitan, District, Circle and Hammersmith & City lines has won the Rolling Stock Excellence Award at the Annual Rail Business Awards. The submission scored an outstanding 48 out of 50 points from the judges who said 'S stock delivers improvements for both customers and operator.'

Northern and Victoria lines win at Golden Whistle awards

7.5 The Northern and Victoria lines have won three national industry awards for outstanding performance. The Golden Whistle awards are sponsored by Modern Railways magazine and organised by the Institute of Railway Operators. They recognise continued high performance, successful project delivery and exceptional contributions to the railway industry.

The three awards were in the categories of:

- (a) Outstanding Team of the Year for the Northern line; and
- (b) Best LU Line Performance (based on year-on-year improvements) – gold for the Northern line and silver for the Victoria line

Asset development team wins engagement award

7.6 At the Employee Engagement Awards, the LU asset development team has been given the Project of the Year award. The team won for its business improvement team programme, an engagement strategy to optimise the department's activities. The Employee Engagement Awards represent forward-thinking businesses that strive to do things differently and put their workforce at the heart of their operations.

Track Delivery Unit shortlisted for Construction News innovation award

7.7 A faster, cleaner and safer way of breaking up concrete during track reconditioning by the Track Delivery Unit has been shortlisted for the Company Innovation of the Year award by Construction News. The technique, known as concrete bursting, is widely used in the building trade but hadn't been successfully used at a live site in LU until trials at Tottenham Hale last summer.

Small holes are drilled into the material, and a feather-and-wedge type hydraulic burster is inserted and expanded to weaken and then break apart the concrete. The old method using mainly hand-held hammer drills, which has remained virtually unchanged for 40 years, is now being phased out.











List of appendices to this report

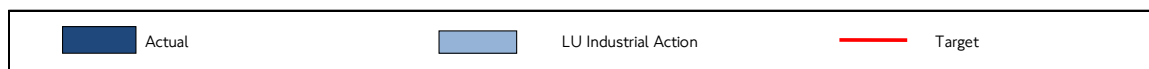
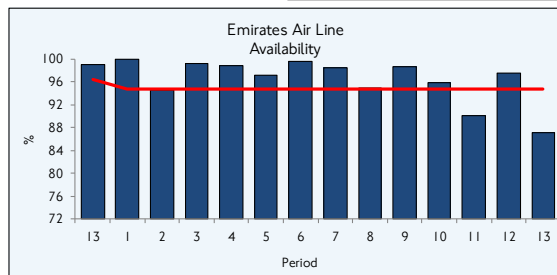
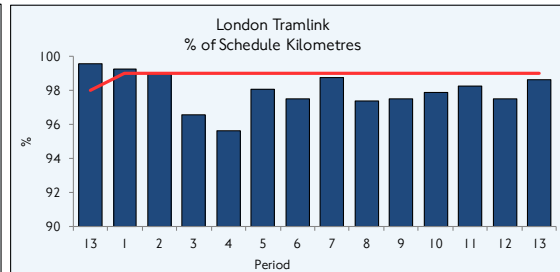
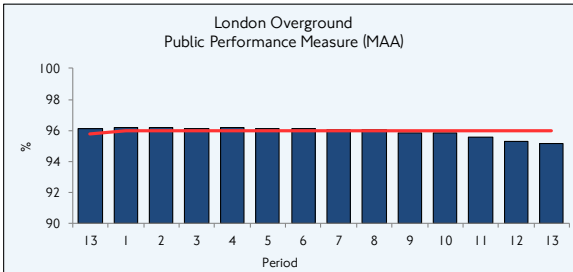
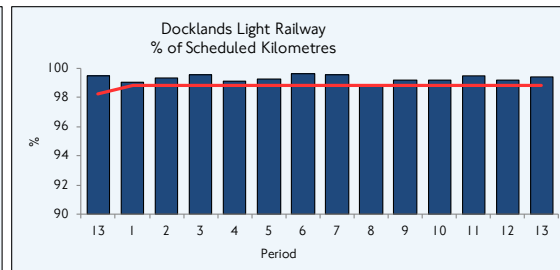
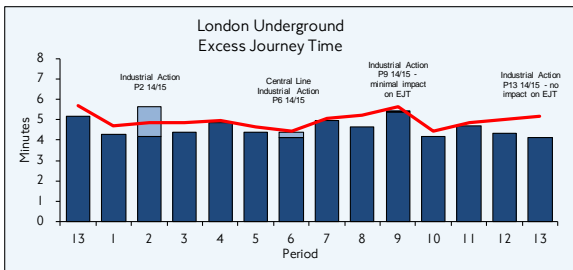
Appendix 1: Performance Charts




