

Transport for London

Projects and Planning Panel

**Subject: TfL Investment Programme Report – Second Quarter
2012/13**

Date: 27 November 2012

1 Purpose

- 1.1 The Investment Programme report for the second quarter of 2012/13 (24 June 2012 – 15 September 2012) is attached to inform the Panel of TfL's Investment Programme performance.

2 Recommendation

- 2.1 The Panel is asked to NOTE this report.

3 Contact

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Investment Programme Report Second Quarter July – September 2012/13

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Cover picture; TfL staff directing customers through Stratford Station to the Olympic Park

Transport for London

Investment Programme Report

Second Quarter, 2012/13 (24 June – 15 September 2012)

I. Programme Highlights

Delivery of the Investment Programme continues to show strong performance and positive progress.

High levels of service were delivered throughout the Games period; the Tube had a 34% increase in passengers; London Overground an increase of 26%; and the DLR also saw significant increases.

LU's Operations were supported by Capital and Asset Performance Directorates throughout the Games with additional standby support, and preparatory work to ensure reliability of new assets, contributing to exceptional overall service. Performance of the assets on Victoria Line Upgrade (VLU) and Sub-Surface Railway Upgrade Programme (SUP) was above Games targets and lifts and escalator performance was exceptionally good. The air cooling was accelerated and brought into service at Green Park and Oxford Circus stations ahead of the Games.

The Olympics Junctions & Carriageways Project completed the rollout of all junction and carriageway measures in time for the Games and have subsequently returned the road network to its original state following the closing of the Games.

Despite the focus on Games performance there were a number of other notable achievements:

On the Sub-Surface Railway (SSR) Upgrade, reliability of the new (S8) trains on the Metropolitan line continues to improve and reached 18,856km mean distance between service affecting failures (MDBSAF) by the end of the quarter, it's highest ever level. This follows concerted efforts made by the team to deliver its fleet reliability programme, including a focus on the performance of train operating systems. The S7 trains on the Hammersmith and City line have also seen an improvement in the measure of reliability, increasing to 3,200km between failures, as a result of both a low number of failures and the slowly increasing number of kilometres travelled.

On the Victoria line Upgrade, the growth trend in technical reliability continued to be maintained at around 27,000km MDBSAF and the project was Highly Commended in the Project of the Year category at the National Rail Awards.

The Countdown Project achieved 'final acceptance' on 13 July 2012 following the completion of the 2,500 signs rollout.

The Emirates Air Line entered revenue service on 28 June 2012 and had carried one million passengers by the beginning of September.

Significant milestones delivered in the quarter included;

- SSR Upgrade S Stock Preview Service provided on Hammersmith & City
- SSR Upgrade 57th S8 train available for delivery to London
- SSR Upgrade End State Track Layout delivery programme in place
- Victoria Station commenced North Paid Area Link Open Cut Excavation
- Cannon Street station was brought into use ahead of the Games

- Emirates Air line revenue operation commences

95% of milestones delivered in the quarter were on or ahead of target.

Significant milestones delivered post quarter included;

- SSR Upgrade all A-Stock removed from service
- SSR Upgrade roll out of new air-conditioned trains on the Metropolitan Line complete
(Annex B:2013)
- Victoria Station Northern Ticket Hall piling of box west completed
- Victoria Station Commence South Ticket Hall main works

2. Projects (over £50m) and Programmes (over £10m per annum)

TfL's Investment Programme contains a range of programmes and projects over £50m, in addition to a multitude of smaller activities. These are delivered by TfL directly, through partners in the London boroughs, or through long-term partnerships with the private sector such as Private Finance Initiatives (PFI's).

This main body of this report covers discrete projects with a total cost greater than £50m and programmes spending over £10m per annum. For each project, key milestones are listed with a forecast date compared against the March 2012 baseline. If appropriate, milestones listed as deliverables for the year in the 2012/13 Budget document are included.

Committed schemes and milestones listed in Annex B of the 2010 Spending Review funding settlement letter are included in this report. The milestones contained in Annex B are identified in the project pages with the note '(Annex B: date)' listed after the description.

Key to RAG status:

Status	Discrete Projects	Annualised Programmes
●	On time or early	100 per cent of target achieved
▲	Between 1 and 89 days late	>75 per cent of target achieved
■	Greater than 90 days late	<75 per cent of target achieved

This report focuses on the delivery of investment projects. For discussion on wider financial performance, see the Quarter 2 Operational and Financial Report.

The estimated final cost (EFC) of some of the projects is not included (marked as * or N/A) for reasons of either commercial confidentiality or annualised programmes.

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Sub-Surface Railway Upgrade

Spend to end Q2 2012/13 £m	EFC £m
2153.6	4196.5

Programme level	Current Plan Date	Actual/Forecast Date	RAG
S Stock Preview Service on Hammersmith and City	09-Jul-12	06-Jul-12	Complete
S Stock in Timetabled Hammersmith and City Service	09-Dec-12	09-Dec-12	●
Roll out of new air-conditioned trains on the Metropolitan Line complete (Annex B: 2013)	02-Mar-13	14-Oct-12	Complete
Rolling Stock	Current Plan Date	Actual/Forecast Date	RAG
S-Stock reliability equivalent to A stock Mean Distance Between Service Affecting Failures (MDBSAF)	21-Jul-12	17-Aug-12	Complete
57th S8 Stock available for delivery to London	13-Oct-12	11-Jul-12	Complete
All A-Stock removed from service	02-Mar-13	14-Oct-12	Complete
SUP Rolling Stock Sub-programme Completion	31-Mar-19	31-Mar-17	●
ATC	Current Plan Date	Actual/Forecast Date	RAG
Location Identified and Agreed for ATC Train Fit Bay	21-Jul-12	08-Jun-12	Complete
End State Track Layout delivery programme in place	15-Sep-12	14-Sep-12	Complete
System Level Requirements Approved by ATC Supplier	05-Jan-13	05-Jan-13	●

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Stable Design Data for End State Track Layout North of Baker St	05-Jan-13	24-Sep-12	Complete
Uxbridge Stabling Detail Design Complete	31-Mar-13	20-Mar-13	●
Approval of the Signal Equipment Rooms Premises Conceptual Design Statement	31-Mar-13	04-Feb-13	●
SUP signalling upgrade complete (Annex B: 2018)	31-Dec-18	31-Dec-18	●
Depots	Current Plan Date	Actual/Forecast Date	RAG
Neasden Depot - Rail access into New Lifting Maintenance Facility enabled	08-Dec-12	25-Jul-12	Complete
Ealing Common Depot - S7 test train permanent berthing enabled	05-Jan-13	05-Jan-13	●
Neasden Depot - Phase 2 Signalling Commissioned	31-Mar-13	02-Nov-12	●
Neasden Depot - Ability to lift S-Stock in New Lifting Maintenance Facility	31-Mar-13	12-Dec-12	●
SUP Depots Sub-programme Completion	31-Mar-15	31-Mar-15	●
Infrastructure Other	Current Plan Date	Actual/Forecast Date	RAG
Paddington (H&C) Infrastructure ready for integration testing	21-Jul-12	04-Jul-12	Complete
Paddington (H&C) Infrastructure complete	08-Dec-12	04-Jul-12	Complete
Stepney Green to Bromley-by-Bow Infrastructure ready for integration testing	02-Feb-13	31-Oct-12	●
Tower Hill Infrastructure ready for integration testing	02-Feb-13	15-Apr-13	▲

