

Transport for London

Rail and Underground Panel

Subject: Managing Director’s Report – Rail and Underground

Date: 15 November 2012

1 Purpose

- 1.1 The purpose of this report is to describe the performance of London Rail (LR) and London Underground (LU) from period 3 to period 6 of the year 2012/13 (27 May to 15 September 2012) and provide updates on the status and progress of major investment projects and items of special interest.
- 1.2 The Panel is asked to note this report.

2 Rail and Underground Performance over the 2012 Games period

- 2.1 The Olympics ran from the evening of 27 July (Opening Ceremony) to the evening of Sunday 12 August (Closing Ceremony), and the Paralympics from 29 August to 9 September. Demand increased significantly compared to the previous year: The table below shows the changes in demand during the Games period.

Demand	Olympics	Paralympics
Underground	62m (34% increase)	39m (18% increase)
Overground	6.4m (26% increase)	4.1m (17% increase)
DLR	6.9m (100% increase)	4m (16% increase)

- 2.2 Emirates Air Line, which began operating on 28 June, saw a succession of record-breaking days. Saturday 11 August, with 32,000 journeys was the busiest day on record.
- 2.3 Tuesday 7 August was the busiest day in the Underground’s history, with over 4.5 million passengers using the system.
- 2.4 Revenue figures increased by over £18m (21 per cent) despite the fact that Olympic ticket holders were also issued with a corresponding One Day travel card.
- 2.5 To meet this demand, enhanced timetables were operated that resulted in a nine per cent increase in scheduled train service capacity on the Tube during the Olympics and seven per cent during the Paralympics.
- 2.6 Rail and Underground operated reliably during the Olympic and Paralympic Games, despite running more services for longer each day and with record

number of passengers, continuing the trend of improving performance in recent periods. The table below shows the reliability achieved during this period.

Reliability (% schedule)	Olympics	Paralympics
Underground	98%	99%
Overground	98%	98%
DLR	99%	99%

- 2.7 Reliability, as measured by Lost Customer Hours (LCH) reduced by 28 per cent during the Olympics, and 51 per cent during the Paralympics compared to the average of periods 1-4 2012/13, with particular improvement in the number of delays due to staff including Operator Not Available.
- 2.8 The net result, of a more intense service being operated more reliably, was an 11 per cent increase in train service capacity and 10 per cent more kilometres run (627,000 kms) over the duration of the Games. This level of service, together with the deployment of Travel Ambassadors and Incident Customer Service Assistants during the Olympics contributed to record levels of Customer Satisfaction on the Underground.
- 2.9 The London Underground Customer Satisfaction Surveys scores were 85 for the 2012 Games. Overall satisfaction scores were highest for Olympic/Paralympic event attendees and volunteers/workers (88), and still at record levels for work related journeys (83).

3 London Underground Performance

Passenger Numbers

- 3.1 Underground demand exceeded expectation between periods 3 and 6 with 378.1 million passenger journeys versus the target of 350.3 million. This was a rise of 7.4 per cent compared with the corresponding period last year. For the year to date, the number of passenger journeys remains ahead of target by 32.8 million.

Service Performance

- 3.2 Excess journey time averaged 5.13 minutes which was 0.57 minutes better than the target for periods 3 to 6. The percentage of schedule kilometres operated was 97.8 per cent, bettering target by 0.8 per cent. The reliability of the railway as measured by LCH was 7.0 million, 1.3 million lower than the target. Period 6 in particular contributed to the excellent results for each of the Key Performance Indicators above with best ever performances achieved.
- 3.3 The only significant disruption to service was caused by a burst Thames Water main on 6 June (Period 3) in the Stratford area which affected Central line services when a vast quantity of water flooded both the east and westbound tunnels between Mile End and Stratford stations.
- 3.4 There were 0.23 Accidental Major Injuries per million hours on LU and LR Infrastructure. This is calculated as a moving annual total rate and is 0.04 better than the target rate. There were eight Accidental Major Injuries to Customers and one to an LU Contractor, there were none to LU or Tube Lines Employees.

This rate has decreased during the first half of 2012/13 from 0.27 in Period 1 to the current rate of 0.23.

4 Line Upgrades

Sub Surface Railway (SSR)

- 4.1 The entire fleet of trains on the Metropolitan lines are now S Stocks (S8) and their reliability continues to improve – reaching 18,856 km between failures by the end of the period.
- 4.2 In July 2012, and in preparation for the introduction into time-tabled service in December 2012, a preview service of the new air-conditioned S7 train (seven car S Stock) commenced service between Hammersmith and Moorgate. These trains will gradually be rolled out to replace the existing C and D stock trains in use on the Hammersmith & City, Circle and District lines. The programme remains on schedule to complete this by December 2014 for C stock replacement (Hammersmith & City, Circle and Wimbledon to Edgware Road District line service) and December 2016 for D Stock replacement (remainder of the District line).

Victoria Line Upgrade

- 4.3 The Victoria line upgrade was completed on 26 September 2012. The new signalling system controls the 47 new trains, allowing for higher frequencies of service and reduced journey times. The new timetable that will be introduced from early 2013 will give 33 trains an hour at peak times, increasing capacity by about 10,000 more passengers an hour.

5 Other Items

Escalator contract

- 5.1 LU and Crossrail have jointly awarded a major contract to Otis, covering the procurement and management of 107 escalators throughout their life at both Crossrail and LU stations. Of these, 50 heavy duty metro-type escalators will be installed on LU over the next 10 years. The first will be installed at Bank in 2013, with installations at Greenford, Embankment and Marylebone stations following.

Tube power network contract restructure

- 5.2 LU served formal notice to Powerlink that the 30 year PFI contract for the operation and maintenance of its high-voltage electrical power network will come to an end in August 2013, 15 years ahead of the contract expiry date. LU will work closely with Powerlink to ensure a smooth transition to the new arrangements. This restructure will result in significant savings by avoiding expensive financing costs that would have come with continuing the contract to its end.
- 5.3 The redevelopment of Victoria Underground station is well underway and is due to be complete in 2018. The work to double the size of the south ticket hall has now begun.

- 5.4 This work will see a three ticket hall station including a brand new north ticket hall and entrance, a new south ticket hall twice the size of the existing one, and nine new escalators and seven new lifts making the station step-free for the 250,000 passengers using it every day. This increases the numbers of passengers with accessibility.

Alarm Covers

- 5.5 Covers installed on Passenger Emergency Alarms on the Jubilee, Northern, Piccadilly and Victoria lines were completed on 17 July 2012 and have been successful in reducing the number of unintended and malicious alarm activations. As a result of these modifications, LCH caused by alarm activations have reduced by 97 per cent since 2011.

Paddington Station

- 5.6 On 24 June 2012, LU opened a new station entrance and concourse at Paddington suburban station for the Hammersmith & City line. The works include two new stairways, improved CCTV and extended platforms to accommodate longer 'S' stock trains. Work has now commenced on the next phase of the project to introduce lifts to platforms and a new gateline by 2014.

6 London Rail Performance

London Overground

- 6.1 London Overground passenger journeys continue to grow strongly and are 16 per cent better than target at 55.4 million for the year to date. Extra demand created by the Games during periods 5 and 6 has contributed to this increase.
- 6.2 London Overground exceeded its Customer Satisfaction target by three points in the second quarter of 2012/13 with a score of 83.
- 6.3 For the sixth consecutive period, London Overground remains in second position in the national Network Rail Public Performance Measure MAA league table, with a score of 96.7 per cent.

New South London Line

- 6.4 The high level programme remains on schedule, with planned completion in time for Network Rail timetable change in December 2012.
- 6.5 The formal implementation agreement with Network Rail for works at Clapham Junction station was the signed by Network Rail on 11 September 2012.

Docklands Light Railway

- 6.6 Year to date journeys of 48.5 million were 5.2 million ahead of target across the whole network, in part due to demand created by the Games.
- 6.7 Overall, performance improved in the second quarter (period 3 to 6) compared with the first quarter, with most measures achieving target or better than target performances.

Emirates Air Line (Cable Car for London)

- 6.8 Passengers and revenue have almost reached the full year forecast level after only three periods of operation. The service carried 538,218 passengers in period 5 and 381,347 in period 6 with numbers particularly high during the Olympic and Paralympic Games. In period 6, 97.7 per cent availability was achieved.

