

Date: 13 November 2014

Item 5: Managing Director's Report – Rail and Underground

This paper will be considered in public

1 Purpose

- 1.1 This purpose of this paper is to provide commentary on the performance of Rail and Underground and present updates on the status and progress of major investment projects and items of special interest, particularly in Periods 3 to 7 2014/15 (25 May 2014 to 11 October 2014).

2 Recommendation

- 2.1 **The Panel is asked to note the report.**

3 Summary

- 3.1 Customer satisfaction has been strong over the period, with all scores higher than earlier in the year, and Docklands Light Railway (DLR) achieving its highest score to date. Customers now have a greater choice of payment mechanisms, as contactless payment was introduced on 16 September 2014. Contactless payment now accounts for 5 per cent of pay-as-you-go journeys, and the figure continues to rise.
- 3.2 Underlying London Underground performance is on track to meet the 30 per cent reliability improvement target in 2015, and the Victoria line is consistently achieving 34 trains per hour at peak times.
- 3.3 Mike Brown and the Mayor launched the design vision for the new trains for the Piccadilly, Bakerloo, Central and Waterloo & City Lines on 9 October. These innovative trains will provide increased accessibility and will be the first deep-level Underground trains to feature air-cooling.
- 3.4 London Overground brought the new stabling facility at Silwood sidings into operation over the weekend of 13 September 2014, to provide capacity for five-car trains, and 13 station platforms have been extended to accommodate these trains.
- 3.5 Significant Injury rates are better than target on both London Underground and London Rail. There has been one fatal customer accident on the network so far this year, when a London Overground passenger fell down the stairs at

Hampstead Heath and later died in hospital. The Accident Frequency Rate in Capital Projects remains better than target.

4 London Underground (LU) Performance

		2014/15 Period 7 YTD	Variance to Target	Variance to Target excl. I.A.
Lost Customer Hours	Millions	13.9	2.8 ▲	-1.0 ▼
Excess Journey Time	Minutes	4.69	-0.09 ▼	-0.34 ▼
Percentage of Scheduled kilometres operated	%	97.2	-0.8 ▼	0.1 ▲
Passenger Journeys	Millions	676.4	-12.8 ▼	-8.6 ▼
Customer Satisfaction Survey	Score	84	1 ▲	n/a

- 4.1 Underlying year-to-date performance was 10.2 million Lost Customer Hours (LCH), 1.0 million better than target. Industrial action in April and August cost 3.8 million LCH, giving a year to date figure of 13.9 million LCH.
- 4.2 Passenger journeys between Periods 1 and 7 of 2014/15 are 676.4 million, 12.8 million less than budget but 3.9 million more than the equivalent period last year. Approximately 4.2 million journeys were lost due to Industrial Action, but most of the rest of the shortfall was due to weaker than expected demand.
- 4.3 Excess Journey Time (EJT) to date has averaged 4.69 minutes, 0.09 minutes better than target. Excluding the impacts of industrial action, a result of 4.44 minutes would have been achieved, 0.34 minutes better than target.
- 4.4 LU has operated 42.2 million kilometres so far this year, the highest ever achieved and equivalent to 97.2 per cent of scheduled kilometres. Underlying performance of 98.1 per cent was recorded, slightly better than the target of 98.0 per cent.
- 4.5 The Quarter 2 Customer Satisfaction Survey (CSS) score was 84, 1 point better than target and in line with Quarter 3 to Quarter 4 2012/2013, immediately after the Olympic Games. LU has been on or above target on this measure for five years, and the trend is on track to reach 86 by 2023/2024 as per the business plan. The Jubilee and Piccadilly lines both achieved record high levels this quarter, at 86 and 85 respectively.

Industrial Relations Update

- 4.6 ASLEF called a strike of train operators on the Central and Waterloo & City lines between 22 and 23 August 2014 over a number of specific concerns. Further planned strike action was suspended following discussions with ASLEF.
- 4.7 On the Fit for the Future – Stations change programme, there have been over eighty meetings in the past eleven months with the Trades Unions and there has been good progress through the process of consultation. Commitments

made to staff remain consistent with no compulsory redundancies and a role for anyone who wants to stay in the business, with no loss of pay, as long as they demonstrate flexibility. An update on the programme is included as a separate item on the agenda for this meeting.

