

TRANSPORT FOR LONDON

RAIL AND UNDERGROUND PANEL

**SUBJECT: MANAGING DIRECTOR'S REPORT – LONDON UNDERGROUND AND LONDON RAIL**

**DATE: 12 JULY 2011**

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**1 PURPOSE**

- 1.1 The purpose of the report is to describe the performance of London Rail and London Underground for periods 1 and 2 of the year 2011/12 (1 April - 28 May 2011) and provide updates on the status and progress of major investment projects and items of special interest.
- 1.2 The Rail and Underground Panel is asked to note this report.

**2 LONDON UNDERGROUND PERFORMANCE**

- 2.1 A summary of key performance indicators and graphs showing trends over the last year are included in Appendix 1.

**Customer Satisfaction**

- 2.2 The target has increased to 80 this year. The first quarter's result was not available in time for inclusion in this report.

**Passenger Numbers**

- 2.3 Journeys to date have been below budget. In part this was due to the additional Royal Wedding Bank Holiday (which was not reflected in the budget) and its proximity to the Easter weekend which encouraged people to take leave during the intervening week.

**Service Performance**

- 2.4 LU has met its service reliability targets in each of the first two periods. The percentage of schedule operated for the year to date is 97.1 per cent against a 96.7 per cent target, and excess journey time is 5.95 minutes compared with the year to date target of 6.02 minutes.
- 2.5 The line performance trends included within Appendix 1, show how the Jubilee line performance has recovered from the poor periods 10 and 11 of last year when the new Transmission Based Train Control (TBTC) signalling system was first introduced between Stratford and Dollis Hill. The success of the recovery plan put in place to improve Metropolitan line performance is also evident.

- 2.6 The Piccadilly was the only line to miss its percentage of schedule target. Unusually for a line which has for some time recorded the highest rolling stock mean distance between failures (MDBF) there were two disruptive defective train incidents, at Knightsbridge on 6 May 2011 and at Piccadilly Circus on 18 May 2011. Signalling failures at Ravenscourt Park, Hyde Park Corner and Wood Green, a trespasser on the track at Boston Manor and person under train incidents at Covent Garden and Southgate were also causes of service losses.

### **Safety**

- 2.7 The moving annual rate of 'major injuries per million hours on LU Infrastructure' stood at 0.26 at the end of period 2, compared with the 2011/12 target of 0.27. To date there have been 18 reported major injuries to customers, and four employee/contractor major injuries.

## **3 LINE UPGRADES**

### **Jubilee line**

- 3.1 The final series of weekend closures required to introduce (TBTC) and Automatic Train Operation (ATO) at the north end of the line, have been taking place through May and June, thereby completing the delivery of the upgrade. Most of these closures were between West Hampstead and Stanmore, although three closures were also necessary between Waterloo and Stanmore.
- 3.2 During each trial operation closure there has been an increase in the number of trains operated across the line. On 29 May 2011, 23 trains were successfully operated between Stanmore and Charing Cross, and a number of Jubilee line trains were run in and out of Neasden depot on most routes. On 5 June 2011, a full TBTC service was operated using the current timetable, with trains running in passenger service between Stratford and West Hampstead and continuing empty for north end of the line. On Monday 27 June, TBTC passenger service was introduced across the whole line, with introduction of the first post-upgrade timetable increase to follow at the end of July 2011.
- 3.3 The line suffered major disruption on the evening of 19 April 2011. This was caused by a traction package cover falling from a train triggering a negative earth in the Canning Town/West Ham area. This resulted in trains across the line shutting down and a long suspension, with customers on stalled trains dealt with safely. A computer issue related to the previous night's disruption at Baker Street caused further problems the following morning. These major incidents apart, reliability of the line has continued its steady improvement with percentage of schedule operated rising from less than 90 per cent at the end of 2010 to almost 97 per cent in May 2011.

## **Northern line**

- 3.4 The next major phase of the programme to upgrade the Northern line will commence in October this year. Much of the preparatory work has already been completed with the conversion of all TBTC signalling system, and the installation of some of the associated trackside equipment. Lessons have been learnt from the upgrade of the Jubilee line and a new approach is being taken on the Northern line that will mean significantly fewer weekend closures than originally planned and no early evening closures.

## **Victoria line**

- 3.5 A notable first was achieved on the Victoria line on Saturday 23 April 2011, when the day's service was provided entirely by the new 2009 stock. By the beginning of June, 40 trains out of the total new fleet of 47 had been delivered.
- 3.6 The upgrade has moved into its final 'asset replacement' phase. Over the Bank Holiday weekend 28-30 May 2011, the first part of the old signalling system was removed at the north end of the line. As a consequence, the old 1967 stock can no longer run to Walthamstow Central and is now only operating two peak hour workings between Seven Sisters and Brixton pending final withdrawal in July 2011. Further line closures are scheduled through the year in order to complete the asset replacement process.

## **Sub Surface Railway**

- 3.7 From 23 May 2011, eight car S stock trains began regular passenger service to Aldgate beginning in the off-peak periods, so that S stock trains now serve all parts of the Metropolitan line.
- 3.8 The first seven car S-stock train began testing during engineering hours on 10 June 2011. The train ran successfully from Neasden depot under controlled conditions through Baker Street, up to Edgware Road and back again. Infrastructure testing activities were undertaken as planned. No immunisation or gauge clearance issues were identified, which was the prime purpose of the test run. The opportunity to assess signal sighting and conduct checks to verify the future positioning of platform and wayside infrastructure within station areas, were also undertaken. Infrastructure testing will continue on the Hammersmith & City line during the course of the summer months focussing mainly on the Hammersmith branch.
- 3.9 LU has awarded Bombardier Transportation the contract to upgrade the signalling on the Circle, District, Hammersmith & City and Metropolitan lines. Significant progress has already been made in constructing the new Hammersmith service control centre, due for completion later this year, which will eventually house the signalling equipment and service control teams for the whole of the sub-surface railway.

## **4 OTHER PROJECTS**

### **Green Park Station**

- 4.1 The project to make Green Park Station step-free from street to all six platforms remains on course to be delivered in September 2011, with additional improvements to existing entrances and re-landscaping of the compound area in Green Park complete by February 2012.
- 4.2 The estimated final cost for the works is significantly under the budget authorised in 2008, achieved by implementing rigorous scope changes, mitigation of risks and management of the contingency, plus savings made since the acquisition of Tube Lines, which is delivering the work.

### **Victoria Station Upgrade**

- 4.3 Primary traffic management stage 1 has commenced, three periods ahead of target. A number of bus route diversions and changes to stopping arrangements were consequently put in place from early May. Design continues to programme, as does the escalator replacement work.

### **Bond Street Station**

- 4.4 From Saturday 4 June to Thursday 24 November 2011 inclusive, Bond Street station is opening later than usual at 06:00 and closing earlier at 23:00. Trains are not stopping at Bond Street outside these times. This change to the opening times provides extra engineering hours to support the station upgrade programme which involves two escalators being taken out of service for replacement. During the revised opening hours, the station remains fully operational.