Tramlink

- 6.9 The Customer Satisfaction score for the second quarter was 87, the same as the last quarter and remains one point above target
- 6.10 Tram passenger journeys at 13.8 million for the year to date are marginally above target.
- 6.11 Service performance for Trams is 0.1 per cent above target, as measured by scheduled kilometres, at 98.1 per cent for the year to date. The second quarter average was 98.7 per cent, 0.7 percent above target and period 6 performance was close to the best performance achieved this year at 99.1 per cent mainly due to the reduction of technical failures on the new Stadler trams.

7 Rail Planning

Rail Franchising and Devolution

- 7.1 TfL gave evidence to the House of Commons Transport Committee on rail decentralisation. The Department for Transport (DfT) will publish a summary of the responses to the consultation (which closed on 28 June 2012) in November 2012.

Industry Liaison





- 7.2 TfL responded to the DfT's combined Thameslink, Southern and Great Northern franchise renewal consultation in August 2012.

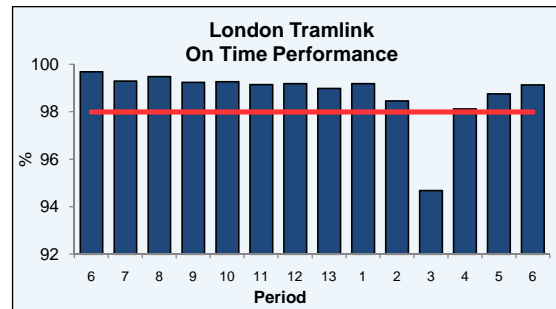
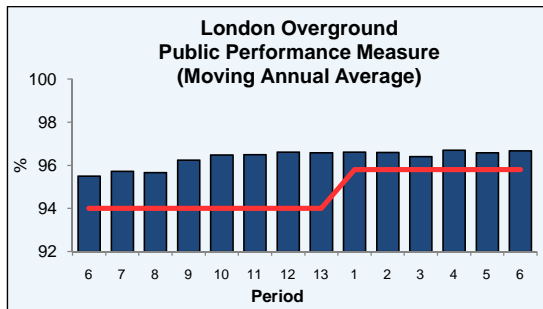
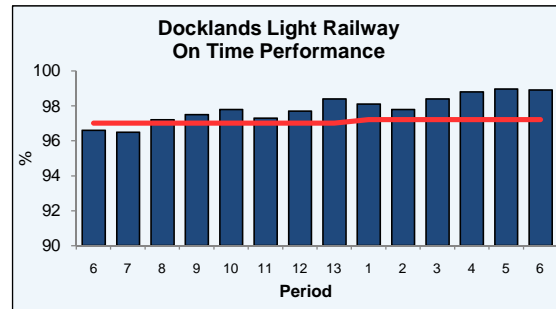
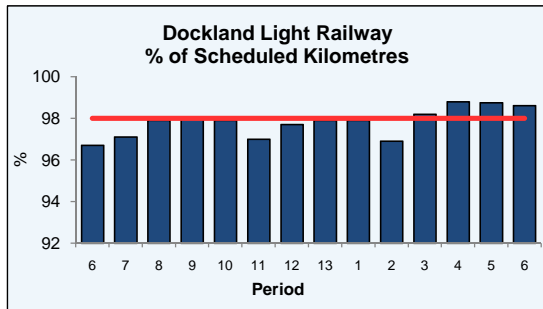
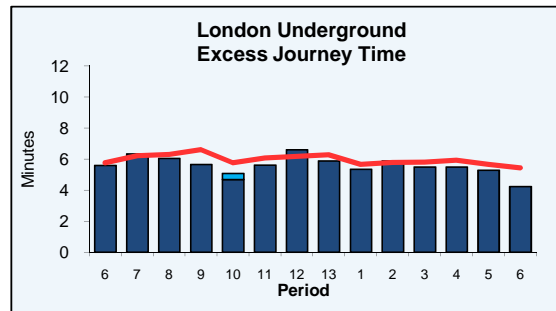
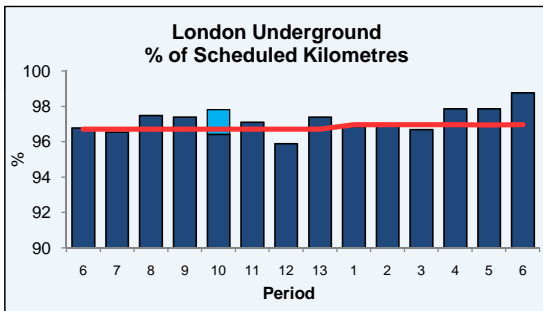
8. Recommendation

- 8.1. The Panel is asked to NOTE this report.



9. Contact

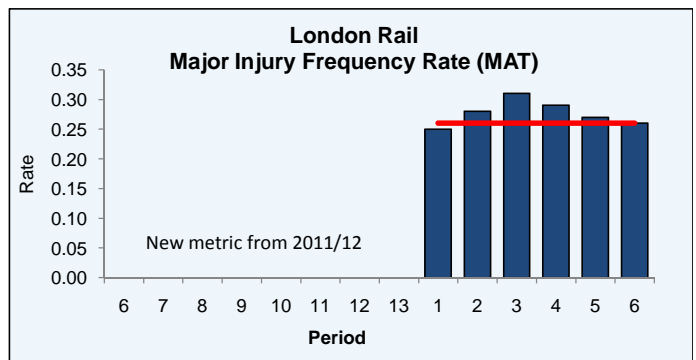
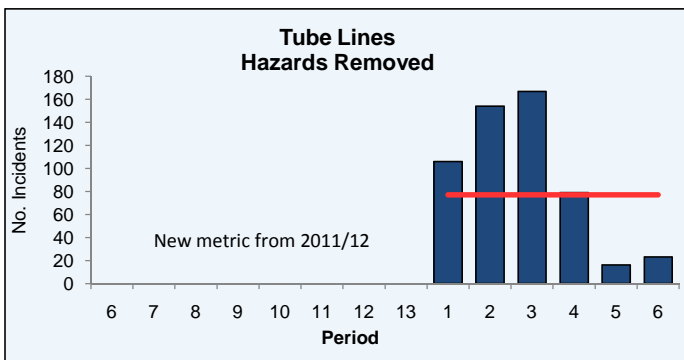
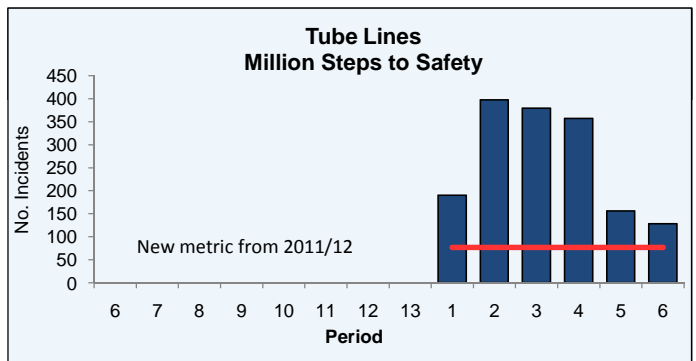
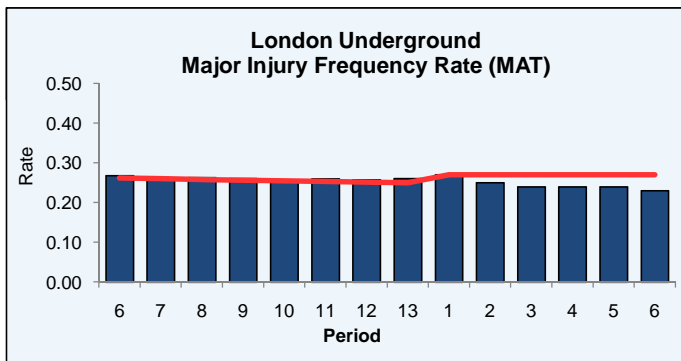
- 9.1. Contact: Mike Brown, Managing Director, London Underground and London Rail
Number: 020 7027 8499
Email: MikeBrown@tfl.gov.uk