London Underground

Stepney Green to Bromley-by-Bow Infrastructure complete	31-Mar-13	31-Jan-13	●
SUP Enabling Other Sub-programme Completion	31-Dec-17	31-Dec-17	●
Conductor Rail	Current Plan Date	Actual/Forecast Date	RAG
SUP ELLCCR Sub-programme Completion	31-Dec-12	31-Dec-12	●
Extra Low Loss Conductor Rail (ELLCCR) - Installation complete	02-Feb-13	04-May-12	Complete
S7	Current Plan Date	Actual/Forecast Date	RAG
SUP S7 Sub-programme Completion	31-Dec-17	31-Mar-13	●
DC Power	Current Plan Date	Actual/Forecast Date	RAG
SUP Power Sub-programme Completion	30-Jun-16	31-Mar-13	●
Signal Immunisation	Current Plan Date	Actual/Forecast Date	RAG
Completion of the Signalling Immunisation works	10-Nov-12	31-Jul-13	■
SUP Signalling Immunisation Sub-programme Completion	30-Jun-14	30-Jun-14	●
Management	Current Plan Date	Actual/Forecast Date	RAG
SUP Programme Management Sub-programme Completion	31-Dec-17	31-Dec-17	●

The Sub-Surface Railway network (consisting of the Circle, District, Hammersmith & City and Metropolitan lines) upgrade will provide new air-conditioned rolling stock, new signalling, modified depots and stations to accommodate the new longer trains and a new control centre. The upgrade will increase capacity and reduce journey times. The programme benefits will be delivered by 2018. The programme is on budget and on schedule to achieve its planned delivery date.

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The last A Stock run was on 29 September, achieving the DfT Annexe B funding milestone, to complete the roll-out of the new S stock on the Metropolitan line 15 months early. A full S Stock service was run on the Metropolitan line throughout the Games period, with high levels of reliability.

The programme is organised around the following four delivery areas:

Rolling Stock

Delivery of new (S8) trains for the Metropolitan line has continued on schedule, and delivery of the 57th S8 train in the quarter, prior to the start of the Games was a milestone achievement.

The programme also took delivery of a further two S7 trains this quarter making four in total and provided a preview service on the Hammersmith & City line during the Games.

Reliability of S stock continued to improve during the period resulting in the highest ever S8 reliability being achieved, exceeding the target set for the Games and bettering that of the outgoing A stock.

Automatic Train Control (ATC)

The re-signalling of the entire SSR network with a modern train control system also provides the opportunity to remodel key pinch-points of track – for example at junctions like Aldgate, Baker Street and Edgware Road. This will allow a once-in-a-generation simplification of track to facilitate world-class reliability and performance. This programme is known as End State Track Layout. The End State Track Layout team achieved a key project milestone with the publication of it's overall delivery schedule for the project. The programme has been designed to align with Bombardier's ATC signalling supply programme and sets out the activities to deliver the track layout enhancements and rationalisations to support the introduction of the new ATC signalling system and the phased delivery of performance improvements across the SSR network. Technical innovation and adoption of global best practice approaches are being explored to minimise access to the railway during installation of ATC systems.

Following receipt of Bombardier's detailed signalling supply schedule, plans are now being developed for testing the ATC system and it's component parts, including installation of the system on the test track at Old Dalby. This approach to demonstrate the functionality and reliability of the system removes risk from the live operational railway. Bombardier has slipped against their latest agreed schedule but following elevation, a recovery plan to the end of the year has been agreed that holds all sectional completion and DfT milestone dates. The causes of delay were lack of resources and leadership, both of which have been addressed, and there is still high confidence in the chosen technical solution.

The project is currently working towards approval of system level requirements with Bombardier and the design of ATC stabling arrangements at Uxbridge and Baker Street, both of which are scheduled to be completed next quarter.

The next major milestones for the signalling project are to complete functional design specification by March 2013 and the generic system design by October 2013.

Depots

At Neasden, track access to the new lifting maintenance facility (NLMF) and civil engineering works have been completed. This new state-of-the-art lifting facility will greatly improve speed and efficiency of train maintenance through it's ability to lift an entire train, rather than the current practice of separately lifting individual carriages. Also at Neasden, installation work has been completed on the new signal equipment room (SER).

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At Hammersmith, demolition works have been completed for one of the access roads (road 24) and a contract awarded to commence extending this road to accommodate new, longer S7 trains.

At Upminster, the permanent way and associated conductor rail works have been completed to the North sidings and work will commence on depot sheds next quarter.

Infrastructure

A key focus of activity this quarter has been making the infrastructure ready to run S stock in timetabled service on the Hammersmith & City line. Despite some specific technical challenges this milestone is due to be achieved, on schedule, on 9 December 2012. This work follows earlier successful achievement of the milestone to make infrastructure ready for the S stock preview service. Difficulties with the One Person Operation (OPO) solution may delay the date by which infrastructure at Tower Hill will be ready. However, a recovery programme is being developed to retrieve this situation.

All legacy track circuits must be treated such that they are not susceptible to electrical interference (Electro-Magnetic Compatibility) from the new trains. This process is termed “immunisation.” Establishing a technical solution for parts of the District line has proven to be more challenging, resulting in delays to commissioning these areas. Whilst the potential solutions will delay completion of the immunisation, this does not impact the forecast achievement of the DfT milestone to complete the roll out of new trains on the District line before the end of 2016.

Signalling modification work is required during the migration from current trains to new S stock. Work has progressed on these systems throughout the quarter, including Victoria, Embankment, St James’s Park, Sloane Square and Temple, with commissioning completed late September 2012. This work is being delivered using LU’s internal delivery expertise including signalling, civil engineering, design and bridges and structures teams.

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SSR Major Power Works (Signalling)

Spend to end Q2 2012/13 £m	EFC £m
4.4	*

Milestones	Current Plan Date	Actual/Forecast Date	RAG
SSR Signalling Power Package 1 - Contract Award (New transformer rooms on Metropolitan and Hammersmith & City line)	02-Feb-13	27-Nov-12	●

This project will provide the main power supplies for the Sub-Surface Railway signalling (local distribution of signalling power is covered elsewhere).

Early minor works progressed satisfactorily on site and tender reviews for the first main package of works were completed. Close liaison with the ATC team continued, and the joint objective for the next quarter is to resolve how signalling power supplies will be provided in areas with Network Rail traction power supplies.

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SSR Major Power Works (Traction)

Spend to end Q2 2012/13 £m	EFC £m
280.8	518.0

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Package 6 Completion of Cable Pull	21-Jun-12	21-Jun-12	Complete
Power to Support 53 S8 & 48 S7C & 9 S7D Trains in service Available	24-Jul-12	01-Oct-12	Complete
SSR - Power available to support Metropolitan Line (x53 S8), Circle Line (x48 S7C) + District Line (x23 S7D) trains in service	13-Oct-12	10-Oct-12	Complete
SSR Power Upgrade - Package 3b Contract Award for 7 substations (5 upgrades + 2 new builds)	31-Mar-13	18-Feb-13	●
Programme Stage Gate Review (SSR PU Programme Close)	15-Jun-18	15-Jun-18	●

This programme will deliver the upgraded power supply capacity to support the entire SSR line upgrade. Capacity is in place to support the entire S8 fleet in pre-ATC mode. Work is now underway to support the introduction of the S7 fleet and the move to full performance under ATC.

Minor construction activity continued over the summer, but commissioning of new equipment into service was suspended during the Games works embargo. Commissioning recommenced in mid-September and progressed well thereafter.

Preliminary site work has now commenced on the eastern part of the District line, tender reviews for the package of work needed to support post-ATC operation on the Circle line are underway, and conceptual design to increase intake capacity from the National Grid at Neasden, needed post-ATC, is complete.