### **Extensions**

- 4.5 Public consultation has been taking place for the both the proposed Northern Line Extension and Croxley Link schemes.

## **5 OTHER ITEMS**

### **PAS 55 Certification**

- 5.1 LU has been awarded PAS 55 certification, validating the effectiveness of the approach taken to maintaining and delivering reliable and safe assets for the railway. PAS 55 is the definitive Asset Management standard, published by BSI (British Standards Institution), which is used worldwide as a measure of good practice. In order to be awarded certification, LU had to undergo rigorous assessment of strategy, planning, projects and maintenance activities with audit interviews of sponsors, front line maintenance and project staff. External auditors Lloyds Register Rail said "LU should be commended for resolving multiple and complex management system arrangements into a single harmonised system that is effectively applied across the business".

## **Royal Wedding**

- 5.2 The Royal Wedding provided an opportunity to test some new ways of working ahead of the 2012 Games, as it meant dealing with large numbers of people unfamiliar with the network and different patterns of travel. Extensive planning by LU and other TfL staff working closely with representatives of the Department for Culture, Media and Sport, City of Westminster and the Metropolitan and British Transport Police meant that the Underground coped well.
- 5.3 A notable innovation was a new messaging system for people leaving Hyde Park after the event. Announcements on the message boards in the park directed people to different stations – Green Park, Hyde Park Corner, Westminster, Victoria or Bayswater – depending on the line and direction they needed. This dispersed the crowds and minimised congestion at each station.

## **LU Pay Offer**

- 5.4 LU's offer of a five year deal that offers cost of living over its life has not been accepted by the Unions. Talks are continuing on the question of statutory holiday working, Boxing Day and related issues. Overall there is, however, an acceptance of the fact of a multi year deal.
- 5.5 The Union's demand for an additional 30 days leave for changing some elements of the train operators' agreement during the Olympic and Paralympic Games period was formally rejected on 2 June 2011. A revised management offer, which recognises the flexibility and contribution made by individuals rather than a collective payment for all train operators, has been put to the Unions and communicated widely among train drivers. As LU finalises detailed timetables, it is becoming apparent that the impact on staff is less than the Unions believe, which weakens their case for excessive payments.

## **6 LONDON RAIL PERFORMANCE**

### **Customer Satisfaction**

- 6.1 The customer satisfaction targets for DLR, London Overground and London Tramlink have increased to 81, 78 and 86 respectively for this year. The first quarter's results were not available in time for inclusion in this report.

### **Passenger and Service Performance**

- 6.2 Passenger volumes and revenue continue to grow strongly across each of the London Rail divisions. On the DLR, passenger journeys during periods 1 and 2 were ahead of budget due mainly to higher than expected growth, particularly around the impacts of reduced engineering works and Jubilee Line performance. Passenger volumes for London Overground and London Tramlink remain in line with budgeted expectations.
- 6.3 All operational targets were exceeded across London Rail except for DLR departures, although these too have continued to improve since the start of the new financial year.

## **Docklands Light Railway Operations**

- 6.4 Apart from departures, all performance scores for the DLR exceeded the budget target, with departures being at its highest level since period 5 of last year. Departures (per cent scheduled operated) for Periods 1 and 2 at 97.8 per cent was 0.2 per cent worse than target; and Service Reliability (per cent on time performance) at 97.5 per cent was 1.5 per cent better than target.

## **London Overground Operations**

- 6.5 On 22 May 2011, a new timetable commenced on London Overground, enabled by the recently completed North London Line infrastructure improvement works. The timetable delivers up to double the number of trains on this key 2012 Games rail route, providing eight trains per hour at peak times between Stratford and Willesden, with four trains per hour to Richmond and four trains per hour to Clapham Junction. In addition, four trains per hour will run every day on the Gospel Oak to Barking line and up to eight trains an hour between Highbury & Islington and Dalston Junction on the East London route.
- 6.6 The contract to build the final part of the London Overground rail network (the link between Surrey Quays and Clapham Junction) has now been awarded to Birse Metro. When complete, this will enable London Overground to operate the orbital route around the Capital. The works will be complete at the end of 2012.
- 6.7 Since the beginning of 2011/12, London Overground has been the highest performing operator nationally, reaching a PPM<sup>1</sup> MAA<sup>2</sup> of 95 per cent, being 1.0 per cent better than target.

## **London Tramlink Operations**

- 6.8 Passenger journeys for London Tramlink were in line with budget and percentage of scheduled service kilometres operated at 99.3 per cent for period 1 and 2 was 1.3 per cent above target.

## **Safety**

- 6.9 Safety performance across the London Rail businesses was better than target for the first two periods of the year. The London Rail Safety Indicator score of 0.04 was significantly better than the target of 0.12, and the DLR Safety Performance Index score at 84.0 significantly better than the target of 80.0.

## **7 DOCKLANDS LIGHT RAILWAY PROJECTS**

- 7.1 At the London Transport awards, DLR's South Quay was named Station of the Year. London Rail's operating partners, LOROL and Serco, also received awards, with LOROL winning Public Transport Operator of the Year and Serco being highly commended for Excellence in Travel Information and Marketing.

<sup>1</sup> PPM (public performance measure): per centage of trains that arrived within five minutes of their stated arrival time as per the timetable currently in operation.

<sup>2</sup> MAA: Moving annual average.

## **DLR Three – Car project**

- 7.2 Three-car trains on DLR are now in operation on the Tower Gateway to Beckton route, marking the completion of the entire three-car upgrade project, with all DLR routes now capable of operating three-car services.

## **Stratford International Extension**

- 7.3 National Rail platforms at Stratford and the conversion of the North London Line to DLR operations are complete. Work on systems, testing, commissioning and snagging is ongoing and the contractor's forecast completion date is now 31 July 2011. Trial operations will commence after this date.

## **Cable Car for London**

- 7.4 Contracts have also now been signed for the building of the Cable Car, with Mace appointed as the lead contractor. Work will start on the ground this summer on what is set to be the first urban Cable Car system of its kind in the UK.

## **8 LONDON OVERGROUND INFRASTRUCTURE PROJECTS**

### **East London Line Project (ELLP)**

- 8.1 The final outstanding works list is forecast to be completed in September 2011. Focus remains on accepting the remaining contract documents and close out of residual works and defects.

### **East London Line Project (ELLP) Phase 2**

- 8.2 Birse Metro have successfully removed the Surrey Canal Road bridge in the period with earthworks within Bridgehouse Meadows area commencing. London Rail and Network Rail met with South West Trains and LOROL and agreed the outline proposals for the Clapham Junction station redesign in June 2011.

### **North London Railway Infrastructure Project (NLRIP)**

- 8.3 Following successful entry into service in period 1, the completion of outstanding minor snagging items is being worked through as part of project close-out. Network Rail has applied for practical completion and no objections have been submitted by London Rail.