List of background papers

None

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London Rail and Underground						
Service Reliability - Period 13 2014/15						
			YTD Target	YTD Actual		YTD Variance
 London Underground	Excess Journey Time	Minutes	4.90	4.63		(0.27)
 London Overground	Public Performance Measure (MAA)	%	96.0	95.2		(0.8)
 Docklands Light Railway	Departures % of Scheduled Departures	%	98.8	99.3		0.5
 London Tramlink	% of Scheduled Kilometres	%	99.0	97.9		(1.1)
 Emirates Air Line	Availability	%	94.8	96.3		1.5

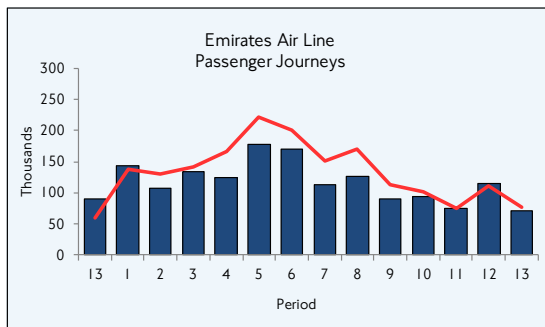
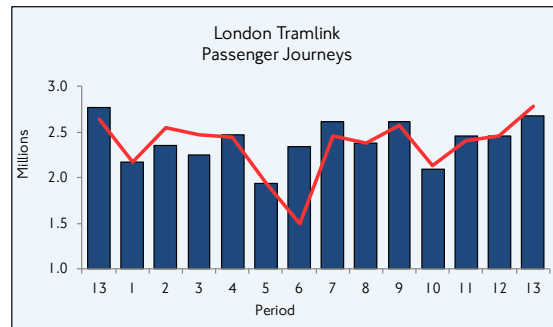
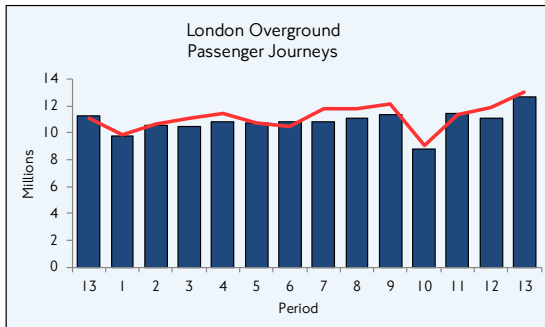
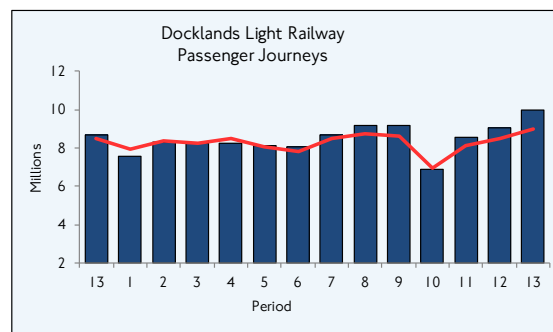
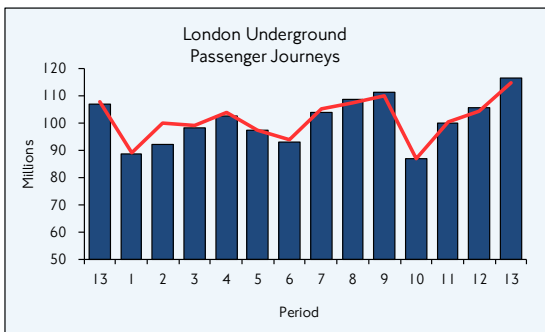


-  Meeting or better than target
-  Worse than target but within defined tolerance: 2% for Excess Journey Time, 1 percentage point for all others
-  Worse than target and outside defined tolerance