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Victoria Line Upgrade

Spend to end Q2 2012/13 £m	EFC £m
998	1,025.8

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Programme Ready for Introduction of WTT34 (30TPH)	22-Apr-12	22-Apr-12	Complete
Delivery of Victoria Line Upgrade Capability	21-Jul-12	02-Apr-12	Complete
Victoria Line Capacity Increase - Introduction of Working Time Table 35 (33TPH) (Annex B: 2013)	31-Mar-13	31-Jan-13	●

The Victoria line upgrade is a “total” line upgrade including new rolling stock, signalling, control equipment, depot and track works. The programme remains below authority and on target to complete ahead of the contractual completion date of August 2013. System reliability, including mitigating the effect of passenger interactions, remains the primary focus. All 47 of the new trains have been accepted for service.

Following the Games embargo for intrusive works, the teams have been remobilised to address the programme of snagging works for long term reliability and maintainability, underpinning the strong underlying performance achieved in readiness for the Games. There is ongoing close collaboration with operational colleagues to support the move to Working Time Table 35 in January. The team is also driving approval and completion of handover and maintenance documentation for the Asset Performance Directorate (APD) as well as ensuring resolution of the issues outstanding for rolling stock Final Acceptance payment.

The experience gained in supporting operational colleagues during the Games has been captured and will form part of the new project scope which is being developed for the Victoria line (post VLU) to satisfy the corporate vision of the Victoria and Jubilee lines and DLR achieving recognition as being world class railways.

The VLU was Highly Commended in the Project of the Year category at the National Rail Awards.

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Underground General Renewals

Spend to end Q2 2012/13 £m	EFC £m
95.3	N/A

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Approval of Concept Submission - Tunnel Cleaning Train Motive Power Unit	13-Oct-12	16-Jul-12	Complete
Engineers Loco 3 - Life Extension	10-Nov-12	05-Jul-12	Complete
Completion of Victoria Line Automatic Track Monitoring System (unit 1)	08-Dec-12	07-Dec-12	●
Finish on Site - 218 Car body ends	31-Mar-14	29-Jan-14	●

This is a portfolio of projects to upgrade and improve rolling stock, signalling systems and other train system assets that are not covered by the line upgrades.

'92 Tube Stock Refresh

344 body ends have now been completed against a target of 340.

Battery Loco Life Extension

Third and fourth Battery Locomotives were completed ahead of plan.

New Tunnel Cleaning Train

The Tunnel Cleaning Train is in two units: the motive unit and the cleaning unit. The former is low risk and on programme and the latter, although on programme, may require some further development work to mitigate environmental issues.

Automatic Track Monitoring System – ATMS

This is an “invest to save” programme in that it will provide track defect and quality information from in-service passenger trains, thereby reducing the requirement for access and manual inspections.

Automatic Track Monitoring System dynamic testing for track geometry system is progressing to plan to achieve the key milestone in December.

London Underground

Victoria Station Upgrade

Spend to end Q2 2012/13 £m	EFC £m
191.8	589.3

Milestones	Current Plan Date	Actual/Forecast Date	RAG
'Bring into Use' Network Rail to LUL Ticket Hall stairs (Sussex Stairs)	23-Jun-12	31-May-12	Complete
Northern Ticket Hall Piling of Box West completed	13-Oct-12	12-Oct-12	Complete
Commence South Ticket Hall Main Works	10-Nov-12	15-Oct-12	Complete
Commence Wilton Road Piling	03-Jan-13	10-Dec-12	●
Commence North PAL Open Cut Excavation	14-Jan-13	13-Aug-12	Complete
North Ticket Hall, access to Vic Line, LFEPA Shaft (Sectional Completion S1) – Deliver into service (Annex B: 2016)	23-Oct-16	29-Aug-16	●
South Ticket Hall and remainder of VSU works Sectional completion S2) – Deliver into service (Annex B: 2018)	04-Jun-18	13-Feb-18	●

The Victoria Station Upgrade project will deliver:

- a new underground north ticket hall at the junction of Bressenden Place and Victoria Street, with an entrance at street level
- a capacity increase in the existing Victoria line ticket hall (south ticket hall)
- nine new escalators
- a new interchange tunnel connecting the two ticket halls
- new lifts providing step-free access between street, ticket hall and Victoria line platform levels
- new lifts providing interchange between the Victoria line and District and Circle lines platforms
- improved access and new lifts between the National Rail and Underground stations

A project of this scale at the Capital's busiest station poses huge engineering challenges. Poor ground conditions must be stabilised through a process of "jet grouting" prior to tunnelling,

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and to facilitate this over 2200 grouting sleeves are being installed in the station and the surrounding roads.

The challenging nature of these works means that some disruption is inevitable, but we are doing everything possible to minimise the disruption to local business, theatres and those travelling to, from and around the station.

The project remains on schedule and within authority. The combined project team have completed their move into site offices in Terminus Place. The Wilton Road station exit has now been permanently closed to allow station upgrade works to proceed. The widened Sussex stairs are now in regular customer use. The first section of the paid area link (PAL) roof slab has been successfully cast and waterproofed. Preparatory works for the retention of the facade to the Duke of York public house have commenced.

Paddington Station Upgrade

Spend to end Q2 2012/13 £m	EFC £m
39.3	*

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Lifts Manufacture Complete (At Factory)	15-Sep-12	14-Sep-12	Complete
Lifts Installed	02-Aug-13	11-Apr-13	●
Final Fit Out Bring into use (Practical Completion)	22-Mar-14	30-Jun-14	■
Acceptance of mandatory asset information documents by LU	28-Jul-14	10-Sep-14	▲
LU Fit Out Work Complete (Annex B: 2014)	01-Nov-14	14-Jul-14	●

Paddington (Hammersmith & City line) station is one of LU's top priorities for congestion relief due to demand growth associated with local area redevelopment and the Sub-Surface Railway upgrade. The project will provide:

- new ticket hall
- significantly enlarged passenger concourse with three staircases to platform level
- provision of new step-free access from street to platform level (H&C platforms)

The design for the station fit-out works, which are to be delivered by London Underground to assist Crossrail in mitigating delays on the main works contract, has now been completed. The manufacture of lifts 3 & 4 is complete (milestone achieved). The project team is investigating opportunities to recover the delay now that fit-out works have commenced.

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Tottenham Court Road Station Upgrade

Spend to end Q2 2012/13 £m	EFC £m
259.4	482.3

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Central Line Overbridges Complete (possession works)	21-Jul-12	18-Jun-12	Complete
Start New Oxford Street Entrance Fit-Out	02-Feb-13	11-Jan-13	●
Commence Ticket Hall Fit Out	02-Feb-13	23-Nov-12	●
Section 1 Completion (Handover part Astoria site)	02-Sep-13	21-May-13	●
Section 3 Completion (Consolidated Piling)	19-Sep-14	09-Sep-13	●
Completion of Phase 1 (Partial Opening of the New Plaza Ticket Hall)	31-Mar-15	04-Jan-15	●
Completion of the Project (Annex B: 2016)	31-Dec-16	29-Dec-16	●

The project will provide:

- a new ticket hall (six times larger than the existing)
- three new escalators serving the Northern line
- improved access from street to ticket hall and from ticket hall to platform level (five new lifts)
- provision for a new public square at St. Giles Circus
- a significant portion of the structural works for the new Crossrail station (by LU)

The project remains on schedule and within authority. Over the next few months, as the heavy civil engineering aspects of the scheme complete, the focus of the project moves towards above ground and fit-out works and the risks associated with below ground civil engineering work diminishes.