### **North London Railway (NLR) Stations Upgrade**

- 8.4 To date, 35 stations have been system tested and 40 have been through ambience snagging (out of 44 stations and two control centres). All stations have remained fully operational and open during the upgrade works.

## **9 REVIEW OF DEVELOPMENTS ACROSS NATIONAL RAIL**

### **Rail Value for Money Study**

- 9.1 A separate paper on rail value for money has been sent to the Rail and Underground Panel.

## **DfT High Level Output Specification (HLOS)**

- 9.2 TfL has produced a report setting out the challenges and proposed solutions for national rail services in London and the South East in the period to 2019. This is the subject of a separate paper to the Rail and Underground Panel. The preferred package of schemes has a cost of £220m per year and a Benefit Cost Ratio of over 4:1. In addition, there are significant wider economic benefits from the schemes proposed.

## **Network Rail Matters**

### Route Utilisation Strategies (RUS)

- 9.3 London Rail has continued to provide a significant amount of input into the London and South East RUS to inform the final document.
- 9.4 TfL has carried out all of the assessment of the options for the London Overground network. This has demonstrated there is a good case for further enhancements to the Overground network to address the forecast crowding problems. The RUS is therefore likely to recommend lengthening of services on the North London Railway, electrification and train lengthening on the Gospel Oak to Barking Line and train lengthening on the West London line, subject to funding.
- 9.5 TfL has also carried out demand forecasting on the West Anglia route. Here the RUS is expected to recommend enhancements to provide a 15-minute interval service between Brimsdown and Stratford, delivering much needed frequency improvements to stations in the Lea Valley. TfL has also continued to provide input on the strategy for other corridors, particularly the South Western and Great Western routes.
- 9.6 The draft stations part of the Network RUS was published in May 2011. TfL has some concerns over the methodology used for this assessment and this point will be made in TfL's consultation response.

## **Stations**

- 9.7 TfL submitted to DfT bids for accessibility improvements at six stations under the Access for All Mid Tier Fund. A decision is expected in September 2011.
- 9.8 TfL also submitted to Network Rail a bid for gating and ticket hall facilities at Kensington Olympia under the Station Commercial Project Facility.

## **Rail Franchising**

- 9.9 TfL has held discussions with all three bidders for the next Greater Anglia franchise covering TfL's aspirations. Any TfL funded enhancements will be finalised with the DfT by October 2011.
- 9.10 TfL has submitted a response to the ORR's consultation on amending licences to improve the provision of information to customers. The response covered TfL's concerns over the policies of the Association of Train Operating Companies in this area.



## **Mayor's Powers over National Rail**

- 9.11 The Mayor sent the Secretary of State the independent review of the case for devolution of inner suburban services in London produced by NERA. The Secretary of State replied to say that discussions would take place between officials. A separate paper on devolution has been sent to the Rail and Underground Panel.

## **Performance of the Passenger and Freight Network**

- 9.12 National Rail passenger demand continues to grow strongly. In the fourth quarter of 2010/11, London and South East demand increased by 7.4 per cent and revenue increased by 9.2 per cent when compared with the same quarter last year. Yields increased following the January 2011 fares rises. There has also been a large increase in both rail freight moved and lifted between the fourth quarter of 2009/10 and 2010/11. Freight moved increased by 13.4 per cent whereas freight lifted rose by 16.6 per cent. The most significant increases compared to the previous quarter were in the coal and construction sectors.

## **Environment and Sustainability**

- 9.13 London Rail is continuing to provide input to various rail industry workstreams. This includes work being led by the Rail Safety and Standards Board to identify the requirements to be included in the next Control Period to reduce carbon emissions from the industry.

## **High Speed Rail**





- 9.14 The public consultation on the Government's strategy for the development of high speed rail in Britain is ongoing. Issues of relevance to TfL include the development of Euston station as the terminus and onward dispersal of passengers from this station, the proposed interchange station with Crossrail at Old Oak Common and the link with HS1. The Mayor and TfL are also concerned about the environmental impacts of the alignment in north west London and the consultation response is likely to seek mitigation for any adverse impacts.

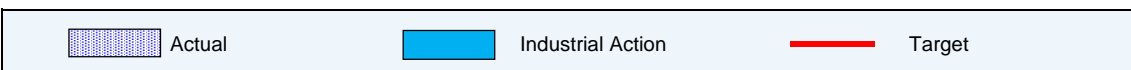
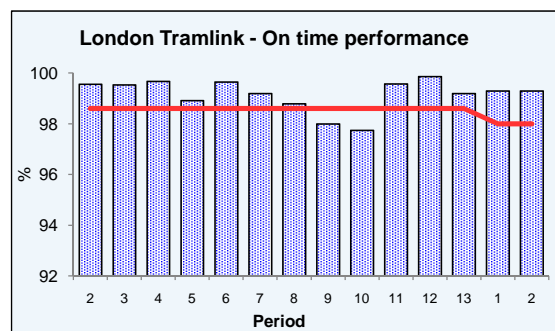
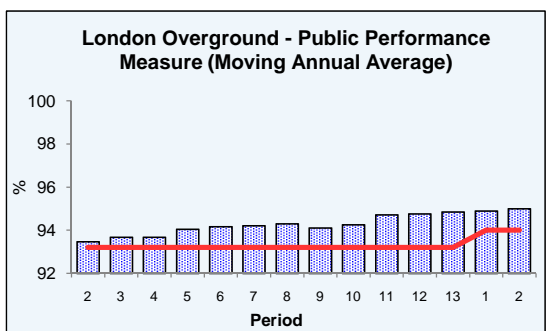
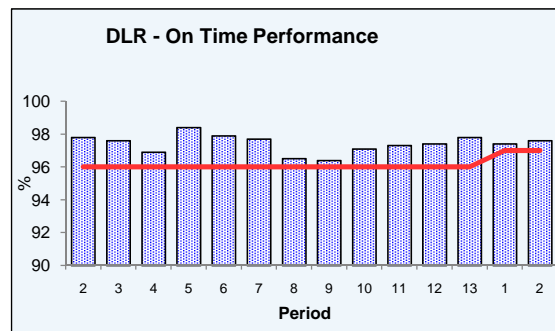
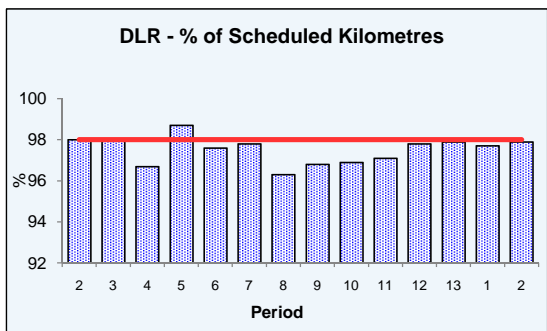
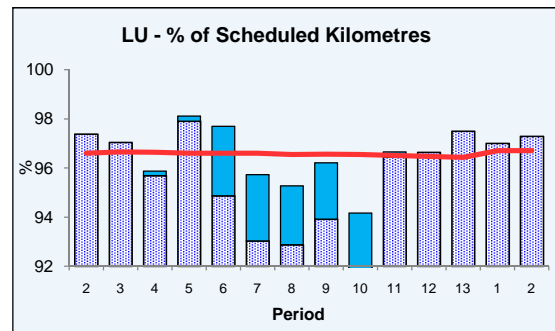
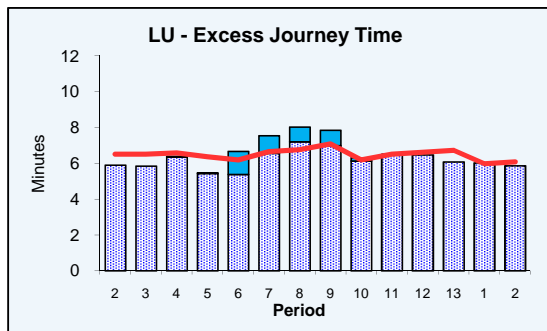
## **10 RECOMMENDATION**