London Rail and Underground Service Reliability - Period 6 2012/13					
			YTD		YTD Variance
 London Underground	% of Scheduled Kilometres	%	97.5	●	0.6
	Excess Journey Time	Minutes	5.29	●	0.41
 Docklands Light Railway	% of Schedule Operated	%	98.2	●	0.2
	On Time Performance	%	98.5	●	1.3
 London Overground	Public Performance Measure (Moving Annual Average)	%	96.7	●	0.9
 London Tramlink	On Time Performance	%	98.1	●	0.1




- 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

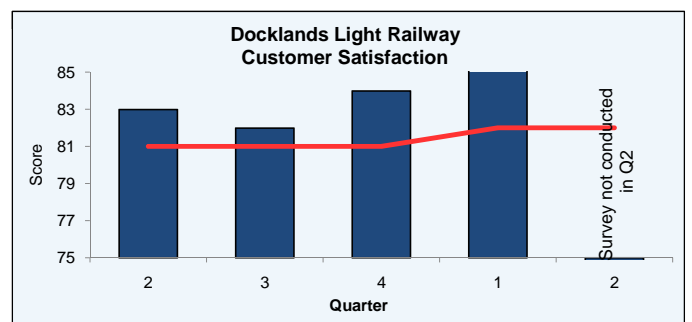
London Rail and Underground						
Safety Performance - Period 6 2012/13						
			Actual	Target		Variance
 London Underground	Major Injury Frequency Rate (MAT)	Rate	0.23	0.27	●	0.04
 Tube Lines	Million Steps to Safety* (000)	No.	128	77	●	51
	Hazards Removed*	No.	23	77	■	(54)
London Rail	London Rail Safety Indicator	Rate	0.26	0.26	●	0.00











- Meeting or better than target
- ▲ Worse than target but within defined tolerance: 5% for Major Injury Frequency Rate (MAT)
- Worse than target and outside defined tolerance

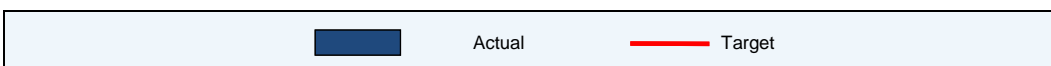
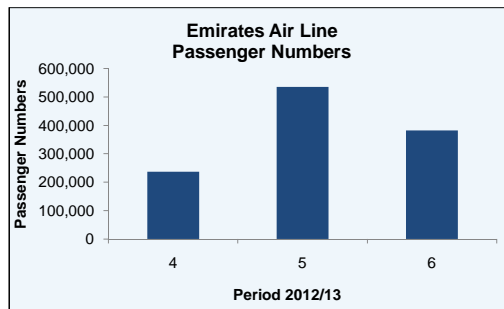
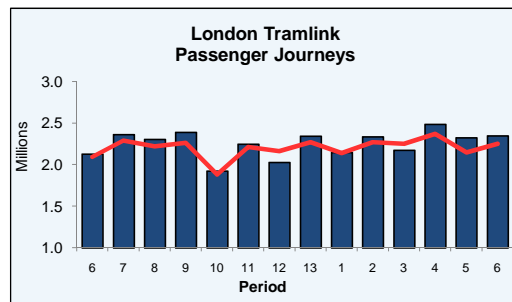
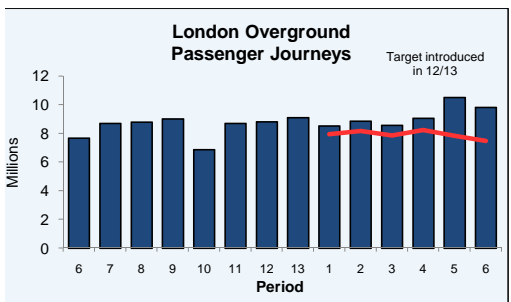
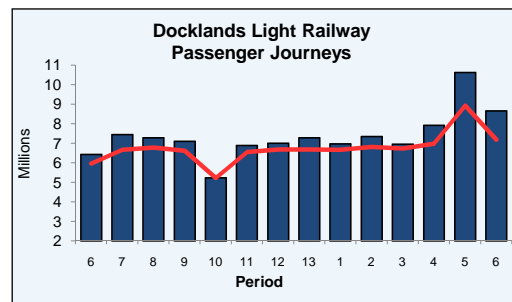
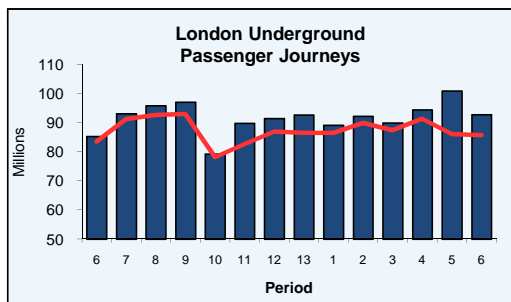
* The "Million Steps to Safety" campaign seeks to optimise active hazard removal in Tube Lines by tracking senior manager site visits and capturing the hazards and good practices they raise. The initial headline target is to achieve a million steps on site during the year and for 1000 hazards to be removed.

London Rail and Underground								
Customer Performance - Period 6 2012/13								
			Most recent survey Quarter		2011/12 Target	YTD		YTD Variance
 London Underground	Customer Satisfaction	Score	83		80	83		3
 Docklands Light Railway	Customer Satisfaction	Score	Survey not conducted in Q2		82	86		4
 London Overground	Customer Satisfaction	Score	83		80	83		3
 London Tramlink	Customer Satisfaction	Score	87		86	89		3




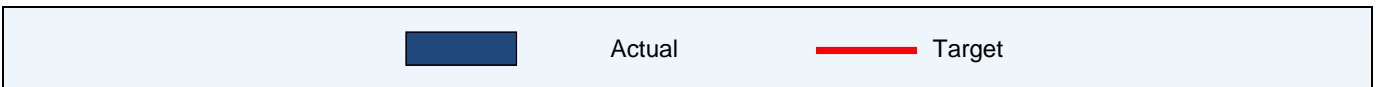
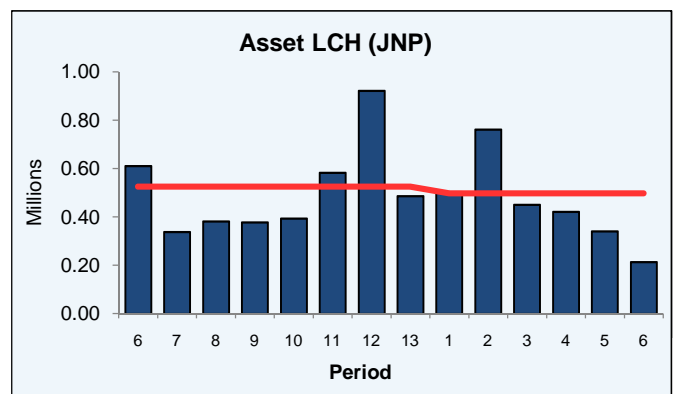
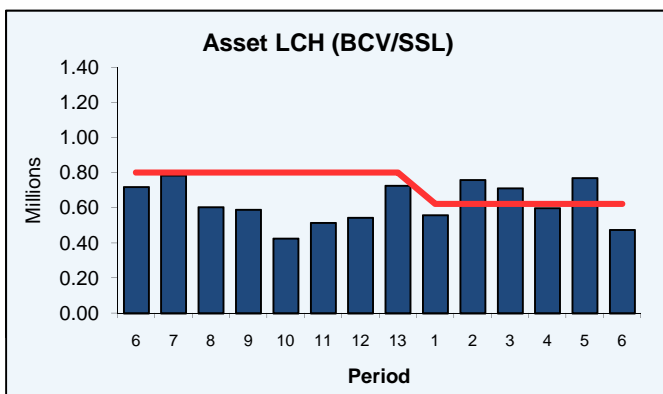
-  Meeting or better than target
-  Worse than target by up to 2 points
-  Worse than target by more than 2 points

London Rail and Underground Customer Demand - Period 6 2012/13					
			YTD		YTD Variance
 London Underground	Passenger Journeys	Million	559.4	●	32.8
 Docklands Light Railway	Passenger Journeys	Million	48.5	●	5.2
 London Overground	Passenger Journeys	Million	55.4	●	7.8
 London Tramlink	Passenger Journeys	Million	13.8	●	0.4
 Emirates Air Line	Passenger Numbers	Thousand	1151.6		N/A