Following a number of minor safety incidents the Contractor has undertaken to prepare and implement an enhanced Safety Improvement Plan to improve site safety performance.

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Bond Street Station Upgrade

Spend to end Q2 2012/13 £m	EFC £m
137.5	290.2

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Demolition of sub-structure Complete	02-Feb-13	01-Feb-13	●
Start of main tunnelling operations (Annex B: 2013)	15-Jul-13	09-Sep-13	▲
Close escalators 1 & 2 for tunnelling	28-Apr-14	11-Jan-14	●
Early hand back Jubilee line platforms. Escalators 6,7, and 8, 3,4,and 5, 4/092 into public use	02-May-15	03-Mar-15	●
Tunnelling Set Up Decommissioned	28-Sep-15	09-Nov-15	▲
Frame to be handover to Developer - Planned Date	06-May-16	22-Apr-16	●
Practical completion (Annex B: 2017)	28-Apr-17	03-Mar-17	●

Bond Street station is a key interchange between the Jubilee and Central lines. Long term demand and congestion are forecast to increase further as a result of growth in employment and leisure travel and the completion of Crossrail in 2018. The scheme provides:

- two additional escalators from the interchange level to the Jubilee line
- a low-level interchange route between the Central and Jubilee lines
- a new step-free entrance and ticket hall on Marylebone Lane
- four new lifts, allowing step-free access to platforms on both the Central and Jubilee lines
- step-free route to Crossrail

The project overall remains on schedule and within authority. The detailed design and the installation of the piles to support the future station ticket hall are both complete. At Stratford Place the stage two piling works are complete, and the installation of plunge columns has commenced.

A minor delay to the commencement of tunnelling operations has been forecast, due to a delay in the completion of demolition activities. A mitigation plan to recover this is being prepared.

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Bank Waterloo & City

Spend to end Q2 2012/13 £m	EFC £m
14.1	*

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Bring Into Use (Annex B: 2015)	31-Dec-15	23-Dec-15	●

The Bank (Bloomberg Place) project will provide easier access to streets south and south-west of the station, reduce congestion on the Waterloo & City line platforms, and provide step-free access to the Waterloo & City line. LU is making a fixed contribution to the funding of the construction of the station box shell, which will be delivered by the developer (Bloomberg). LU will fit out the station box to complete the new entrance. The project schedule is highly dependent on the developer.

The project remains on schedule and within authority. Bloomberg have installed a full monitoring system in readiness for the commencement of construction which is now scheduled towards the end of October 2012. The deed of variation formalising the changes to the station box design is now close to completion. Discussions are ongoing with Bloomberg to gain access to the completed station box to commence fit-out works ahead of the completion of the over-site development.

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Bank Congestion

Spend to end Q2 2012/13 £m	EFC £m
14.7	*

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Submit for Transport & Works Act Order (TWAo)	30-Apr-14	07-Apr-14	●
TWAo Grant of Powers	30-Sep-15	30-Sep-15	●
RIBA E-F Design Phase Completed	31-Dec-15	31-Dec-15	●
Start on Site	04-Jan-16	04-Jan-16	●
Ticket Hall Delivery into Service	14-Sep-21	25-Aug-21	●
Beneficial Use (Annex B: 2021)	31-Dec-21	31-Dec-21	●

The Bank Northern line congestion relief project will relieve current and expected congestion in Bank station, by having a new southbound running tunnel and platform with the existing platform utilised as a concourse area. By mitigating increasingly frequent congestion of the Northern line/DLR area, station closures will be reduced.

We are adopting an exciting and innovative approach to the delivery of this project. Known as Innovative Contractor Engagement (ICE), the approach seeks to promote innovation and maximise value through the development of an early dialogue with Contractors. The ICE approach was developed by London Underground to better deliver large complex projects, and Bank is piloting the approach with the support of Infrastructure UK (part of HM Treasury).

Short-listed bidders have confirmed their willingness to proceed to invitation to tender (ITT) stage by submitting request to proceed (RTP) documentation.

This now completes the initial dialogue phase of the ICE.

London Underground

Station Development

Spend to end Q2 2012/13 £m	EFC £m
1,264.5	1,461.4

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Complete Design Validation - Vauxhall Station Capacity & Step- Free Access	11-May-12	10-May-12	Complete
Highbury & Islington Event Mitigation Works available for Beneficial Use	21-Jul-12	22-Jun-12	Complete
Cannon Street Bring into use	27-Jul-12	26-Jul-12	Complete
Bromley by Bow Step-Free Access Commence Detailed Design	29-Jan-13	12-Mar-13	▲
Bromley by Bow Step-Free Access Bring into Use	23-Dec-14	07-Jan-15	▲

This comprises projects primarily to keep stations fit for purpose. It also includes minor station upgrades, some of which are third party funded works and budgetary provisions for future station capacity schemes. Planned funding for Finsbury Park, Highbury & Islington and Vauxhall stations, along with a general provision for congestion relief schemes, are included in this programme.

At Heathrow T123 all front of house works were completed ahead of the Games. Work to back of house continues with completion estimated for the end of October. Cannon Street station was brought into use ahead of the Games, with completion of all works forecast for early November.

Regarding step-free access at Bromley by Bow, although commitment to Section 106 funds had been delayed, funds have now been received. This has delayed the issue of the design ITT and the start of the design.

London Underground

Stations Third Party Schemes

Spend to end Q2 2012/13 £m	EFC £m
4.2	*

The Northern Line Extension operational strategy that supports the omission of the proposed shaft in Claylands Road has been agreed. Preparations are underway for the public consultation exercise commencing in November 2012. Discussions with the new owners of the former Battersea Power Station site, S.P. Setia, have commenced.

Croxley Rail Link - The Transport and Works Act public hearing was due to commence on 9 October and complete on 18 October.

Thameslink

Spend to end Q2 2012/13 £m	EFC £m
34.6	42.8

Milestones	Current Plan Date	Actual/Forecast Date	RAG
London Bridge Network Rail Station - Network Rail Complete Works	10-Jan-19	10-Dec-18	●

This project provides LU support and infrastructure protection to the Thameslink programme delivered by Network Rail (NR). All of the expenditure is reimbursed by NR.

At Blackfriars snagging works continue towards a full hand back of all assets in mid November. The project has been shortlisted in the outstanding team-working category in the National Rail Awards.

Farringdon Station is now fully operational; the programme to clear all snags is expected to continue until the end of the year.

London Underground

LU Lifts & Escalators (BCV/SSR)

Spend to end Q2 2012/13 £m	EFC £m
159.1	*

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Charing Cross Escalators 1 and 3 return to service	28-Apr-12	23-Apr-12	Complete
Tottenham Hale Escalator 1 return to service	28-Apr-12	21-Feb-12	Complete
Baker St. Escalator 3 completion of works and return to service	23-Jun-12	18-May-12	Complete

Lift and Escalator refurbishment works are undertaken to ensure continued safe and reliable operation of the assets and to minimise failures which could result in unplanned station closures.

TfL have awarded a contract to Kone for up to 50 lifts at market leading rates.

TfL have also recently announced the largest ever order for station escalators (over 100 machines) at world-class unit-rates to supplier Otis. Through this contract, Otis has committed to a 60 per cent improvement in Tube escalator reliability with incentives to increase this further. Payments are linked to achieving these improvements.

The Lifts and Escalator Games resilience plan, developed in collaboration with the Asset Performance Directorate (APD) and Tube Lines, proved highly effective in ensuring that disruption due to failures was virtually eliminated during the period of the Games. This excellent performance was driven by enhanced availability of spares, contractors on 24 hour standby, preventative inspections and suspension of all but essential works.