- 10.1 The Panel is asked to NOTE this report.

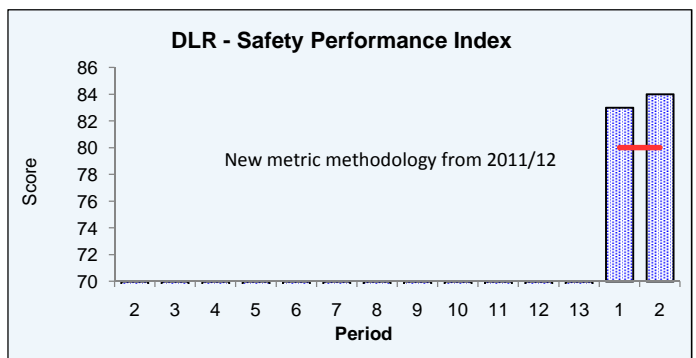
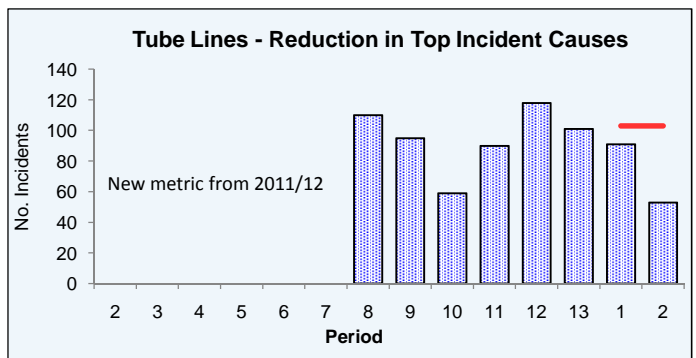
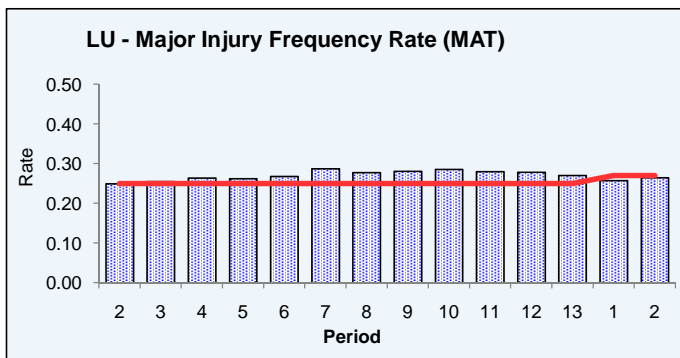
## **11 CONTACT**





- 11.1 Contact: Mike Brown, Managing Director, London Underground and London Rail  
Number: 020 7027 8499  
Email: [MikeBrown@tfl.gov.uk](mailto:MikeBrown@tfl.gov.uk)

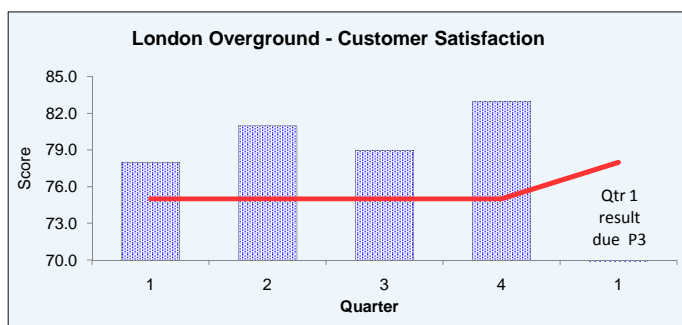
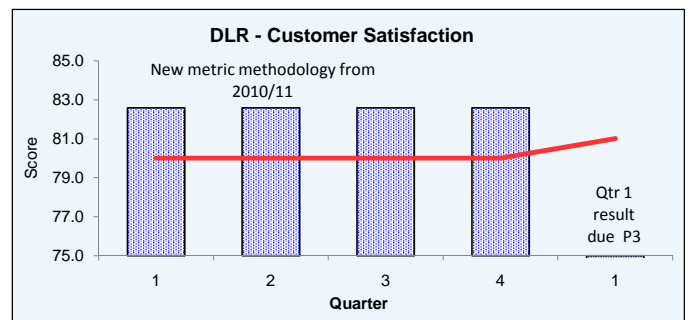
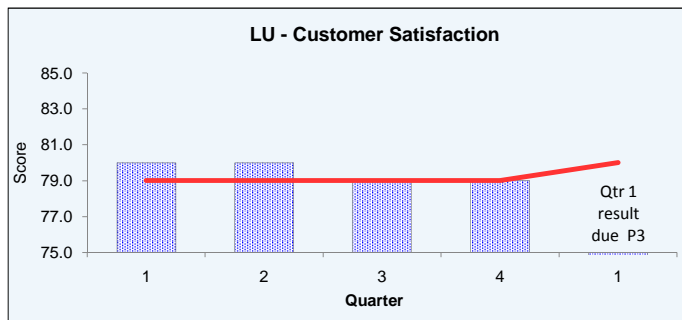
London Rail and Underground					
Service Reliability - Period 2 2011/12					
			YTD		YTD Variance
 <b>London Underground</b>	% of Scheduled Kilometres	%	97.1	●	0.4
	Excess Journey Time	Minutes	5.95	●	0.07
 <b>Docklands Light Railway</b>	% of Schedule Operated	%	97.8	▲	(0.2)
	On time performance	%	97.5	●	0.5
 <b>London Overground</b>	Public Performance Measure (Moving Annual Average)	%	95.0	●	1.0
 <b>London Tramlink</b>	On Time Performance	%	99.3	●	1.3