London Underground Capital Programmes

Sub-Surface Railway (SSR)

- 4.8 The delivery of S Stock trains continues, beginning the roll-out on the core routes of the District line which will continue during 2015. The new trains have one more car than those they replace, providing a significant increase in capacity.
- 4.9 Negotiations continue in relation to a new Automatic Train Control signalling contract, and senior-level dialogue is taking place with Thales towards reaching an acceptable value-for-money solution.
- 4.10 Hertfordshire County Council is currently finalising their bid to the Department for Transport (DfT) for funding for the Croxley Rail Link scheme. A decision on this by the DfT is expected by the end of December 2014.

Northern Line Upgrade

- 4.11 The Northern line continued to operate reliably with a new, more intensive, timetable. This delivers an additional two trains per hour in each direction on the central London sections, capable of carrying over 1500 more people per hour.
- 4.12 All the remaining works necessary for the new timetable, which will deliver a 20 per cent capacity improvement for customers on the line, are scheduled and proceeding to plan. Track work continues to deliver the speed improvements needed to meet the target of December 2014.

Northern Line Extension (NLE)

- 4.13 The public enquiry ended on 20 December 2013, and the report has been delivered to the Secretary of State for Transport. Approval is expected imminently.
- 4.14 The tender evaluation of the four bids received on 17 March 2014 was completed to programme, and the process concluded following contract award on 4 September 2014. Ferrovial Agroman Laing O'Rourke (FLO) Joint Venture was awarded the contract to design and build the NLE and main works are expected to start in Spring 2015.
- 4.15 On 16 October 2014 Battersea Power Station Development Company (BPSDC) had their planning application for Phase 3 of their development approved by the London Borough of Wandsworth. The changes in Phase 3 from the reference design are significant and affect the design of Battersea Station. TfL and FLO are working with BPSDC to review the impact (including cost and programme implications), understand the constraints and develop a

design to meet the needs of both parties. It is expected that a design will be agreed by January 2015.

Victoria Line Upgrade

- 4.16 The line is consistently delivering 34 trains per hour at peak times. Fleet performance saw rolling stock Mean Distance Between Service Affecting Failures (MDBSAF) achieve over 100,000km between service affecting failures, which was more than double the rate over the previous four weeks.

New Tube for London (NTfL)

- 4.17 On 9 October 2014, the Mayor and Mike Brown formally launched our design vision for the next generation of trains to serve customers on the Piccadilly, Bakerloo, Central and Waterloo & City lines. We have worked with transport design agency PriestmanGoode to ensure that the 250 new trains will be in keeping with LU's traditions for innovation and fantastic design. These trains, which we aim to introduce from the mid-2020s, will be the first deep-level Underground trains to feature air-cooling. They will also be more accessible than the trains they replace, providing step-free access from the platform to the cars, and will also have wider doors and a walk-through design similar to the new trains on the London Overground and the Metropolitan, Circle, Hammersmith & City and District lines.
- 4.18 The new trains will be introduced as part of a wide-ranging modernisation project which will increase capacity on the four lines mentioned above by up to 60 per cent. An exhibition on the new fleet is at King's Cross St. Pancras station and runs until 16 November 2014.
- 4.19 A presentation on NTfL is included as a separate item on the agenda for this meeting.

Track Renewals

Uxbridge Block Closure

- 4.20 This summer saw major engineering works on the Uxbridge branch of the Metropolitan and Piccadilly lines as part of the wider programme of track renewal. These were successfully completed ahead of schedule.
- 4.21 These major works required both lines to be part-closed between Ruislip and Uxbridge (and to Rayners Lane and Wembley Park on some weekends) from Saturday 19 July until Sunday 10 August 2014. With the works being completed early, the Metropolitan line was able to run a special train service on Friday 8 August 2014 for customers.
- 4.22 18,000 tonnes of new ballast, 10,000 new fast-clip sleepers and 5,000 conductor rail pots were installed during the works. Works completed include 5.9 km of new ballasted track replaced between Ruislip and Uxbridge. LU used this major closure to do more work than originally planned, including approximately 1km more of ballasted track replacement.

Overnight Ballasted Track Renewal

- 4.23 The first week in November will see the first anniversary of delivery of new ballasted track during our short overnight 'Engineering Hours', and we have now completed more than 1,000m over five different sites. We have in this time developed two different methodologies, with mini-diggers and with a vacuum suction machine, each appropriate to different parts of the railway. This has already saved the need for four weekend closures, including one affecting the vital Piccadilly line route to Heathrow Airport and we have shown that it is possible to deliver in the sub surface tunnels as well as in the open. Work continues on two or three sites simultaneously on most weekday nights.