The annual milestone setting process for 2013/14 has commenced and will provide an approved selection of milestones going forward.

London Underground

Cooling the Tube Programme

Spend to end Q2 2012/13 £m	EFC £m
171.2	182.0

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Out of service fans - Phase 4 - All fans available for beneficial use	10-Nov-12	16-Jun-12	Complete
Out of service fans - Phase 4 - Handover to Maintenance (excluding Green Park and Oxford Circus transferred to Stations programme)	30-Jan-13	28-Jan-13	●

This is a long term programme to control ambient temperatures on the Underground to stop them increasing as the train service increases. Without intervention, temperatures will rise as more energy is dissipated within the tunnels due to increased train service capability delivered by the deep-tube line upgrades.

All three restored ventilation shafts in Phase 4 were delivered into beneficial use before the Games. Condition surveys and benefit/cost comparisons of candidates for Phase 5 have now commenced.

Both Green Park and Oxford Circus Platform Cooling were successfully delivered in time for the Games. Green Park platform cooling was brought into use on 13 July whilst Oxford Circus platform cooling was delivered on 17 July a full ten weeks ahead of plan.

There has been significant customer feedback regarding the Platform Air Handling Units – all immensely positive and their performance during the Games was exceptional.

The more strategic plan for the Victoria line continues with the use of regenerative braking, ventilation shaft utilisation and the as yet to be commissioned Coasting Control on 09 stock.

London Underground

Crossrail

Spend to end Q2 2012/13 £m	EFC £m
157.2	274.0

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Work Package Plan Agreed for Moorgate Ticket Hall Sterilisation (Stage 1)	28-Apr-12	24-Apr-12	Complete
Agreement of Crossrail System Integration User Requirement Statement	28-Apr-12	25-Apr-12	Complete
Liverpool St Enabling Works Bring into Use Station Operations Room	08-Dec-12	09-Nov-12	●
LU Support Complete for Crossrail Trial Running Stations (Central Section)	28-Feb-19	31-Dec-18	●

This project provides LU support and infrastructure protection to the Crossrail Programme delivered by Crossrail Limited (CRL). The vast majority of the expenditure is reimbursed by CRL.

The design assurance deliverables for the new works were clarified and agreed between LU and CRL by streamlining the requirements in line with the agreed Technical Assurance Plan.

The new CRL and LU relationship scorecard was finalised and formally published.

Approval was given by LU for CRL to tunnel beneath the Hammersmith & City line, following receipt of necessary assurance evidence. Works took place with no adverse effects to LU infrastructure.

The works package plan has been agreed with CRL for the Station Operations Rooms Systems Integration Project. Invitations to tender have been submitted by LU for the concept design.

London Underground

Track Renewal (BCV/SSR)

Spend to end Q2 2012/13 £m	EFC to 2012/13 £m
35.3	94.9

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Points and Crossings - Achieve 2 units	12-Oct-12	17-Sep-12	Complete
Ballasted Track Replacement and Re-ballast Metres - Achieve 1,637m	12-Oct-12	17-Sep-12	Complete
Track Drainage - Replace 4,648m	12-Oct-12	30-Nov-12	▲
Deep Tube Class 1 Renewal (Expected trackform life of 40 years) - Achieve 1,014m	12-Oct-12	28-Sep-12	Complete
Completion of Central Line Blockade (11 Points & Crossing renewed)	05-Jan-13	05-Nov-12	●
Ballasted Track Replacement and Re-ballast Metres - Achieve 6,908m	31-Mar-13	04-Mar-13	●

Track Partnership

The Track programme remit is to deliver a five year programme of track, drainage and points and crossings renewals against an established schedule of work. By 2018 the target is that 25 per cent of new infrastructure will have been delivered.

Unit rates for track renewals are tied to volumes. The Track Partnership has established a strategic plan linking in with known Tube Lines work and stretching over five years, it includes the use of “blockade” working and although painful for customers it is also a more efficient way of working and sometimes, depending on the complexity of the area it may also be the only viable option.

The plan looks to bring a more focussed approach to closures and transitions from its current track condition approach to an approach that maximises the work bank by bringing work forward or pushing it back and then concentrating this in more customer coherent parcels that looks to focus work in a particular area of the network and then move on with the aim of not returning for some years – this is difficult to achieve in some areas where the sheer scale of renewal required and the location mean some degree of disruption for long periods but in general the approach is valid and a more efficient use of resources. The plan also looks to combine Track Partnership work and Tube Lines work where these synergies exist to maximise use of both GB Rail freight and Transplant fleet of trains.

London Underground

The Unit Rate flight path is predicated on this plan and achieves better than target year on year given the volumes in the plan. The plan will also act as a focus for other programmes to manage their work.

The track team achieved three programme milestones early by completing two points & crossing units, 221 metres of Ballasted Track Renewals and 184 metres of Deep Tube Renewals.

London Underground

As part of the Track Partnership's improvement programme the biggest training event in London Underground Track Renewals history took place at Ruislip Depot over the Games moratorium. The training was undertaken on four live track renewal depot worksites and resulted in delivery of 560 metres of ballasted track renewal. The training of 426 staff was supported by 40 engineering trains with 14 trainers qualified in engineering and behavioural skills training.

Drainage work from the Track Partnership has fallen behind plan as a direct result of the Track Partnership Improvement Programme and is currently forecasting to undershoot the PAM by circa 500 metres. A remedial plan is in place to recover this meterage, pulling forward new work and increasing delivery of mid-week working – nearly 1000 metres of drainage work was completed and the Track Partnership team are now fully resourced and gaining ground.

Track Delivery Unit (TDU)

The in-house LU Track Delivery Unit (TDU) performance continues to go from strength to strength exceeding planned volumes and driving down Unit Rates to record lows;

- Class 1 Deep Tube Renewal (DTR) milestone achieved two weeks early (28 Sep 2012) by driving and capitalising on all production opportunities during the Games period
- Unit rates for historic (pre-TDU) DTR works were in excess of £10k per metre. Unit rates for current TDU delivery range between £6.5k per metre and £8.5k per metre dependant on the complexity and location with further efficiencies planned
- Removal of over 200 tonnes (4,500 metres) of scrap rail in support of Games Reliability Plan
- Early delivery volumes up on a demanding rail grinding programme consistently delivering 20 to 30 per cent more than plan with over 12,000 metres planned in quarter three
- Grinding unit rates are improving consistently – budgeted at £80 per metre, delivered in quarter two for £75 per metre and on target for quarter three delivery at £65 per metre

Neasden Depot Siding Road reconfiguration and installation of 13 sets of points completed on schedule together with new work comprising of re-railing and re-ballasting works for Croydon Tramlink.

London Underground

Civils (BCV/SSR)

Spend to end Q2 2012/13 £m	EFC to 2012/13 £m
7.7	28.4

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Practical Completion: Northwood – Northwood Hills	26-May-12	25-May-12	Complete
Practical Completion: Wimbledon Park to Southfields	26-May-12	25-May-12	Complete
Detailed Design Complete: Harrow-on-the-Hill to North Harrow	21-Jul-12	21-Jul-12	Complete
Start on Site: Northwood to Pinner	10-Nov-12	09-Nov-12	●
Practical Completion: Strengthening three Bridges in the Bayswater Area	02-Feb-13	01-Feb-13	●
Practical Completion: Bridge Impact Protection - Perivale Area	31-Mar-13	30-Mar-13	●

The Civils Programme is running to plan for 2012/13. Planned site works, off the network, proceeded at two locations during the Games period including the protection of over-bridges in Perivale. Project work in the quarter focussed on finalising designs and project completion stages. 15 project conceptual or detailed designs were completed in the quarter to programme, including the detailed designs for the earth structure remediation projects at Chorleywood-Chalfont and Latimer and Harrow-on-the-Hill to North Harrow.