London Rail and Underground Safety Performance - Period 2 2011/12						
			Actual	Target		Variance
 London Underground	Major Injury Frequency Rate (MAT)	Rate	0.26	0.27	<span style="color: green;">●</span>	0.01
 Tube Lines	Reduction in top incident causes (Number of incidents)	No.	53	103	<span style="color: green;">●</span>	50
London Rail	London Rail Safety Indicator	Rate	0.04	0.12	<span style="color: green;">●</span>	(0.08)
 Docklands Light Railway	DLR Safety Performance Index	No.	84	80	<span style="color: green;">●</span>	4

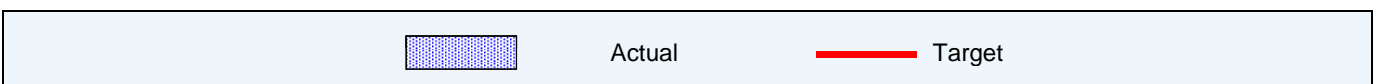
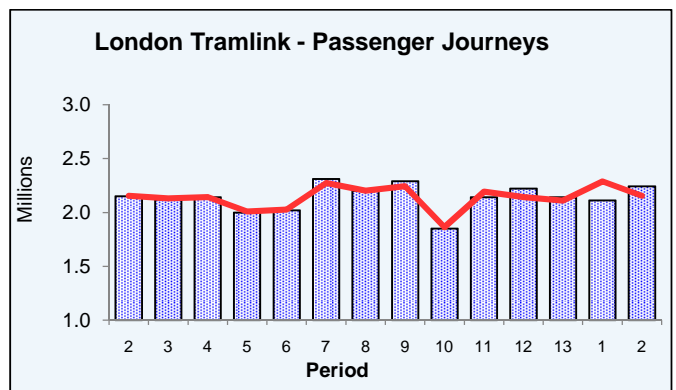
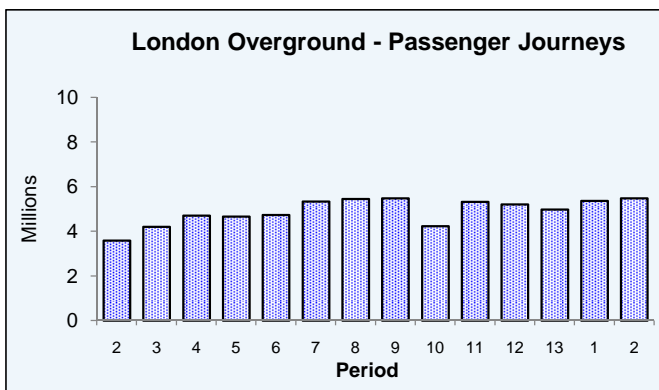
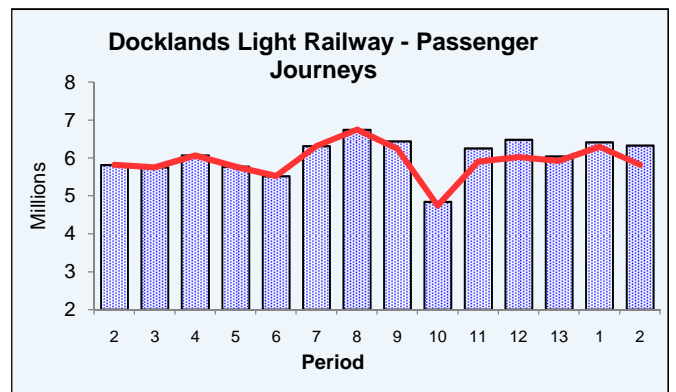
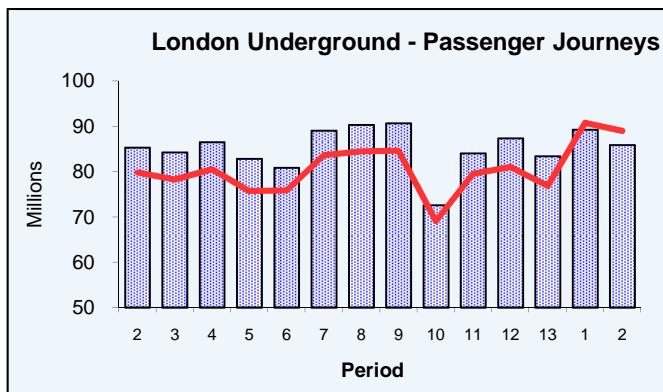


London Rail and Underground								
Customer Performance - Period 2 2011/12								
			Most recent survey Quarter		2011/12 Target	YTD		YTD Variance
 London Underground	Customer Satisfaction	Score	79.0	▲	80.0	N/A		N/A
 Docklands Light Railway	Customer Satisfaction	Score	82.6	●	81.0	N/A		N/A
 London Overground	Customer Satisfaction	Score	83.0	●	78.0	N/A		N/A
 London Tramlink	Customer Satisfaction	Score	84.0	■	86.0	N/A		N/A