Major Stations Improvement

Contract for fit out of new Bank entrance awarded

- 4.24 Construction specialists Hochtief UK Limited have been awarded the contract to fit out the new Waterloo & City line station entrance 'box' at Bank station.
- 4.25 The award of this contract is an important step towards delivering the new Bank station, and to meeting the challenge of increasing demand, helping to provide quicker and easier journeys for customers. The step-free Waterloo & City line entrance and ticket hall, with new escalators and lifts, will form a key part of the upgrade plans for Bank, one of London's busiest stations, and will complete in July 2017.

Euston escalators

- 4.26 The first escalator to be refurbished as part of the escalator refurbishment project at Euston was completed and returned to service two weeks ahead of schedule.
- 4.27 The escalators are being refurbished in succession to enable an escalator to be running in the up direction from the Victoria and Northern (Bank branch) platforms at all times. The schedule has been accelerated to reduce the impact on our customers.

Tottenham Court Road Station Upgrade

- 4.28 The fit-out of the new ticket hall is progressing, and while the programme remains challenging, we currently remain on target to achieve partial opening in January which will allow major structural works to start on the Central line platforms. Work is progressing as scheduled on the escalator installations and fit-out works to the new Oxford Street entrance and the Northern line concourse.

Victoria Station Upgrade

- 4.29 The ground stabilisation jet grouting has now been successfully completed with almost 2,200 jet grout "columns" constructed to stabilise the poor ground ahead of tunnelling. This is the first large-scale use of jet grouting for tunnel construction in the UK and has already seen the project shortlisted for the New Civil Engineer International Tunnelling Awards.

- 4.30 The north ticket hall ventilation structure has been completed and the plant room slabs cast. Three sections of the south ticket hall plant room slab are complete and sewer connections in the west bound link are progressing to plan.

Bond Street Station Upgrade

- 4.31 The northern tunnels concourse has been enlarged to its full cross section and the excavation of the escalator barrel for the new northern escalators (No 9 and 10) has been completed. The excavation for the new link below the Central line platforms to the south is progressing well. Strengthening works to the temporarily closed Jubilee line platforms are progressing to plan ahead of a return to passenger service in December 2014.

5 London Rail

London Overground Performance

		Period 7 YTD	YTD Variance to Target
Passenger Journeys	Millions	73.9	-2.0 ▼
Public Performance Measure (MAA)	%	96.0	0.0 ▲
Customer Satisfaction Survey	Score	84	3 ▲

- 5.1 London Overground (LO) carried 73.9 million people in Periods 1 to 7, 2.0 million below target and 1.5 per cent down on the corresponding position in 2013/14. This is mainly due to the impact of weekend closures required to deliver our capacity improvement programmes and for Crossrail works, the impact of which was underestimated in the budget.
- 5.2 LO's operational performance, as measured by the Public Performance Measure (PPM), averaged 96.3 per cent for the first seven Periods of the year. The Moving Annual Average (MAA) measure at 96.0 per cent was on target and more than sufficient to maintain LO's second place ranking in the national PPM league. Punctuality on the East London Line is a concern however, particularly the impact of Southern's poor current performance on services south of New Cross Gate. NR performance is a key concern.
- 5.3 LO's CSS score of 84 has been maintained through Quarter 2 and remains 3 points ahead of target. Solid operational performance, good weather and seasonality of demand are likely to have driven this. However, Quarter 3 is traditionally more challenging for customer satisfaction.

London Overground Capacity Improvement Programme

Devolution of Rail Services

- 5.4 In support of the Mayor's Rail Vision, responsibility for West Anglia inner rail services between Enfield Town/Chingford/Cheshunt via Seven Sisters to Liverpool Street, and Romford to Upminster (West Anglia Inner services), will

transfer to London Overground on 31 May 2015. The current Overground concessionaire, London Overground Rail Operations Ltd (LOROL), will run these services under a variation to its existing Concession Agreement until the expiry of the concession in November 2016. Work continues with the current operator (Abellio), DfT, LOROL and Network Rail to ensure a successful transfer.

- 5.5 At the same time, Greater Anglia services between Shenfield and Liverpool Street will transfer to Crossrail (Crossrail Eastern), and will be operated under a new concession awarded to MTR Corporation (Crossrail) Limited. This will mark the start of Crossrail operations as part of TfL Rail services.