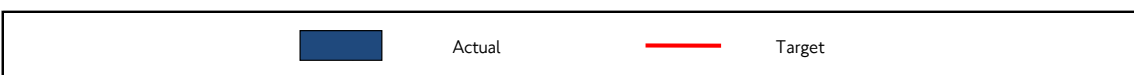
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**London Rail and Underground
Customer Demand - Period 13 2014/15**

		YTD Target	YTD Actual		YTD Variance
 London Underground	Passenger Journeys	Million	1313.0	1305.6	 (7.4)
 London Overground	Passenger Journeys	Million	145.0	139.8	 (5.2)
 Docklands Light Railway	Passenger Journeys	Million	107.4	110.2	 2.8
 London Tramlink	Passenger Journeys	Million	30.3	30.9	 0.6
 Emirates Airline	Passenger Numbers	Thousand	1800.0	1544.7	 (255.3)




Please note that the number of passenger journeys fell in Period 10, which is consistent with equivalent periods in previous years over Christmas time. There was, however, growth in passenger journeys across London Underground and London Rail in comparison to the corresponding period in 2013/14.

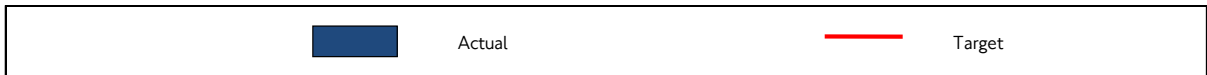
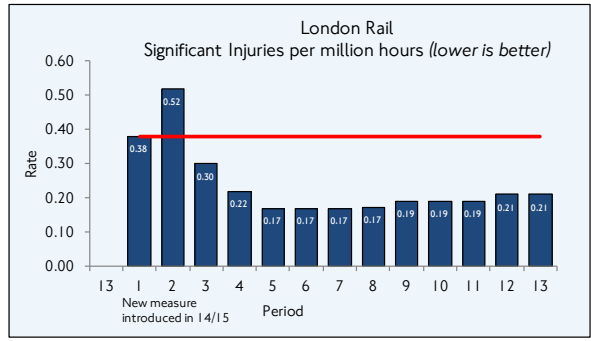
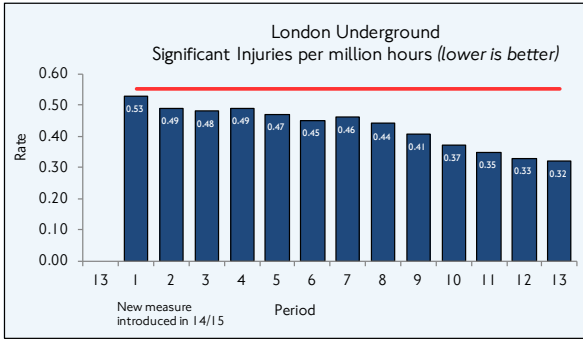


-  Meeting or better than target
-  Worse than target by up to 2%
-  Worse than target by more than 2%

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London Rail and Underground
Safety Performance - Period 13 2014/15











			Target	Actual		Variance
 London Underground	Significant Injuries per million hours (MAA)	Rate	0.55	0.32	●	0.23
London Rail	Significant Injuries per million hours (MAA)	Rate	0.38	0.21	●	0.17

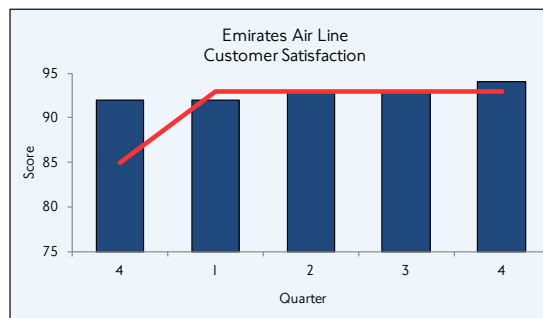
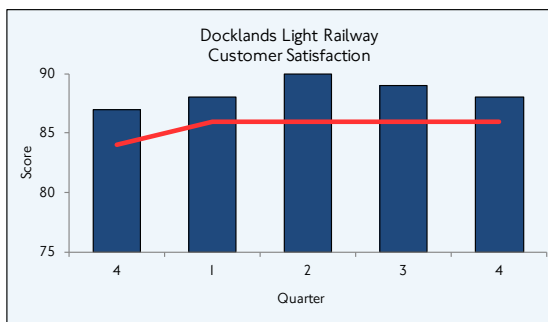