Projects recently started on site and to plan at Bayswater to strengthen cast iron roof beams over the track, in Islington to protect over-bridge parapets and at North Harrow to stabilise two embankments. As scheduled, in quarter three works will start on site at Northwood Hills - Pinner on embankment stabilisation and on the preparation of the abutments of bridges at Chiswick Park ahead of the replacement of the superstructures planned for period eleven.

Site works will commence next quarter to stabilise embankments at Fairlop. These works have been brought forward in the programme to take advantage of the Hainault blockade when works can be carried out more easily and cost effectively than during traffic hours.

The use of construction management methodologies has brought the Civils Unit Rates for some jobs down to the level of Network Rail – the key player in this area - given the nature of the LU infrastructure, this is quite an achievement and drives the unit rates to 1/3rd of that for historical contractor earth works stabilisation. Three further construction managed sites are planned for this financial year.

London Underground

Deep Tube Programme

Spend to end Q2 2012/13 £m	EFC £m
4.9	*

Milestones	Current Plan Date	Actual/Forecast Date	RAG
DTP Strategic Objectives Defined (Outcome Definition)	26-May-12	22-May-12	Complete
Strategy and plan to meet our commitment to the DfT of life extension of the Piccadilly line signalling signed-off by the Rail & Underground Board	31-Oct-12	17-Jul-12	Complete
Deep Tube Programme Authority Expires	31-Dec-12	31-Dec-12	●
(*) Delivery of prototype for a low energy, higher capacity train for Piccadilly and Bakerloo lines (Annex B: 2015)	31-Dec-15	31-Dec-15	●

The Deep Tube Programme (DTP) will deliver new trains and railway control systems to the Bakerloo, Piccadilly, Waterloo & City and Central lines to replace life-expired assets to realise capacity and journey time benefits at the lowest possible whole-life cost. This will be achieved through the introduction of more efficient train system solutions which will allow line capacity enhancements to be delivered without a major increase in energy consumption and tunnel temperatures, thereby reducing the need for capital intensive tunnel and station cooling infrastructure.

Clearly with such a major investment, good industry practice and prior experience requires that an up-front feasibility and de-risking exercise is carried out. This feasibility stage has indicated several work streams each of which relates to a key risk and the funding and detailed scheduling of these is being finalised whilst the initial work has already started.

Progress against scope is on track to deliver Programme Gate B by October 2013. An integrated programme baseline has been established for the Feasibility stage, based on the objectives and assumptions that were approved by the DTP Board in quarter one. Performance and trends will be measured in relation to this baseline. Any changes will be managed by a formal change management process.

(*) A detailed definition of the 2015 DfT Annex B milestone "delivery of a low energy, higher capacity prototype train" has been agreed with the DfT, with formal written confirmation being sought. Note that this milestone does not constitute delivery of a prototype train which would be able to run usefully on the LU network.

London Underground

A holistic conceptual picture has been constructed to illustrate the current status of the Deep Tube railway design. Thirteen critical design features have been identified which will be used to establish and monitor maturity of the railway design.

A supplier engagement strategy has been produced to govern how the team will work with suppliers to develop the design whilst recognising commercial sensitivity.

Tube Lines

Lifts and Escalators (JNP)

2012/13 Spend to end Q2 £m	EFC to 2012/13 £m
4.0	17.6

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Bermondsey Secondary Passenger Lift 1 - bring into use	16-Jul-12	15-Jun-12	Complete
West Ham Escalator 6 Refurbishment - bring into use	16-Jul-12	26-Jun-12	Complete
Highgate Escalator 1 Refurbishment - bring into use	04-Mar-13	15-Feb-13	●
Leicester Square Escalator 4 Refurbishment - bring into use	04-Mar-13	01-Feb-13	●
Canary Wharf Escalator 8 Refurbishment – bring into use	04-Mar-13	02-Feb-13	●
Clapham South Escalator 1 Refurbishment – bring into use	04-Mar-13	22-Feb-13	●
Waterloo Escalator 21 Refurbishment – bring into use	30-Mar-13	18-Mar-13	●

Lifts

The handover of lifts at Bermondsey and Canada Water was completed.

Escalators

Achieved 'Bring in to Use' status for escalators at Bermondsey, Waterloo, Westminster, and West Ham. All mobilisation pack information was completed along with ancillary documentation, approvals and licenses for the five escalator refurbishments which started simultaneously post Games.

Tube Lines

Station Condition Renewal (JNP)

2012/13 Spend to end Q2 £m	EFC to 2017/18 £m
7.9	15.4

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Heathrow Terminal 1,2,3 - delivery into service	19-Dec-12	19-Dec-12	●

Rail Vehicle Accessibility Regulations (RVAR Platform Humps)

The Olympic Delivery Authority (ODA) installation works at Finsbury Park, Oakwood and Hounslow West were completed in the Quarter. RVAR works on Kings Cross (Piccadilly line) and Green Park (Piccadilly and Jubilee line) platforms were also completed.

Tenders for Northfields Train Crew Accommodation have been received and are being reviewed. The programme is on target for contract award in October.

All front of house stations works for the Heathrow Modernisation project were successfully completed prior to the Games period as planned.

Tube Lines

Track (JNP)

2012/13 Spend to end Q2 £m	EFC to 2012/13 £m
10.6	30.9

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Completion of 1200m of Tube Reconditioning	31-Mar-13	01-Feb-13	●
Completion of 4000m of re-rail	31-Mar-13	31-Mar-13	●

Re-railing of 360 metres of track was achieved between Baker Street and Bond Street in a 27 hour closure, and bridge ballasting works in a 52 hour closure between Brent Cross and Golders Green was delivered successfully.

Key achievements completed in the quarter, included 315 metres of track replacement, 209 metres of tube reconditioning, 33 metres of pit reconditioning, 504 metres of life extension and 1933 metres of scrap rail removal at five sites (between Leicester Square and Charing Cross, and Arnos Grove and Southgate). All sites were handed back to Operations.

Tube Lines

Civils (JNP)

2012/13 Spend to end Q2 £m	EFC to 2012/13 £m
6.6	18.1

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Completion of 740m of Earth Structure Renewal	27-Mar-13	27-Mar-13	●
Completion of 4000m of Drainage intervention	31-Mar-13	31-Mar-13	●

All pre Games work was completed at Canons Park ahead of programme and the Temporary Speed Restriction (TSR) was lifted to allow full speed running on 25 July, achieving the Games milestone.

Monitoring continues on a nightly basis with no movement detected on either track or embankments.

Site preparation works are being undertaken in readiness for the next phase of remediation works on the southbound embankment, due to be completed by November 2012. The designs for northbound embankment have been produced and submitted.

Bridge and structure painting works were completed at Oakwood, Brent Cross, north of Hendon and between Burnt Oak and Colindale. Painting works commenced on the bridge between Boston Manor to Osterley. The contract was awarded for work structure packages including Neasden Depot, Dollis Hill and South Harrow.

717 metres of ultra-violet drainage lining renewal were completed with year to date actuals ahead of plan.