London Overground Concession

- 5.6 The LO concession is due for renewal in November 2016 and preparations are underway for the specification for and procurement of the next operator. The procurement will broadly follow the process established in appointing operators for both Crossrail and Docklands Light Railway, drawing heavily on the learning from those processes and building on the growing expertise within TfL for successfully delivering train operator contracts.
- 5.7 A detailed programme is in the process of being drawn up culminating in contract award in Summer 2016.

Silwood Sidings

- 5.8 The new stabling facility at Silwood sidings, with capacity for ten five-car trains, has been completed. These sidings were completed within 18 months of gaining project authority – a record for railway projects of this size in the UK.
- 5.9 The sidings facility at Silwood came into operation over the weekend of 13 September 2014, ahead of the first five-car trains coming into service between Highbury & Islington and Clapham Junction/New Cross Gate/Crystal Palace and West Croydon in November 2014, in advance of the public milestone at the end of 2014. The sidings will provide overnight stabling for ten trains. Work to extend 13 station platforms to accommodate the running of five car trains has also been completed.
- 5.10 Platform 2 at Willesden Junction will be extended during October and November 2014 and required the suspension of services using the low-level part of the station for five days, from 29 October and 2 November 2014, as there were alterations to both track and platform. During this period, reduced London Overground services operated on some sections of the network, and bus replacement services were provided where necessary. Also during this period, the Bakerloo line did not run between Harrow & Wealdstone and Queen's Park, although it continued to run between Queen's Park and Elephant & Castle. The work was scheduled to coincide with school half-term to help reduce disruption to our customers, as fewer journeys are made during school holidays. A communications programme was in place to advise customers of the closure.

Docklands Light Railway Performance

		Period 7 YTD	YTD Variance to Target
Passenger Journeys	Millions	57.3	-0.1 ▼
Departures	%	99.3	0.5 ▲
Service Reliability	%	99.4	n/a
Customer Satisfaction Survey	Score	90	4 ▲

- 5.11 Passenger numbers in the year to Period 7 are 57.3 million, 0.1 million lower than target but 6 per cent higher than the corresponding position last year.
- 5.12 DLR Departures and Service Reliability performance for the year to date are 99.3 per cent and 99.4 per cent respectively. On Time Departures are now 0.5 per cent ahead of target.
- 5.13 The DLR CSS score increased to 90 during Quarter 2, 4 points better than target. Solid operational performance, good weather and seasonality of demand are the likely causes. However, Quarter 3 is traditionally more challenging for customer satisfaction.
- 5.14 The new franchise for the railway will commence on Sunday 7 December 2014. Mobilisation work is on programme with KeolisAmey Docklands (KAD), as are the transfer arrangements from Serco Docklands. The new franchise will be formally launched on 8 December 2014.

Trams Performance

		Period 7 YTD	YTD Variance to Target
Passenger Journeys	Millions	16.2	0.6 ▲
Percentage of Scheduled kilometres operated	%	97.8	-1.2 ▼
Customer Satisfaction Survey	Score	90	1 ▲

- 5.15 Current year passenger journeys are 16.2 million to Period 7, around 4 per cent higher than target.
- 5.16 The Year-to-date Scheduled Kilometres Operated measure is 97.8 per cent, 1.2 per cent lower than target. Performance was impacted by fleet maintenance issues, which are being addressed by bringing tram maintenance in-house from Bombardier. We are working with Bombardier to commence shadow running in late November with the transfer of responsibility from 7 December 2014.
- 5.17 CSS scores are above the target of 89 at 90 for Quarter 2.

Emirates Air Line (EAL) Performance

		Period 7 YTD	YTD Variance to Target
Passenger Journeys	Millions	0.97	-0.18 ▼
Customer Satisfaction Survey	Score	93	0 ▲

5.18 Current year demand is 0.97 million passenger journeys; EAL passenger revenues remain in excess of operating expenditure.

5.19 The Quarter 2 CSS score of 93 was on target.

Customer Contactless payment

5.20 Our customers now have even greater flexibility, choice and value for money when they use our services, thanks to the introduction of contactless payment on London Underground and our rail services which took place on 16 September 2014.

5.21 All LU, Overground, DLR, and tram customers can now use their contactless debit or credit cards for 'pay as you go' travel.