- Meeting or better than target
- Worse than target




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London Rail and Underground
Customer Performance - Quarter 4 2014/15

			2014/15 Target	YTD		YTD Variance
 London Underground	Customer Satisfaction	Score	83	84		1
 London Overground	Customer Satisfaction	Score	81	83		2
 Docklands Light Railway	Customer Satisfaction	Score	86	89		3
 London Tramlink	Customer Satisfaction	Score	89	89		0
 Emirates Airline	Customer Satisfaction	Score	93	93		0



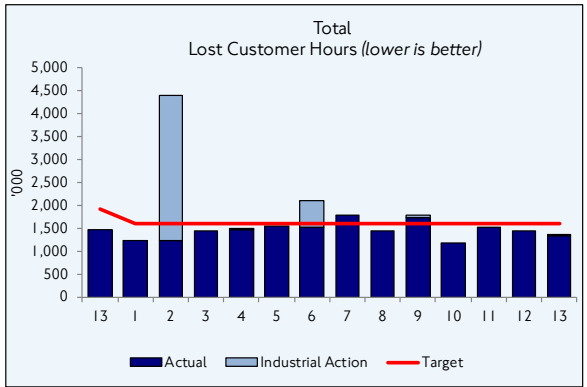
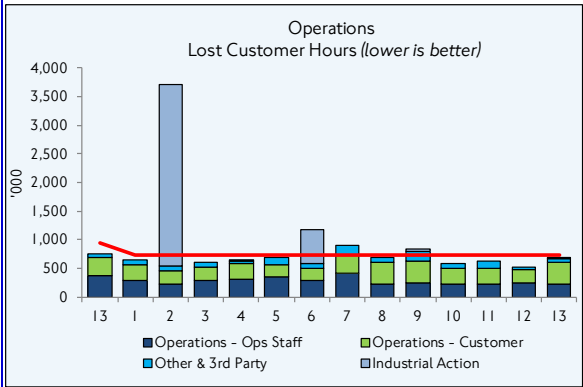
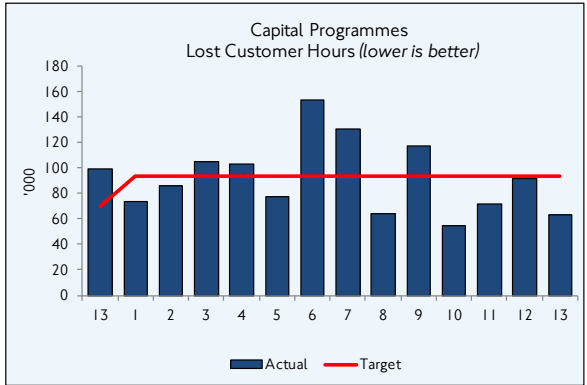
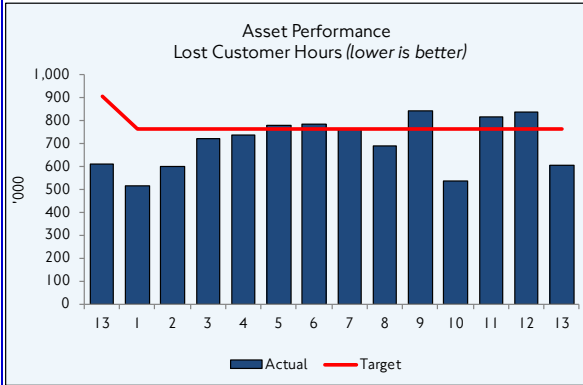
 Actual  Target

-  Meeting or better than target
-  Worse than target by up to 2 points
-  Worse than target by more than 2 points

Vertical scales on graphs may vary according to data range

Note that vertical scales on graphs vary according to data range

London Underground Lost Customer Hours - Period 13 2014/15				
	YTD Target	YTD Actual		YTD Variance
	'000	'000		'000
Asset Performance	9,939	9,236	●	(703)
Capital Programmes	1,211	1,192	●	(19)
Operations (Including Industrial Action)	9,550	12,232	◆	2,682
Total (Including Industrial Action)	20,700	22,660	◆	1,960
Operations (Excluding Industrial Action)	9,550	8,410	●	(1,139)
Total (Excluding Industrial Action)	20,700	18,838	●	(1,862)



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