Tube Lines

Jubilee Line Upgrade

2012/13 Spend to end Q2 £m	EFC to 2017/18 £m
29.9	45.8

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Decommissioning and removal of assets	30-Jun-14	30-Jun-14	●

Work continues post operational handover to deliver the remaining works. These core works include a programme to deliver Transmission Based Train Control (TBTC), Engineering Vehicles (February 2013) and Ruislip Pre-Departure Test Facility (October 2013). There is also a programme for decommissioning and removal of old assets (scheduled for completion in June 2014).

The good performance of the TBTC system continued through the Games period which supported the achievement of exceeding the Jubilee line performance targets. During September, the 28 day moving average for TBTC delays is down to just two minutes per day.

Ten engineering trains are now TBTC enabled and the Long Welded Rail trains achieved the first TBTC enabled rail-drop on 14 September.

Additional software builds are planned to address modifications at Neasden depot and reliability improvements in November. A further two builds are planned to address operability and reliability improvements beyond the scope of the original upgrade. This will include system modifications in reaction to Platform Edge Door and Axle Counter failures.

Tube Lines

Northern Line Upgrade

2012/13 Spend to end Q2 £m	EFC to 2017/18 £m
121.6	412.7

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Installation Complete Northern Migration Areas (NMA High Barnet to West Finchley) and NMA2 (Mill Hill East to Highgate)	10-Jul-12	29-Apr-12	Complete
Start System Testing NMA1 (High Barnet to West Finchley)	04-Aug-12	15-Jun-12	Complete
Installation Complete; NMA5 (Stockwell to Morden)	21-Sep-12	03-Sep-12	Complete
Installation Complete; NMA6 (Edgware to Belsize Park)	26-Oct-12	19-Dec-12	▲
Installation Complete; NMA4 (Old Street/Euston to Oval)	23-Nov-12	28-Nov-12	▲
106 Trains ready for Revenue ATO Service	03-Dec-12	01-Dec-12	●
Northern line upgrade complete, delivering 20% increase in capacity (Annex B: 2014)	31-Dec-14	31-Dec-14	●

Maturity Level 4 system testing (where TBTC controls and protects trains in Automatic Train Operation mode) commenced in the second migration area (West Finchley to Highgate) during the quarter. This was a key achievement delivered ahead of programme.

Progress continued in overcoming the remaining installation challenges, notably with the completion of complex equipment installation at Camden Town and loop installation at Leicester Square.

Installation is substantially complete in most locations between Edgware and Belsize Park, barring Golders Green which was impacted by the additional Games access restrictions. Within the quarter although two milestones have slipped, in neither case is there an impact to the overall project completion.

London Rail

East London Line Phase 2b

Spend to end Q2 2012/13 £m	EFC £m
58.7	76.7

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Complete integration testing	31-Jul-12	24-Jun-12	Complete
Commencement of trial operations	30-Nov-12	25-Jun-12	Complete
Commence passenger services	09-Dec-12	09-Dec-12	●

East London Line (ELL) Phase 2b will provide an additional four trains per hour on the core East London line. These trains will run to Clapham Junction via a new chord that leaves the ELL Phase 1 route to the south of Surrey Quays and joins the South London line to the north of Queens Road (Peckham). This new track will enable a new route, between Highbury and Islington and Clapham Junction, and provide the final link to make London Overground a fully orbital railway.

During the quarter the civil works contractor, Birse Metro, continued to finalise their remaining works and are expected to complete on site in October 2012. Fencing work along the perimeter of the phase 2 site, as well as along the track route has begun which is also due to be completed in October 2012.

The invitation to tender for the subway works at Rollins Street has been issued; work will commence in November 2012, and completion is expected prior to the December 2012 opening date.

The formal implementation agreement with Network Rail regarding the works at Clapham Junction station was signed by Network Rail on 11 September 2012. Works have progressed and London Rail continues to support Network Rail to ensure delivery by the date required for passenger service.

Overall the project is on schedule to support passenger opening in line with the Network Rail timetable change in December 2012.

London Rail

Emirates Air Line

Spend to end Q2 2012/13 £m	EFC £m
59.3	61.8

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Commencement of trial operation	01-May-12	28-May-12	Complete
Revenue operation commences	01-Jun-12	28-Jun-12	Complete

The Emirates Air Line entered revenue service prior to the Games in June 2012.

Over one million passengers have been carried since the opening with in excess of 180,000 passengers using the service in a week during the Games.

Surface Transport

Barclays Cycle Hire Scheme

Spend to end Q2 2012/13 £m	EFC £m
110.7	152.9

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Phase 2: Go Live - Expansion area launch	02-Mar-12	02-Mar-12	Complete
Phase 2: Construction complete	30-Apr-12	30-Apr-12	Complete
Phase 1: End of phase 1 close	31-May-12	04-Jul-12	Complete
Phase 2: JCB/Amex card acceptance available	21-Sep-12	13-Jul-12	Complete
Phase 2: Start of Phase 2 Close (Gate 2)	28-Jan-13	28-Jan-13	●
Phase 2: End of phase 2 close (Gate E)	30-Apr-13	31-May-13	▲

The Barclays Cycle Hire scheme launched successfully to registered members on 30 July 2010 and was opened up to all users on 3 December 2010. Around half of the scheme members have opted for annual membership, which means the scheme costs less than 12 pence per day, as the vast majority of trips are less than 30 minutes. This is a low-cost and convenient alternative for many travellers.

The TfL Board approved in September 2012 plans for Cycle Hire expansion and intensification, taking Cycle Hire west and south-west into areas of high demand including parts of Wandsworth, Hammersmith and Fulham, and additional areas of Lambeth, and Kensington and Chelsea. This will increase the number of bicycles to around 11,000 across the whole scheme, supported by at least an additional 5,000 docking points. This scheme is due to launch in December 2013 with full completion by spring 2014.

The design and development of an improved IT system with customer usability improvements is due for delivery in spring 2013.

The minor slippage on the 'end of phase 2 close' milestone is for alignment with the Surface Board meeting date which will occur at the end of the gate review process.

Surface Transport

10 Cycle Super Highways

Spend to end Q2 2012/13 £m	EFC £m
25.4	107.1

Milestones	Current Plan Date	Actual/Forecast Date	RAG
CS2 Extension – preliminary design complete	31-Jan-13	31-Jan-13	●
Route 5 Invitation to Tender issued	15-Feb-13	31-Mar-13	▲
Phase 2 (routes 5 & 12) detailed design complete	28-Feb-13	*	
CS2 Extension – detailed design complete	31-Mar-13	31-Mar-13	●
Route 5 contract awarded	30-May-13	30-May-13	●
CS2 Extension – construction complete	30-Aug-13	30-Aug-13	●

The Ten Cycle Superhighways project will deliver ten radial cycle commuter routes from outer to central London by 2015. The first two routes of the programme (Route 2 and Route 8) were opened in July 2011, following completion of the Cycle Superhighways Pilot Routes project in July 2010.

The Cycle Superhighways programme remobilised in May 2012 following a pause for the pan-TLRN Junctions Review. In relation to route 12, it is now intended to deliver this route alongside the junction improvement works planned for Highbury Corner, with an extension to route 2 being brought forward to August 2013. This will mean that cyclists on route 12 will benefit from substantial improvements to one of the biggest barriers to cycling along the route.

The minor milestone slippage on Route 5 reflects the latest schedule following remobilisation of the programme after the junction review process and are now in line with the programme presented to and agreed by the Cycle Superhighways Board on 12 June 2012.

*This milestone will now not be delivered in this form due to the changed sequence of delivering Routes 5 and 12.