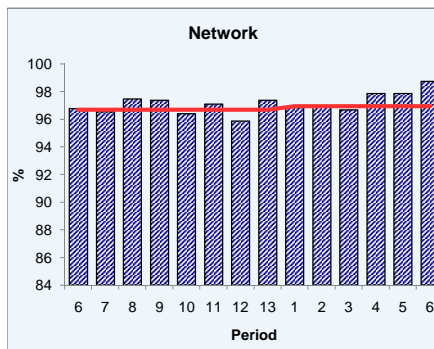
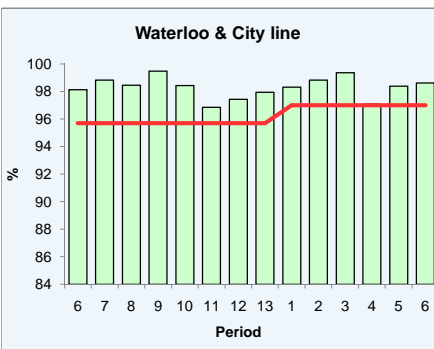
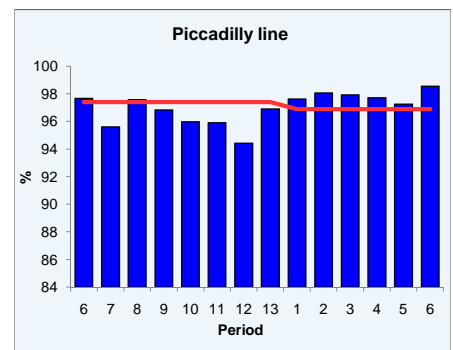
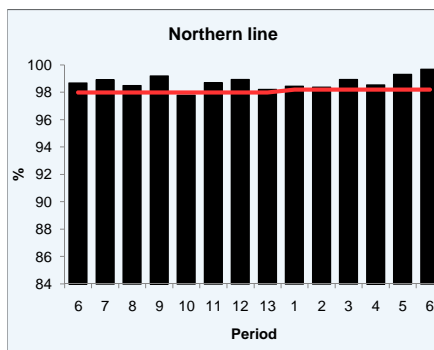
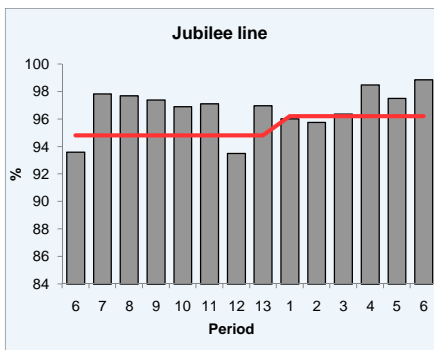
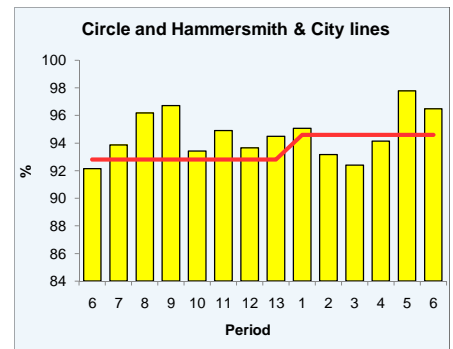
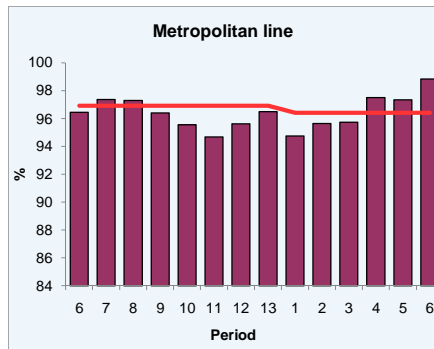
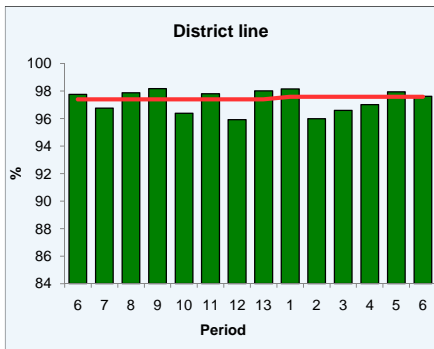
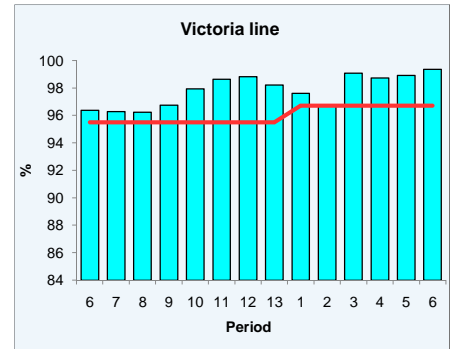
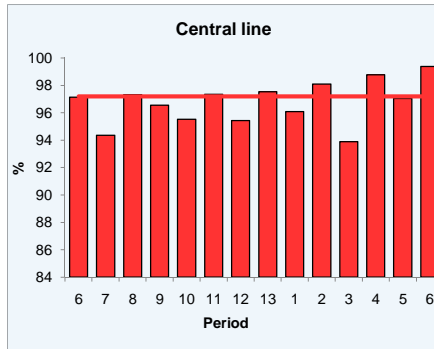
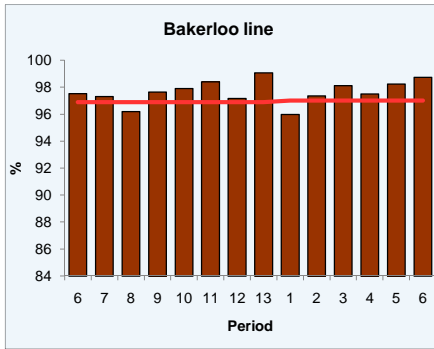
- Meeting or better than target
- ▲ Worse than target by up to 2%
- ▲ Worse than target by more than 2%

London Underground					
Asset Lost Customer Hours (LCH) - Period 6 2012/13					
			YTD		YTD Variance
 London Underground	Asset LCH (BCV/SSL)	Million	3.87	■	(0.14)
	Asset LCH (JNP)	Million	2.69	●	0.29



- Meeting or better than target
- ▲ Worse than target by up to 5%
- Worse than target by more than 5%

London Underground Line Performance Trends Percentage of Scheduled Kilometres Operated