5.22 Contactless payment has been available on our buses since 2012 and it is widely used in shops and cafes too. It means customers no longer have to queue to top-up an Oyster Card, or even carry one at all if they choose not to.

5.23 Contactless journeys now account for 5 per cent of all pay-as-you-go journeys on London Underground and our rail services, a figure which is growing every day.

Cooling the Tube fan refurbishment projects

5.24 The Cooling the Tube programme has successfully refurbished two disused fans in ventilation shafts serving the Central and Piccadilly lines. The huge fans, near Redbridge and Gloucester Road stations, have been out of service for many years, but are now helping to lower the temperature across our network. The fans draw hot air from the tunnel and expel it into the atmosphere, cooling the tunnels in the area by up to 1.5 degrees. This reduces the residual heat in tunnels generated by our trains. More work like this is required to reduce the temperature across our network as we look to run more trains in the future, and planning is underway to carry out works on another four ventilation shafts.

Evolution of Croydon Trams

5.25 Since May 2000, Croydon Trams has steadily increased its passenger numbers to 31 million in 2013. Now one of the busiest tram services in Europe, it connects users with 50 local bus connections, interchanges with seven main line stations and the Underground at Wimbledon, removing the equivalent of four million car journeys a year from London's roads.

- 5.26 To celebrate the continuing evolution of the tram, a short documentary film has been produced. The film illustrates our continuous innovation, and the commitment to improving this important community transport link which runs into the heart of every town centre on its route.
- 5.27 The fleet is steadily expanding, with more new-generation trams introduced to support London's economic development and population growth.
- 5.28 A paper on Trams strategy is included as a separate item on the agenda for this meeting.

People

Viewpoint

- 5.29 Viewpoint, the TfL-wide employee survey, gives all permanent and fixed-term employees the chance to have their say on what it's like to work here. The Viewpoint survey for this year opened for responses on 20 October, with all feedback due by 14 November 2014. Results will be available in early January 2015.

Tottenham Court Road Station Upgrade receives RoSPA Gold award

- 5.30 The Tottenham Court Road station modernisation has been awarded gold at the Royal Society for the Prevention of Accidents Occupational Health and Safety Awards 2014.
- 5.31 The awards recognise a commitment to continuous improvement in accident and ill-health prevention at work. The scheme is open to businesses and organisations of all types and sizes from across the UK and overseas and encourages the raising of occupational health and safety standards across the board.

National Rail Awards

- 5.32 LU won three separate categories in this year's awards.
- 5.33 LU's project to introduce lightweight aerospace materials to the railway, with the aim of reducing maintenance and electricity costs, won the prestigious Stephenson Award for Engineering Innovation. This is a further acknowledgement by the wider industry that as an organisation we remain committed to coming up with innovative solutions to old problems. The Piccadilly line rolling stock team won the Maintenance Team of the Year award, a testament to the work they do to keep their 41-year-old rolling stock in good working order. The Northern line upgrade, in partnership with Thales, won the Outstanding Team Work Award. Two other LU projects were also shortlisted for this category: Tottenham Court Road (Goslett Yard Box), and the Track Partnership.

National Transport Awards

- 5.34 Teams and individuals across LU were also recognised at this year's prestigious National Transport Awards.

- 5.35 Wesley Felix, Train Operator on the Bakerloo line was awarded Frontline Employee of the Year. He was recognised for assisting an injured passenger while driving on the Bakerloo line.
- 5.36 London Underground Control Centre (LUCC) were joint winners for the Most Innovative Project. The LUCC project delivered the underpinning technology, connectivity and the capability for cross functional teams such as British Transport Police, Network Operations and Computerised Track Access Control to move into one central command centre.
- 5.37 Jonathan Byrne, Customer Service Assistant based at Covent Garden station, LU and Aktarul Miah, PMO Manager Infrastructure Service Delivery, Customer Experience, were both highly Commended in the Frontline Employee of the Year category.