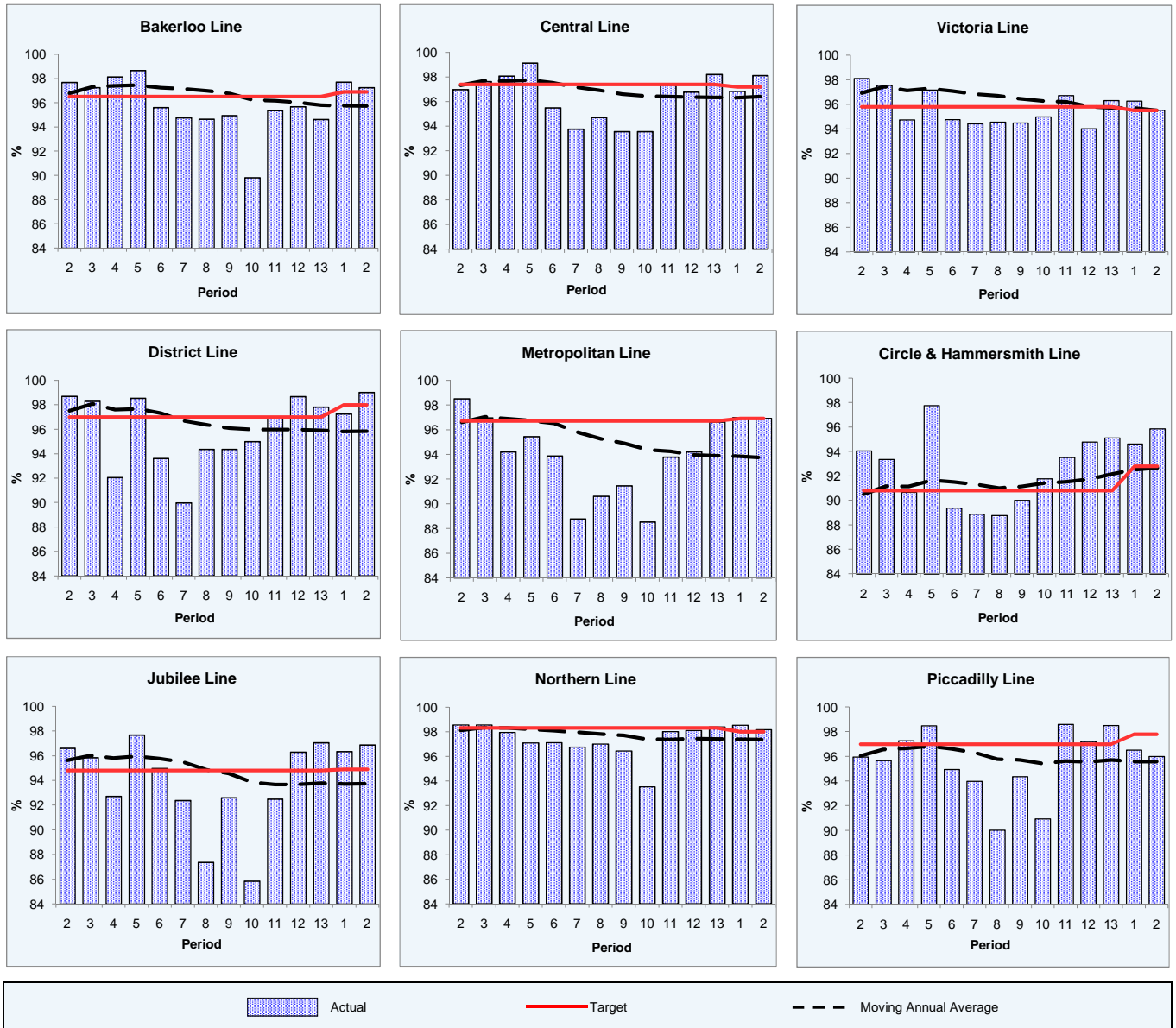


### London Rail and Underground Customer Demand - Period 2 2011/12

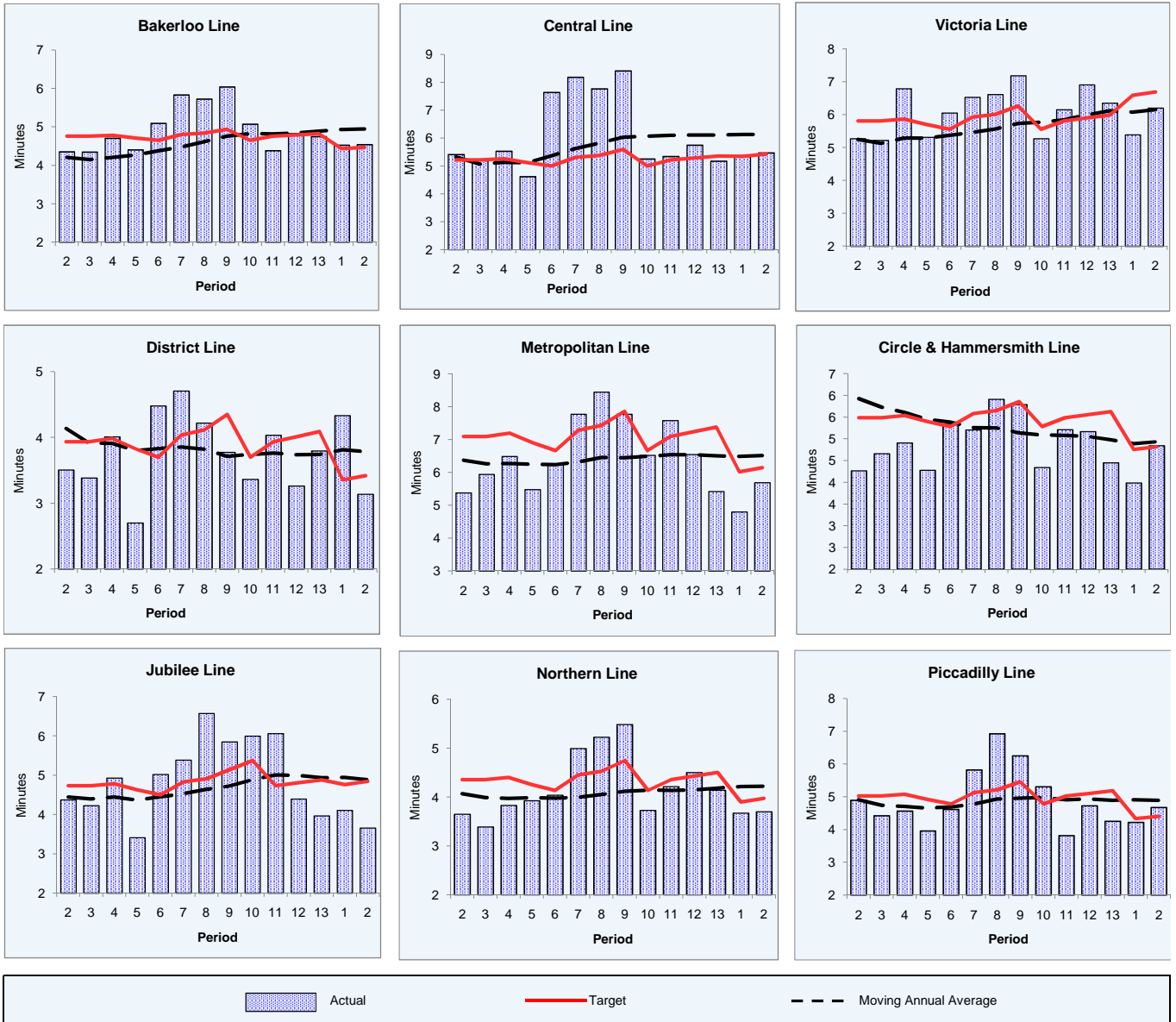
				YTD		YTD Variance
	<b>London Underground</b>	Passenger Journeys	Million	175.1	<span style="color: yellow;">▲</span>	(4.7)
	<b>Docklands Light Railway</b>	Passenger Journeys	Million	12.7	<span style="color: green;">●</span>	0.6
	<b>London Overground</b>	Passenger Journeys	Million	10.9		No target
	<b>London Tramlink</b>	Passenger Journeys	Million	4.4	<span style="color: yellow;">▲</span>	(0.1)