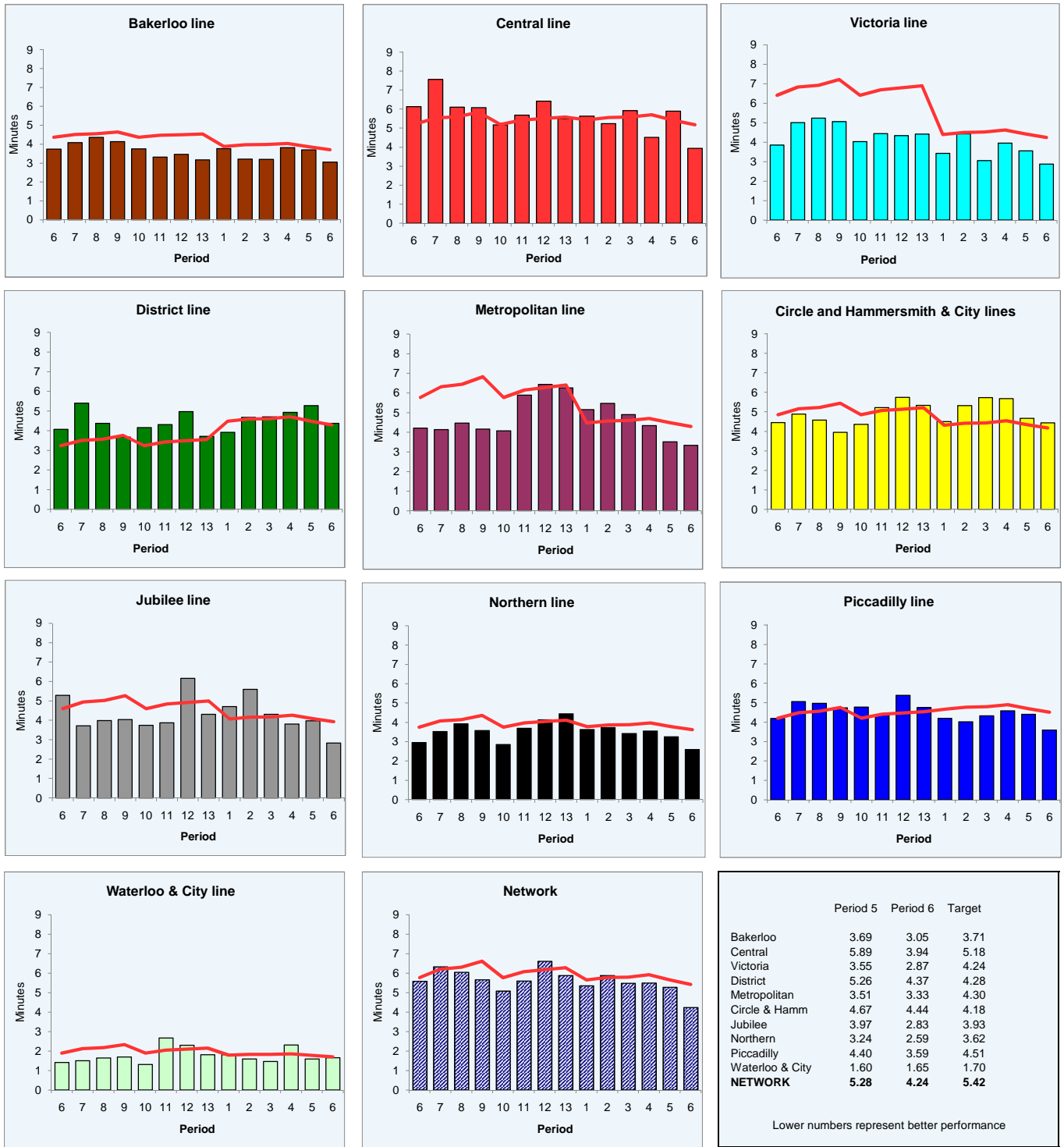
	Period 5	Period 6	Target
Bakerloo	98.2	98.7	97.0
Central	97.0	99.4	97.2
Victoria	98.9	99.4	96.7
District	98.0	97.6	97.6
Metropolitan	97.3	98.8	96.4
Circle & Hamm	97.8	96.5	94.6
Jubilee	97.5	98.9	96.2
Northern	99.3	99.7	98.2
Piccadilly	97.2	98.5	96.9
Waterloo & City	98.4	98.6	97.0
NETWORK	97.9	98.8	97.0

Higher percentages represent better performance

Actual (line colour)
 Target

The graphs show the percentage of scheduled kilometres operated by trains in passenger service on each line. Scheduled kilometres are the distances timetabled to be run, adjusted for planned engineering works.

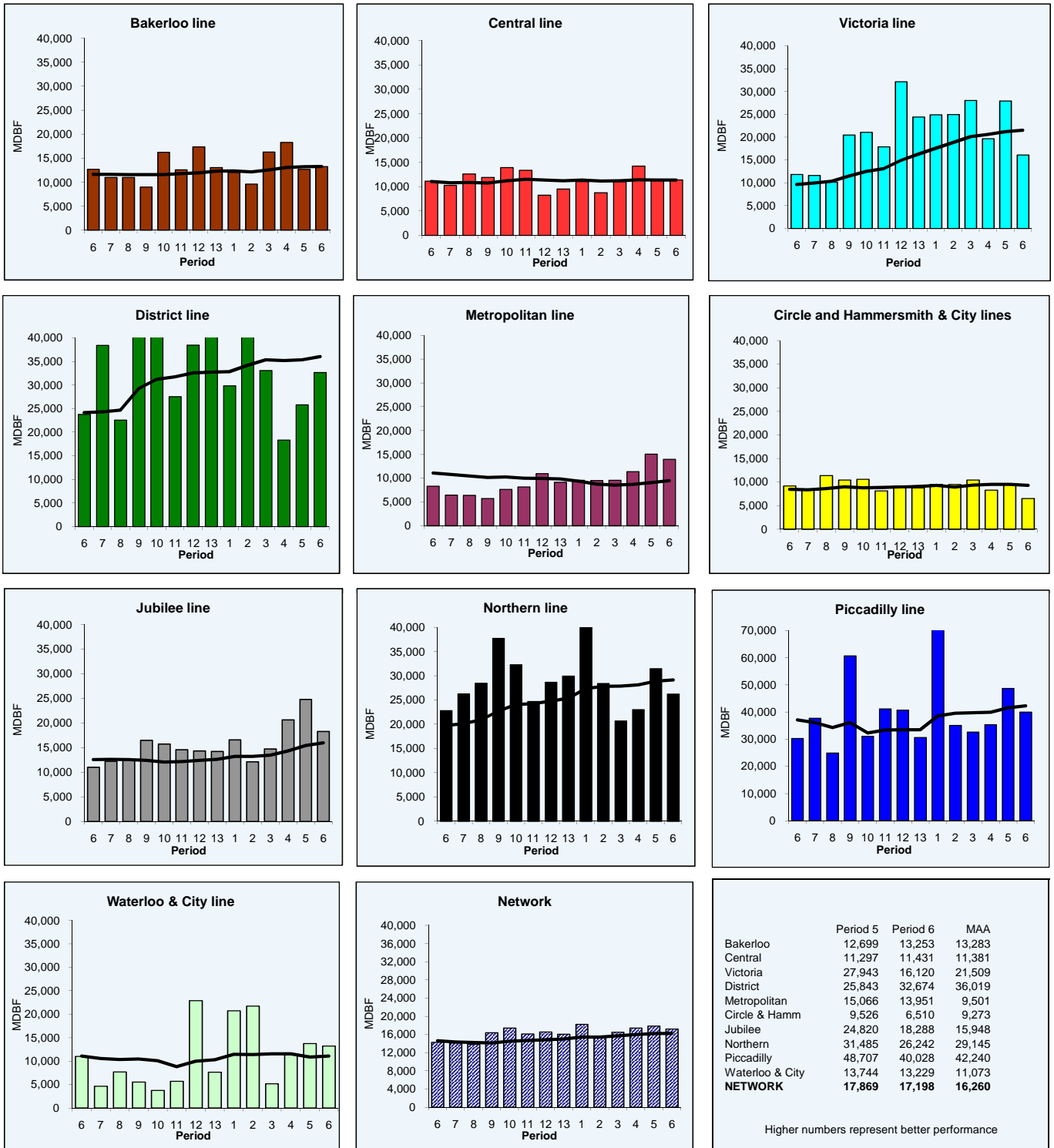
London Underground Line Performance Trends Excess Journey Time



Actual (line colour)
 Target

The time in minutes to complete an average journey on the network over and above the expected time, weighted by customer time values. The calculation includes the impact of planned closures.