List of Background Papers:

None

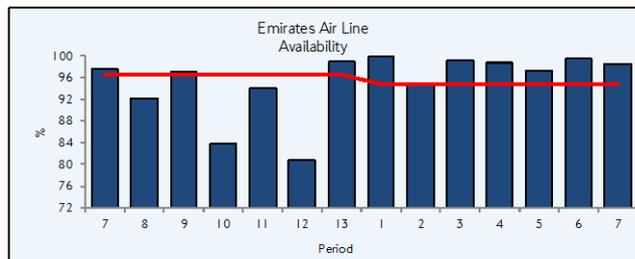
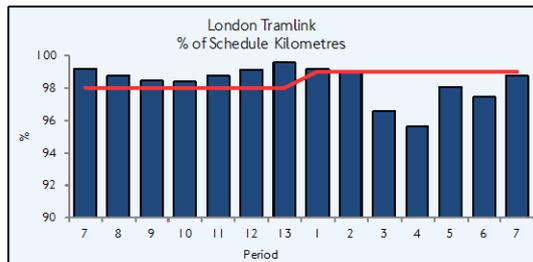
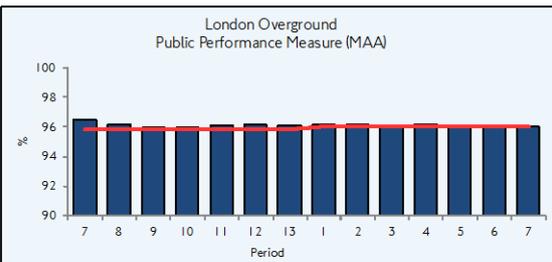
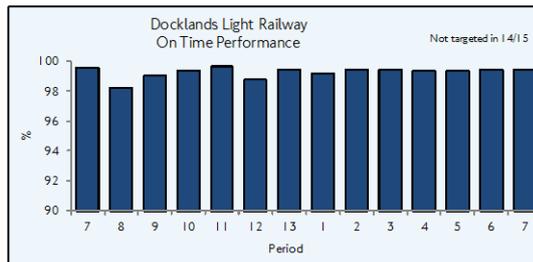
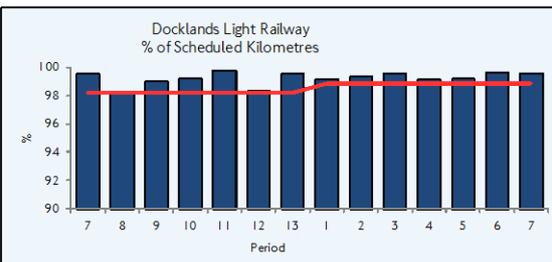
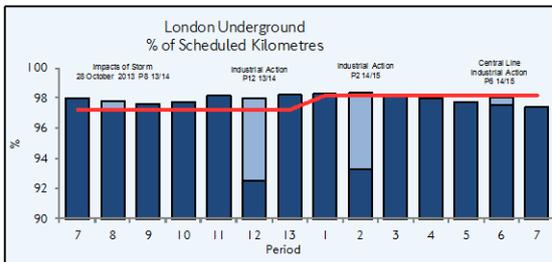
List of appendices to this report:

Appendix 1 – Performance Charts

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London Rail and Underground
Service Reliability - Period 7 2014/15

			YTD Target	YTD Actual		YTD Variance
 London Underground	% of Scheduled Kilometres	%	98.0	97.2		(0.8)
	Excess Journey Time	Minutes	4.78	4.69		(0.09)
 Docklands Light Railway	Departures % of Scheduled Kilometres	%	98.8	99.3		0.5
	On Time Performance	%	N/A	99.4	Not Targeted in 14/15	
 London Overground	Public Performance Measure (MAA)	%	96.0	96.0		0.0
 London Tramlink	% of Scheduled Kilometres	%	99.0	97.8		(1.2)
 Emirates Air Line	Availability	%	94.8	98.3		3.5

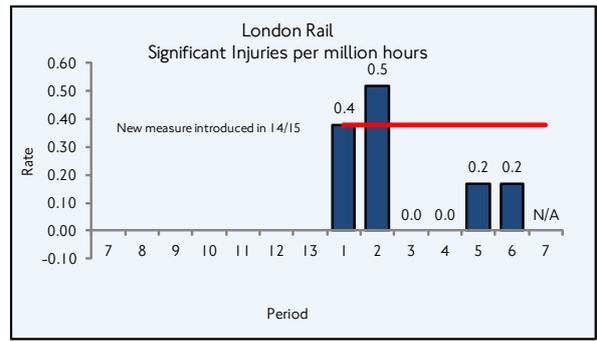
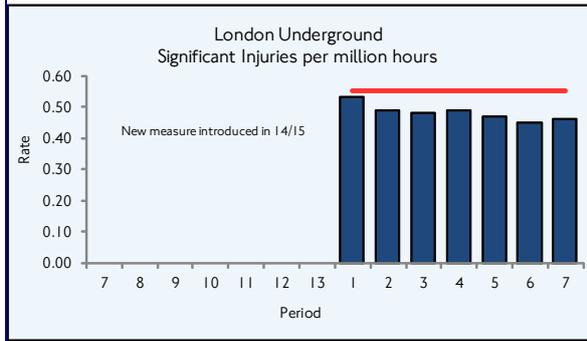