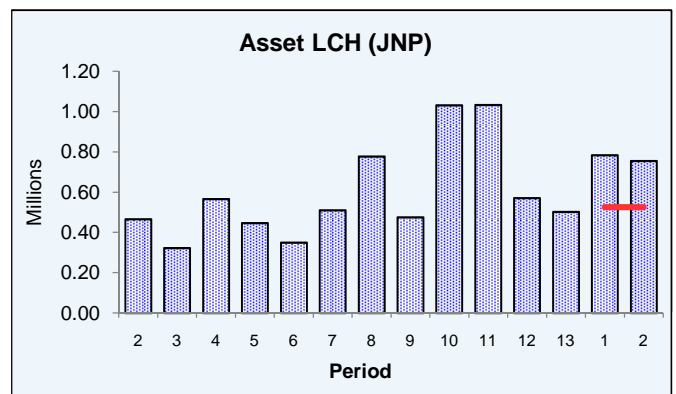
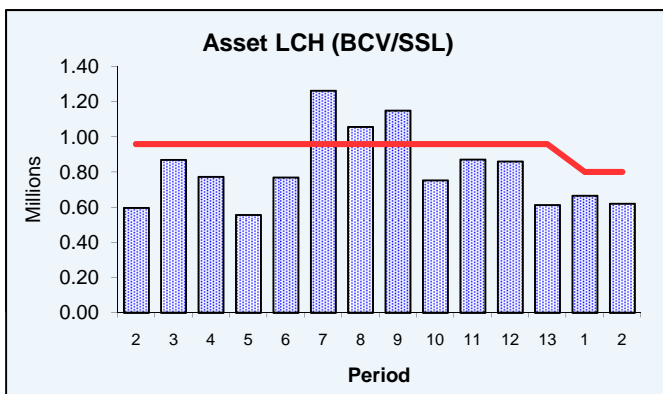
### London Underground Line Performance Trends Percentage of Scheduled Kilometres Operated

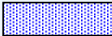



### London Underground Line Performance Trends Excess Journey Time



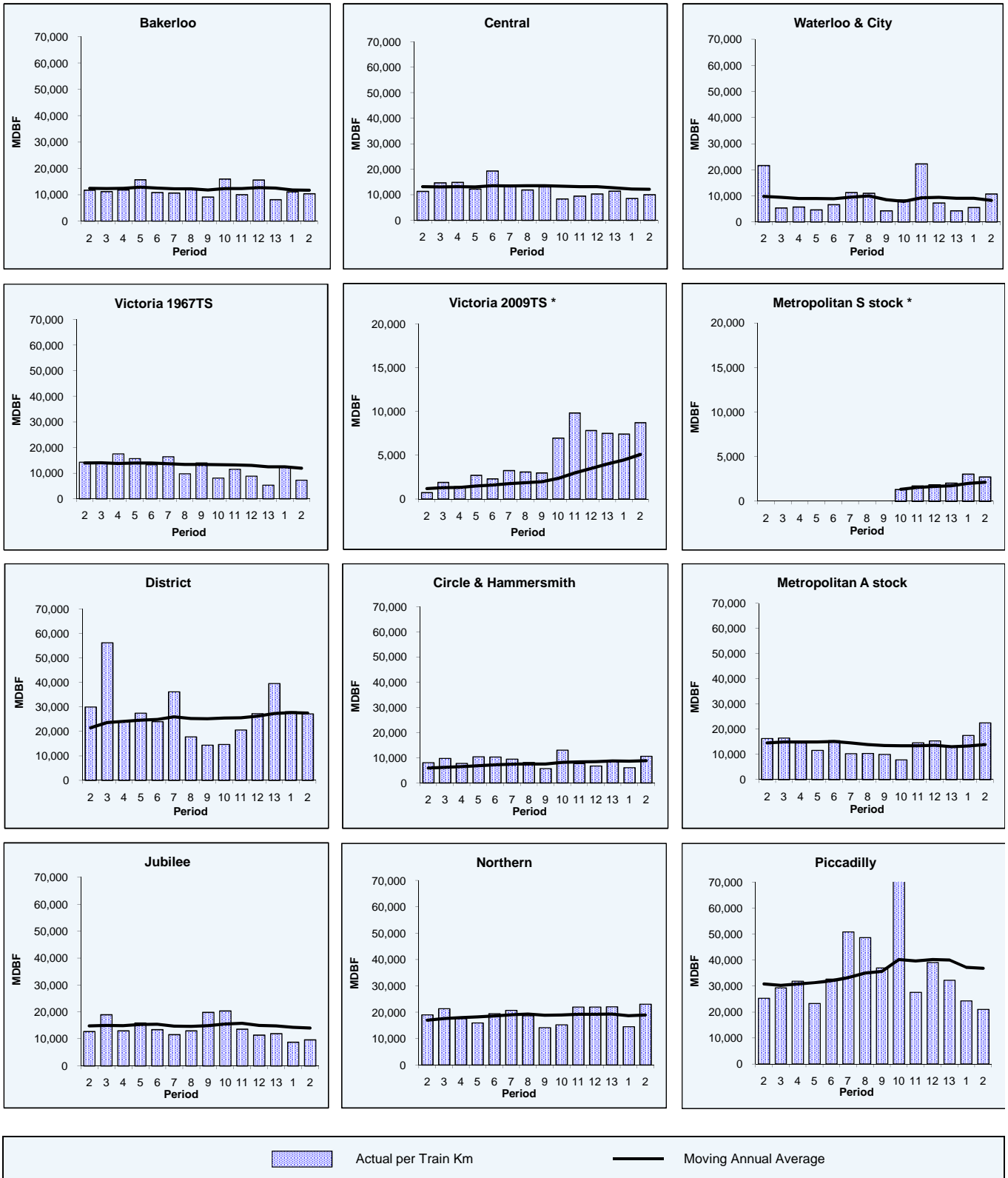
London Underground					
Asset Lost Customer Hours (LCH) - Period 2 2011/12					
			YTD		YTD Variance
 London Underground	Asset LCH (BCV/SSL)	Million	1.28	●	0.32
	Asset LCH (JNP)	Million	1.54	■	(0.49)