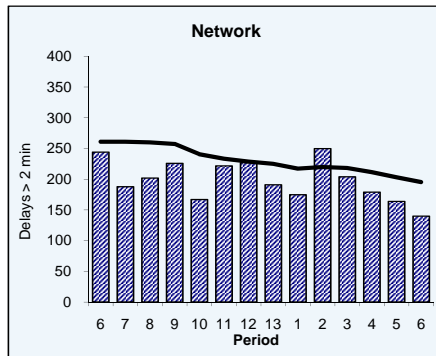
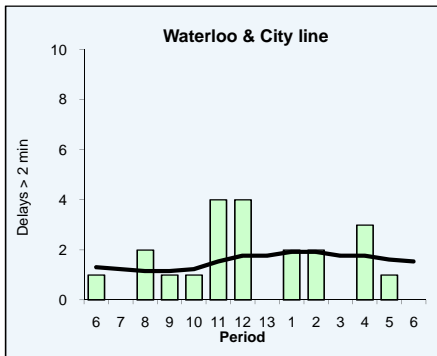
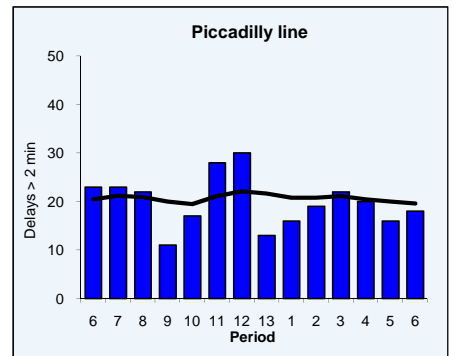
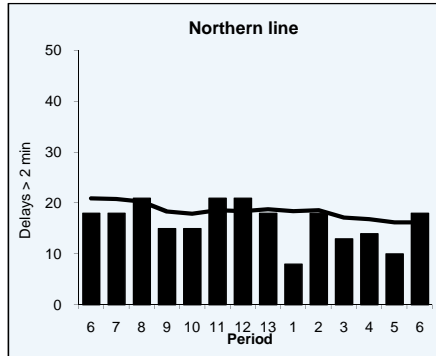
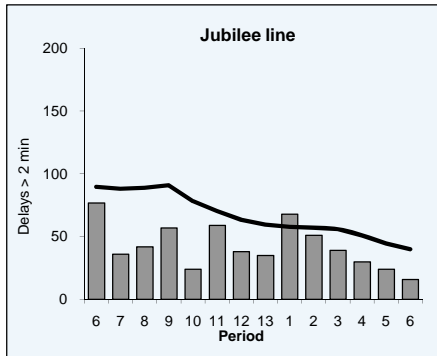
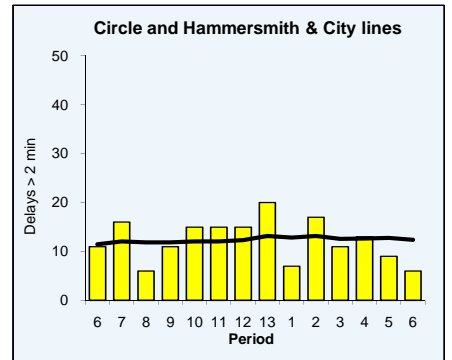
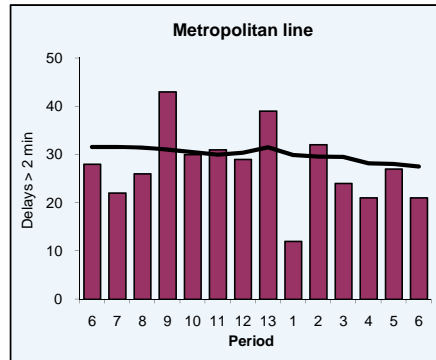
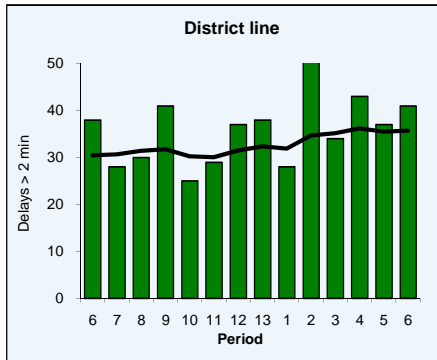
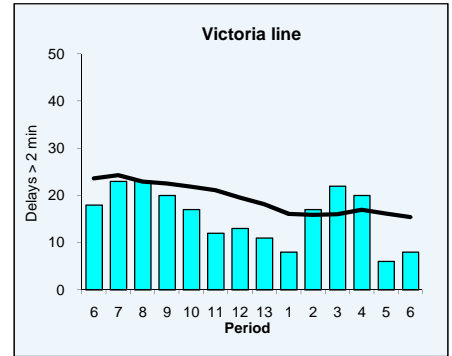
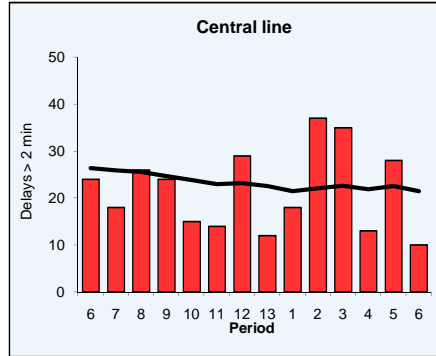
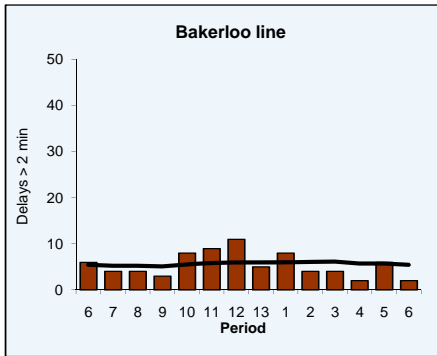
London Underground Line Performance Trends Rolling Stock Mean Distance Between Failures



Actual Train Kilometres between Failures
 Moving Annual Average

The number of train kilometres operated in customer service divided by the number of rolling stock asset-related service disruptions of 2 minutes or more, including items that are attributed but still in abeyance to be agreed. Subsequent agreement of attribution could therefore give rise to retrospective changes.

London Underground Line Performance Trends Signal and Point Related Delays >2 minutes



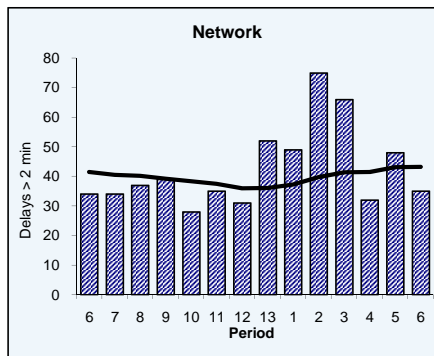
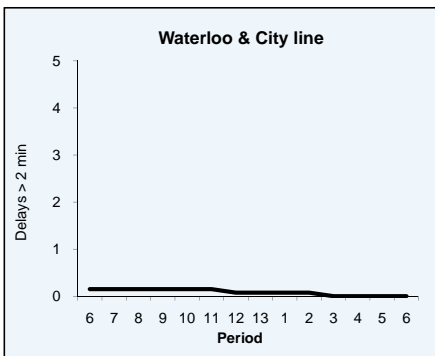
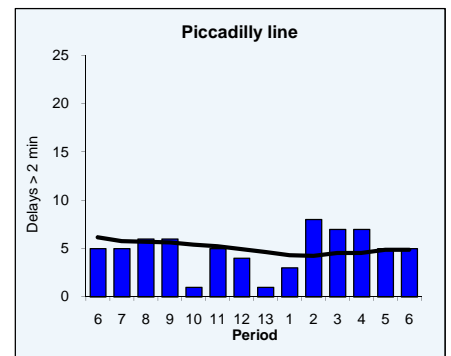
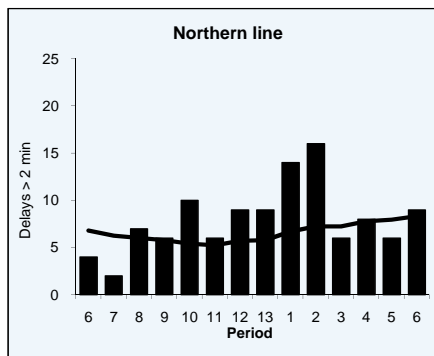
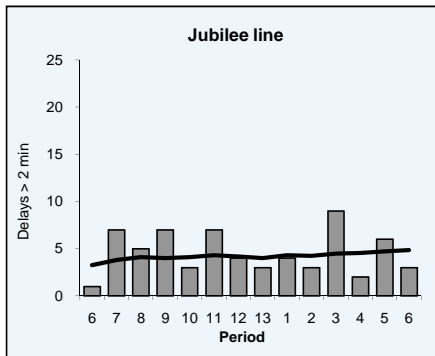
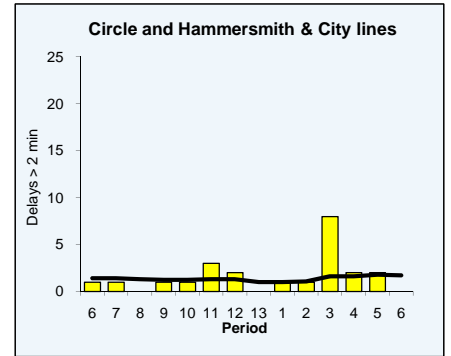
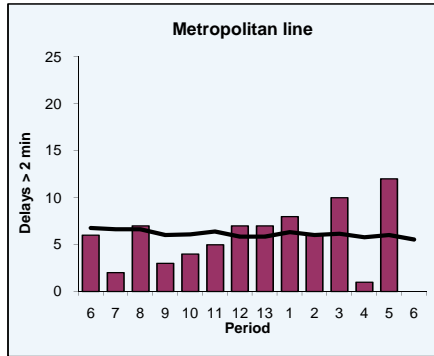
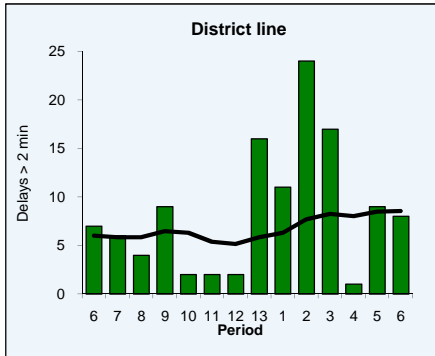
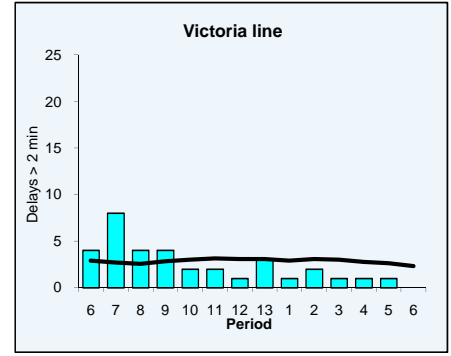
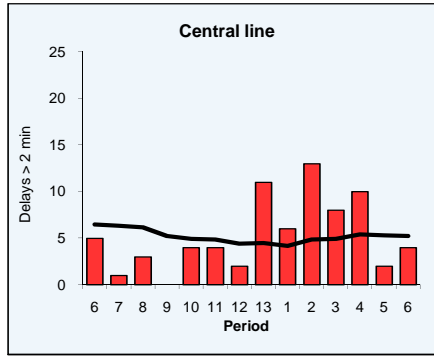
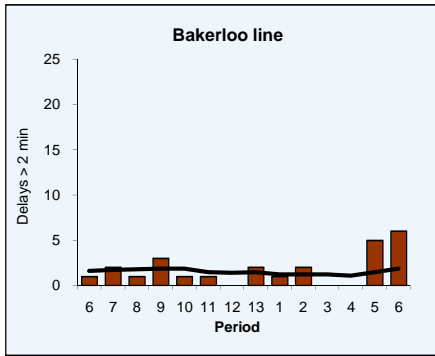
	Period 5	Period 6	MAA
Bakerloo	6	2	5
Central	28	10	21
Victoria	6	8	15
District	37	41	36
Metropolitan	27	21	27
Circle & Hamm	9	6	12
Jubilee	24	16	40
Northern	10	18	16
Piccadilly	16	18	20
Waterloo & City	1	0	2
NETWORK	164	140	195