-  Meeting or better than target
-  Worse than target but within defined tolerance: 2% for Excess Journey Time, 1 percentage point for all others
-  Worse than target and outside defined tolerance

Note that vertical scales on graphs may vary according to data range

London Rail and Underground
Safety Performance - Period 7 2014/15

			Target	Actual		Variance
 London Underground	Significant Injuries per million hours	Rate	0.55	0.46	●	0.09
London Rail	Significant Injuries per million hours	Rate	0.38	N/A		N/A



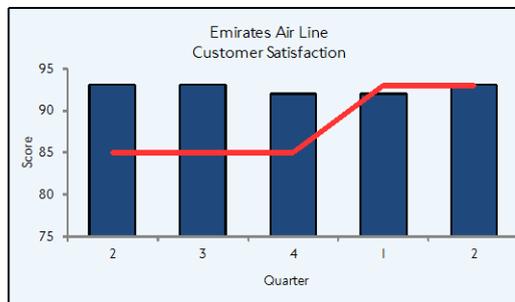
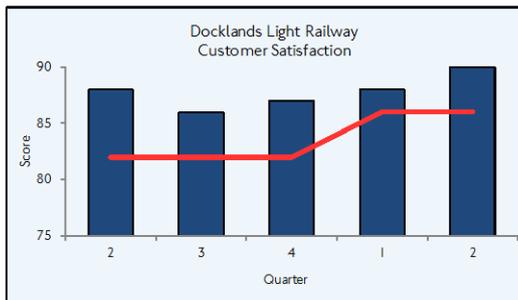
Actual
 Target

● Meeting or better than target
■ Worse than target

Note that P7 data is not yet available for London Rail

London Rail and Underground
Customer Performance - Period 7 2014/15

			2014/15 Target	YTD		YTD Variance
 London Underground	Customer Satisfaction	Score	83	84		1
 Docklands Light Railway	Customer Satisfaction	Score	86	90		4
 London Overground	Customer Satisfaction	Score	81	84		3
 London Tramlink	Customer Satisfaction	Score	89	90		1
 Emirates Air Line	Customer Satisfaction	Score	93	93		0



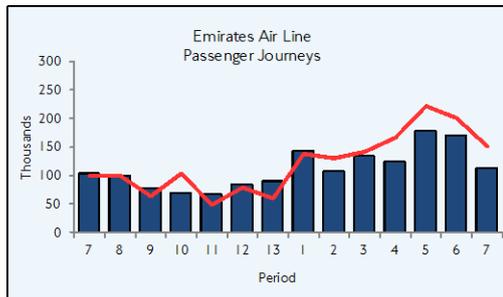
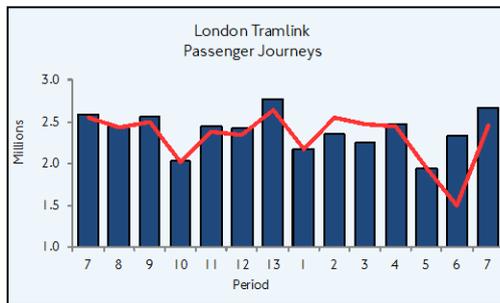
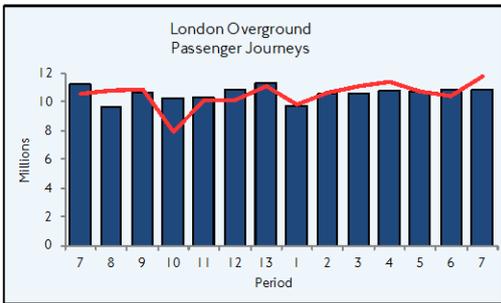
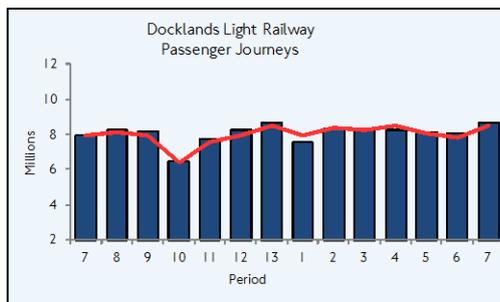
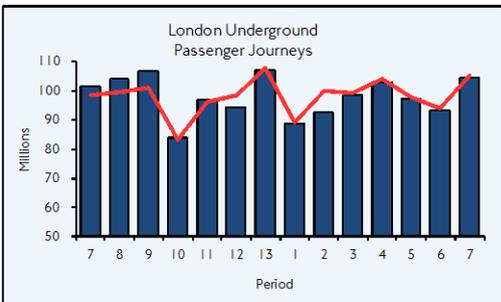
 Actual  Target