 Actual	 Target
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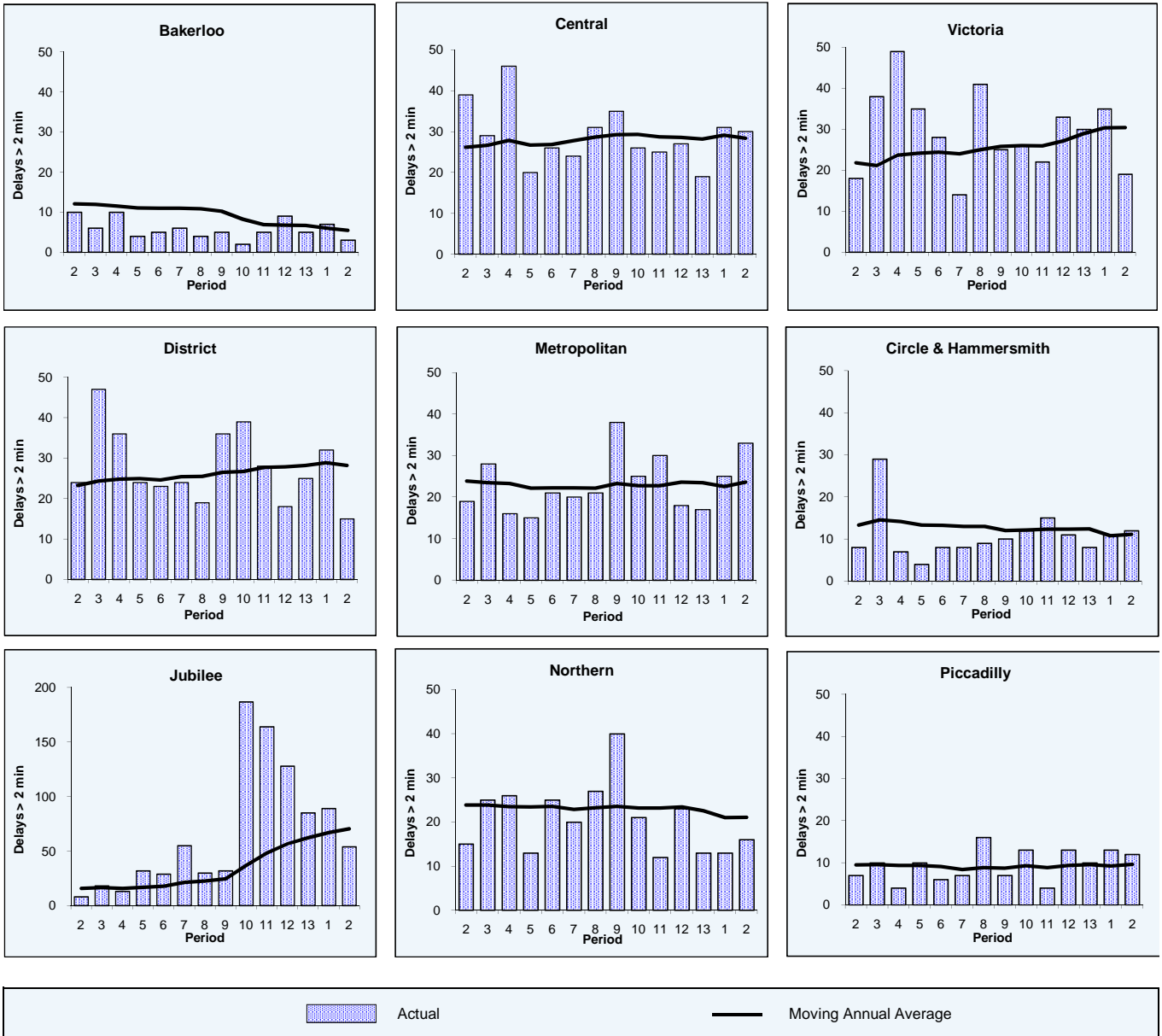
### London Underground Line Performance Trends Rolling Stock Mean Distance Between Failures



The graphs on this page show Rolling Stock MDBF calculated as the number of train kilometres operated in customer service divided by the number of asset-related service disruptions of 2 minutes or more, and include items that are attributed but still in abeyance to be agreed. Subsequent agreement of attribution could therefore give rise to retrospective changes.

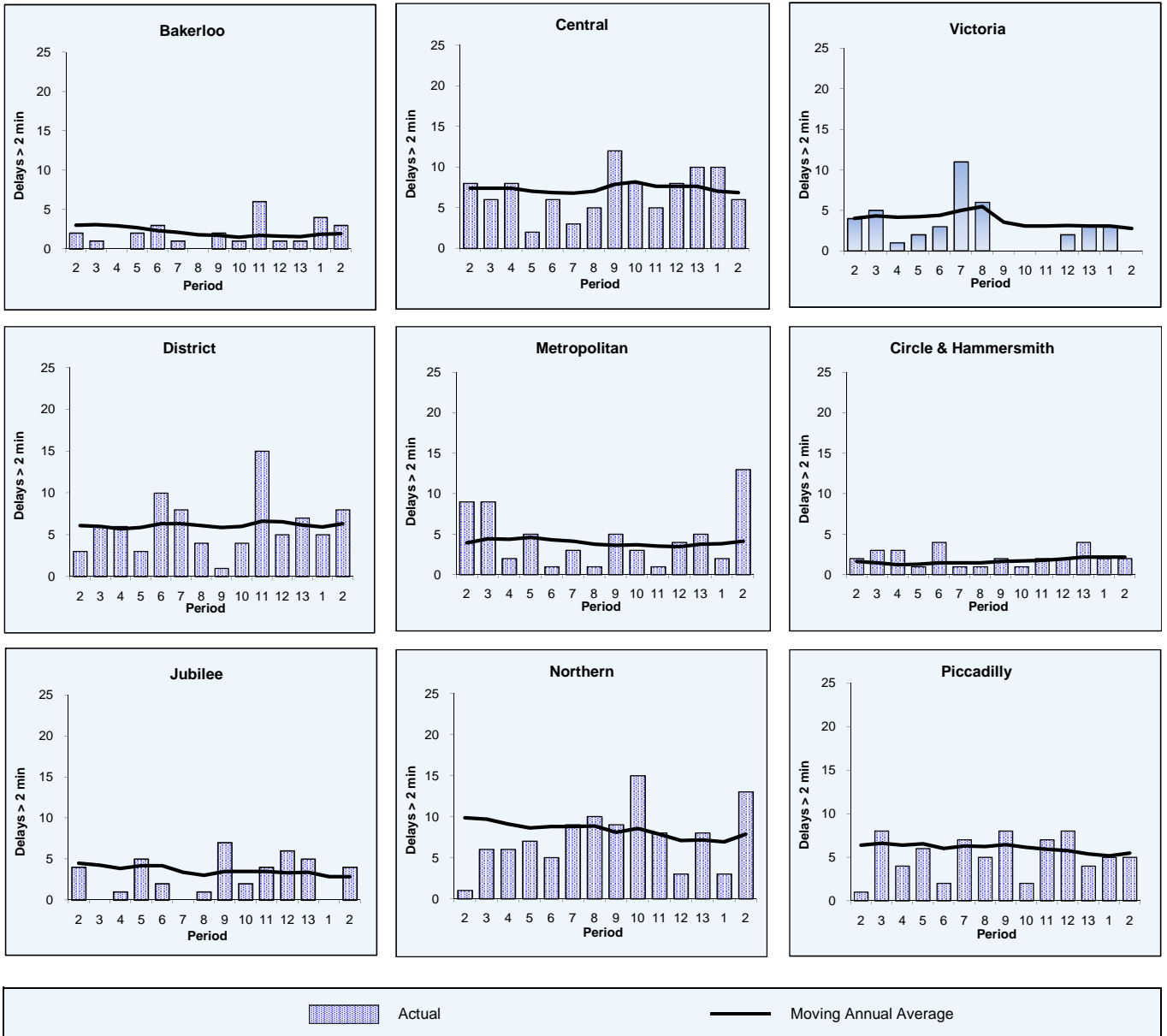
\* Graphs for the new stock types (Victoria 2009TS and Metropolitan S stock) use a different scale from the older stocks so as to maintain visibility of the trends.

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



The graphs on this page show the number of asset-related service disruptions of 2 minutes or more and include 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



The graphs on this page show the number of asset-related service disruptions of 2 minutes or more and include 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 Lift and Escalator Availability