Lower numbers represent better performance

Actual
 Moving Annual Average

The number of train control asset-related service disruptions of 2 minutes or more including items that are attributed but still in abeyance to be agreed. Subsequent agreement of attribution could therefore give rise to retrospective changes.

London Underground Line Performance Trends Track Related Delays >2 minutes



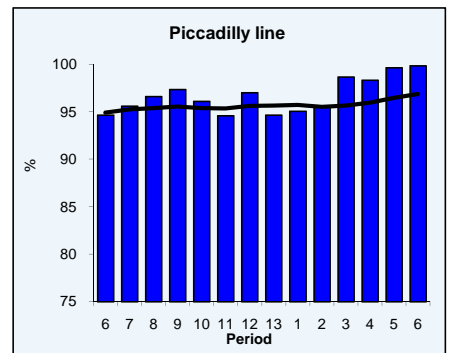
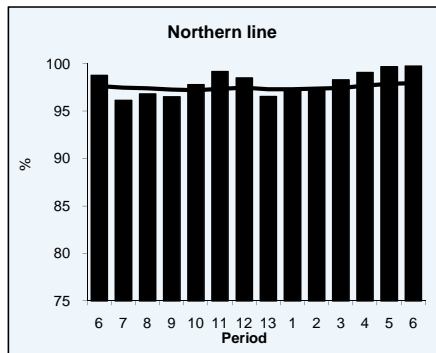
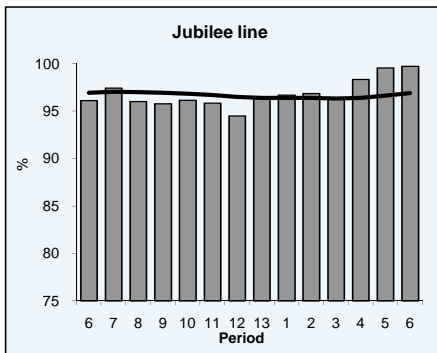
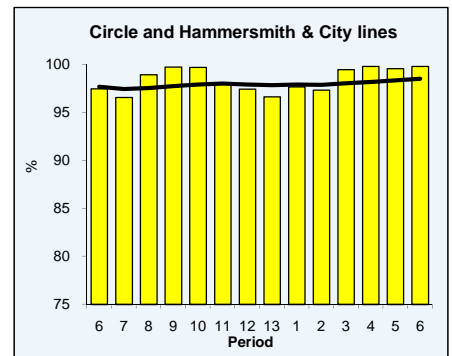
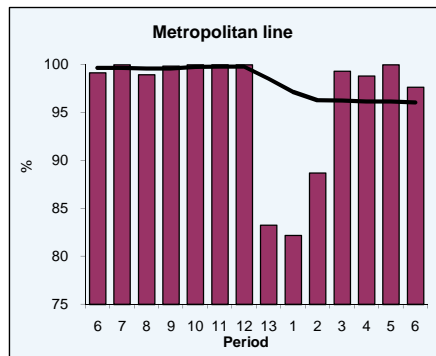
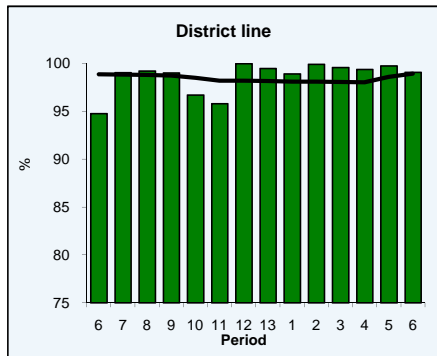
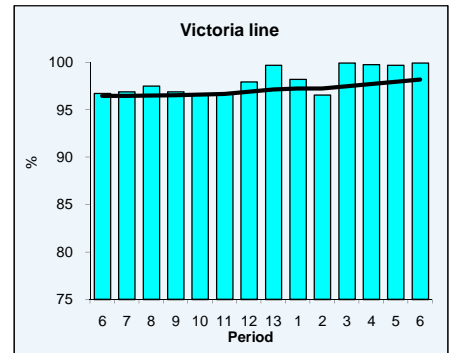
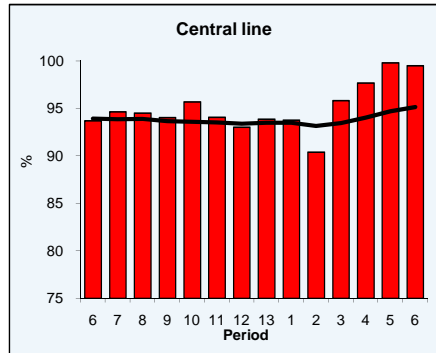
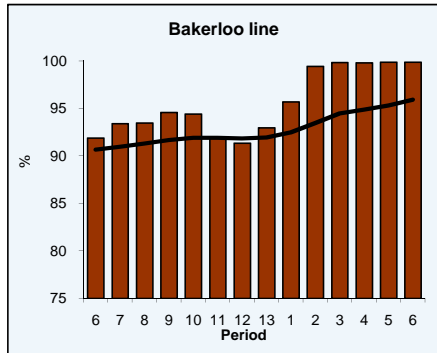
	Period 5	Period 6	MAA
Bakerloo	5	6	2
Central	2	4	5
Victoria	1	0	2
District	9	8	9
Metropolitan	12	0	6
Circle & Hamm	2	0	2
Jubilee	6	3	5
Northern	6	9	8
Piccadilly	5	5	5
Waterloo & City	0	0	0
NETWORK	48	35	43

Lower numbers represent better performance

Actual
 Moving Annual Average (MAA)

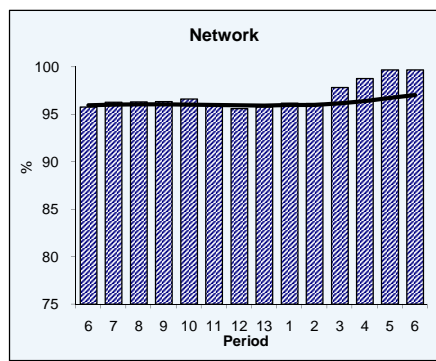
The number of trackasset-related service disruptions of 2 minutes or more including items that are attributed but still in abeyance to be agreed. Subsequent agreement of attribution could therefore give rise to retrospective changes.