Surface Transport

New Investment SCOOT

Spend to end Q2 2012/13 £m	EFC £m
13.4	112.3

Milestones	Current Plan Date	Actual/Forecast Date	RAG
240 Sites commissioned onto UTC (FY 11/12) 413 Cumulative	30-May-12	30-May-12	Complete
115 UTC Design Briefs complete (FY 12/13)	31-Dec-12	31-Dec-12	●
115 detailed designs completed	31-Dec-12	31-Dec-12	●
115 Sites civil engineering complete (FY 12/13)	01-Mar-13	01-Mar-13	●
115 Sites SCOOT Loops installed (FY 12/13)	18-Mar-13	18-Mar-13	●
115 sites commissioned onto UTC (FY 12/13) 528 cumulative	31-Mar-13	31-Mar-13	●
Final signal technology enabling completed (Annex B: 2015)	31-Jul-13	31-Jul-13	●

The SCOOT programme will upgrade traffic signal technology to help meet the Mayoral objective of smoothing traffic flow. Costs shown are for the New SCOOT Investment project, which will deliver 528 sites of a planned 1,000 sites. The remaining sites are funded and delivered by business-as-usual activities across Surface Transport.

Under the New SCOOT Investment project, 240 sites were planned to be installed in the 2011/12 financial year, bringing the total to 413 sites of the 528 the project will contribute towards the planned 1,000 total. These sites were delivered by the end of May 2012.

The remaining 115 sites are planned to be installed in the 2012/13 financial year, taking the total to the full 1,000 sites. At the end of the second quarter, 38 design briefs were completed, 18 detailed designs completed, four civil engineering sites completed, four SCOOT loops installed and four sites commissioned.

Potential for further expansion of SCOOT over the next six years is under consideration, as reflected in the EFC figure shown above.

Surface Transport

Hammersmith Flyover

Spend to end Q2 2012/13 £m	EFC £m
16.9	95.5

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Phase 2: Corporate Gate A project commencement approved	31-May-12	06-Jun-12	Complete
Installation of strengthening measures at critical piers	30-Jun-12	28-May-12	Complete
Designer appointed	31-Jul-12	30-Oct-12	■
Award of framework agreement or contract	31-Mar-13	31-Mar-13	●

The Hammersmith Flyover project is part of a programme of eight specific road bridges, tunnels and structures on the Transport for London Road Network (TLRN) that have been identified as requiring capital investment in order to improve road network safety, network resilience and stability, and reduce the whole-life costs of specific assets through early intervention.

Due to the poor condition of Hammersmith Flyover, and immediate risks to the safety of the structure, measures to support load-bearing capacity prior to the Games commenced in January 2012. The first phase of works, treating the parts of the structure that have suffered the worst deterioration, has been completed, with the flyover re-opening to full traffic loading on 28 May 2012.

The second phase of works, the development and implementation of a long-term strengthening solution, is now underway with a designer and is expected to be appointed by 30 October 2012. The procurement date has been re-phased to align with the schedule for appointing the contractor, avoiding a prolonged initial design period and optimising the contractor's input.

Surface Transport

TLRN Capital Renewal Programme

The annual budget for the Transport for London Road Network (TLRN) Capital Renewals Programme is based on long-term asset investment modelling and an objective, risk-based assessment of the renewals required, delivering a safe and serviceable network.

Spend to end Q2 2012/13 £m	EFC £m
25.5	47.0

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Delivery of the 2012/13 programme of works	31-Mar-13	31-Mar-13	●

Capital Renewals is an annualised programme of schemes that maintain the physical infrastructure of the TLRN, including carriageways, footways, structures, tunnels, lighting, drainage, green estate and street furniture. The programme consists of schemes that lengthen the useful life of an asset, either by replacing it with a new one, or by some other intervention such as reconstruction or refurbishment.

Schemes are identified, prioritised and programmed (assigned to an appropriate year) using a risk-based approach. Typically, an additional 10 per cent of schemes are identified to act as reserves. The reserves create flexibility that caters for unplanned scheme deferrals, caused by factors such as severe winter weather, refusal of permits on congestion grounds and other events.

Carriageway resurfacing

By the end of Quarter 2, 392,136 square metres of carriageway was resurfaced against a forecast output of 450,000 square metres for the year (87% of annual target achieved to date).

Footways resurfacing

By the end of Quarter 2, 25,863 square metres of footway was resurfaced against a forecast output of 44,000 square metres for the year (59% of annual target achieved to date).

Lighting column replacements

By the end of Quarter 2, 714 lighting columns were replaced against a forecast output of 1,100 for the year (65% of annual target achieved to date). This total is a reduction from the 910 reported in Q1, following an internal reassessment of progress.

Corporate

ITSO

Spend to end Q2 2012/13 £m	EFC £m
43.1	65.9

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Head office processing system operational	06-Sep-12	18-Dec-12	■
Rail hardware roll-out complete	30-Apr-13	30-Aug-13	■
Completion of project	24-Dec-13	24-Dec-13	●

ITSO (Integrated Transport Smartcard Organisation) is the smartcard specification being mandated by the Department for Transport (DfT) for rail franchises and for the national bus concessionary scheme. Enabling the acceptance of ITSO specified tickets requires changes to TfL's ticketing systems, including a card reader capable of reading both the Oyster and ITSO tickets, establishment of a head office processing system, new and upgraded communications links and other system changes. The project is being funded by the DfT under an agreement with TfL dated 28 May 2009.

Over-the-Air Communications trial has been extended to a further four garages with main roll-out to start on 15 October and complete by early December. The rail reader vanguard has started, and deployment on the Train Operator Companies (TOCs) estate will commence in mid-October. The Local Area Network surveys and installations remain on schedule.

Stage 2 ITSO software development continues, with integration testing due to start in November. There have been some issues agreeing the product set to be used with Southern TOC and this has caused a delay to the hardware roll-out and head-office processing system being operational, although this is not on the critical path and December 2013 completion remains on target. Integration testing will include Host Operator Processing System (HOPS) to HOPS testing with the Southern HOPS, this is progressing with some integration issues being worked through. A pilot of ITSO acceptance on Southern services is on schedule for the first quarter 2013.

Future Ticketing Project

Spend to end Q2 2012/13 £m	EFC £m
12.8	66.0

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Phase 1 – initial bus launch to be implemented, payment of the bus single fare by contactless bank card	31-May-12	13-Dec-12	■
Phase 2b – 7 day capping to be implemented	31-Mar-13	15-Nov-13	■
Phase 2a – multi-modal daily travel and daily capping with contactless bank card to be implemented (Annex B: 2012)	03-Jun-13	15-Nov -13	■

The Future Ticketing Programme enables the acceptance as payment for travel of contactless cards issued on an EMV (Eurocard, Mastercard, and Visa) platform both by banks and by TfL. To enable cost savings and acceptance of contactless cards, changes to the existing ticketing system and back office processes will be made.

Phase 1- due to previous delays caused by the requirement to stabilise the build before wider deployment, completion is forecast for December 2012. The functionality was proved in June, but the stability issues could not be resolved in time to allow the rollout to take place before the Games moratorium.

The new software is now being deployed to the remainder of the fleet following a period of stable operation. Launch activities including driver education, finalisation of web text and briefing materials for contact centre staff are progressing well.

Phase 2 - due to a request by the DfT to prioritise IOP+ (Integrated Transport Smartcard Organisation on Prestige) development and diversion of resources from its precursor, the initial bus launch, to implement significant changes to the annual Fares Revision package at the direction of the Mayor, this is now forecast for completion in November 2013.

Design assurance has been completed on a number of work packages and the first stage of Cubic's internal integration testing has started. User acceptance and performance testing is underway for the TfL developed components that will be delivered to the contractor in November 2012.