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

Note that vertical scales on graphs may vary according to data range

London Rail and Underground
Customer Demand - Period 7 2014/15

		YTD Target		YTD Actual		YTD Variance	
	London Underground	Passenger Journeys	Million	689.2	676.4		(12.8)
	Docklands Light Railway	Passenger Journeys	Million	57.5	57.3		(0.1)
	London Overground	Passenger Journeys	Million	75.9	73.9		(2.0)
	London Tramlink	Passenger Journeys	Million	15.6	16.2		0.6
	Emirates Air Line	Passenger Numbers	Thousand	1151.5	971.5		(180.0)

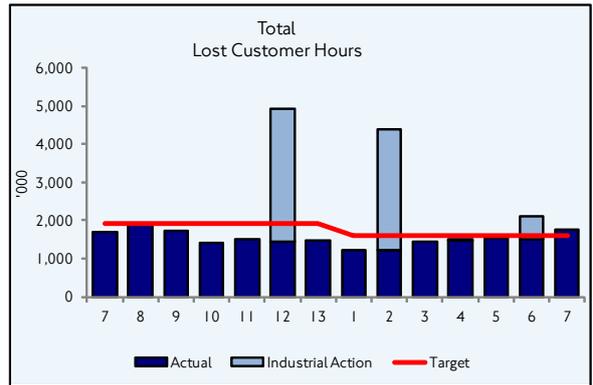
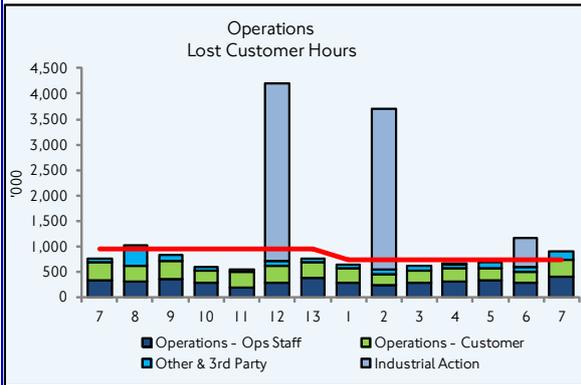
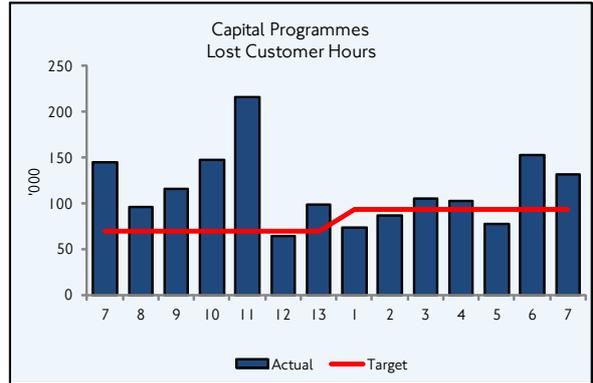


-  Meeting or better than target
-  Worse than target by up to 2%
-  Worse than target by more than 2%

Note that vertical scales on graphs vary according to data range

**London Underground
Lost Customer Hours - Period 7 2014/15**

	YTD Target '000	YTD Actual '000		YTD Variance '000
Asset Performance	5,352	4,883	●	(469)
Capital Programmes	652	730	◆	78
Operations (Including Industrial Action)	5,142	8,323	◆	3,181
Total (Including Industrial Action)	11,146	13,936	◆	2,790
Operations (Excluding Industrial Action)	5,142	4,557	●	(585)
Total (Excluding Industrial Action)	11,146	10,170	●	(976)



Note that vertical scales on graphs vary according to data range