London Underground Line Performance Trends Escalator Availability



Waterloo & City line

The stations served by the Waterloo & City line are managed by the Jubilee line (Waterloo) and the Central line (Bank)



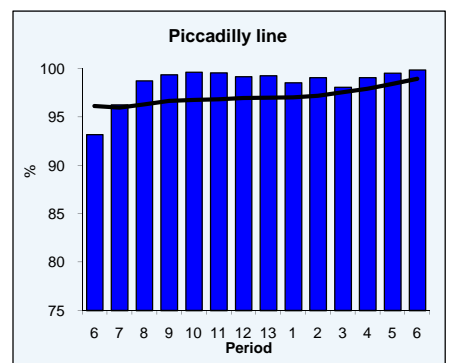
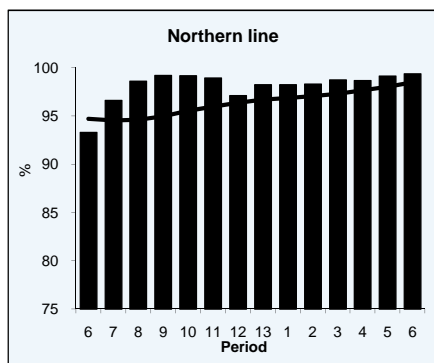
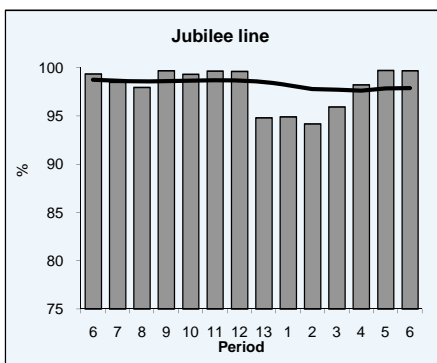
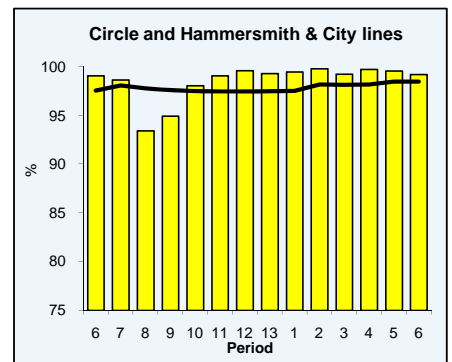
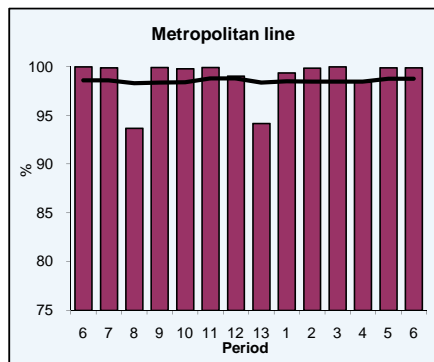
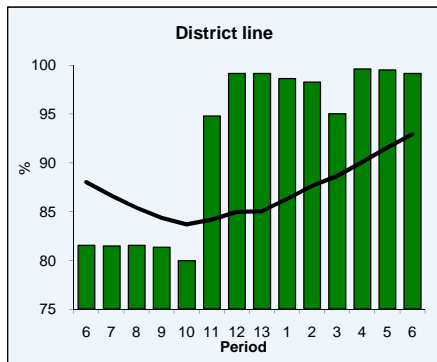
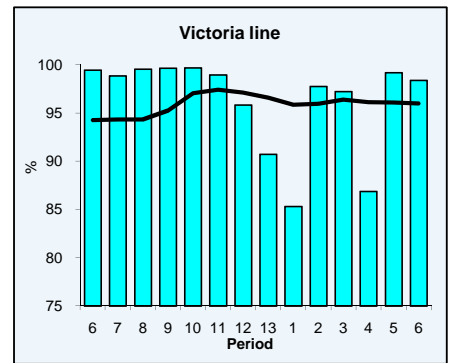
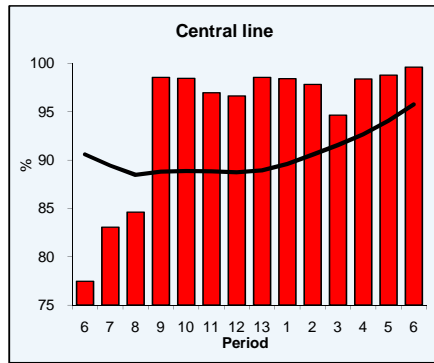
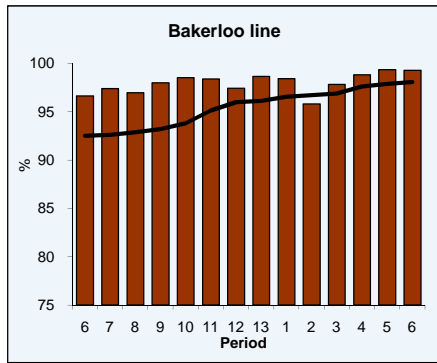
	Period 5	Period 6	MAA
Bakerloo	99.9	99.9	95.9
Central	99.8	99.5	95.2
Victoria	99.7	99.9	98.2
District	99.7	99.1	98.9
Metropolitan	100.0	97.7	96.1
Circle & Hamm	99.6	99.8	98.5
Jubilee	99.6	99.7	96.9
Northern	99.7	99.8	97.9
Piccadilly	99.6	99.9	96.9
Waterloo & City	n/a	n/a	n/a
NETWORK	99.7	99.7	97.0

Higher percentages represent better performance

Actual — Moving Annual Average (MAA)

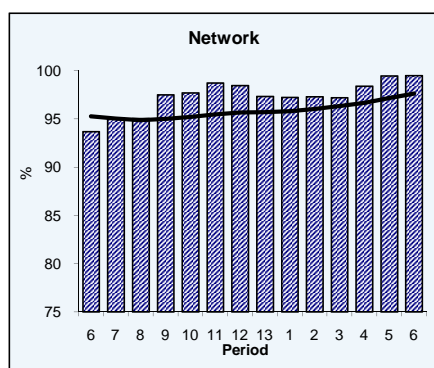
The total hours escalators were working, or available to work if required, as a percentage of total scheduled service hours. Results include the impact of planned works. The drop in period 13 on the Metropolitan line is due to one of the escalators at Baker Street being taken out of service in order to convert its electricity supply from direct current to alternating current (the line has just 6 escalators, all at Baker Street).

London Underground Line Performance Trends Lift Availability



Waterloo & City line

The stations served by the Waterloo & City line are managed by the Jubilee line (Waterloo) and the Central line (Bank)



	Period 5	Period 6	MAA
Bakerloo	99.4	99.3	98.1
Central	98.8	99.6	95.7
Victoria	99.2	98.4	96.0
District	99.5	99.2	92.9
Metropolitan	99.9	99.9	98.8
Circle & Hamm	99.6	99.2	98.5
Jubilee	99.7	99.7	97.9
Northern	99.1	99.4	98.5
Piccadilly	99.6	99.9	98.9
Waterloo & City	n/a	n/a	n/a
NETWORK	99.4	99.5	97.6

Higher percentages represent better performance

Actual — Moving Annual Average (MAA)

The total hours lifts were working, or available to work if required, as a percentage of total scheduled service hours. Results include the impact of planned works. Planned works have taken place on two lifts at Earl's Court (District line), these returned to service on 16 January. On the Central line, the dip in availability between periods 1 and 8 11/12 was mainly due to planned works on two lifts at Bank station.