

TRANSPORT FOR LONDON

FINANCE AND POLICY COMMITTEE

SUBJECT: TfL INVESTMENT PROGRAMME REPORT –
SECOND QUARTER 2009/10

DATE: 24 NOVEMBER 2009

1 PURPOSE AND DECISION REQUIRED

- 1.1 The Investment Programme report for the second quarter of 2009/10 (28 June 2009 – 19 September 2009) is attached to inform the Finance and Policy Committee of Transport for London's Investment Programme performance.
- 1.2 This report will be considered by the Board at its meeting on 10 December 2009.

2 RECOMMENDATION

- 2.1 The Committee is asked to NOTE the contents of this report.

3 CONTACT

- 3.1 Contact: Steve Allen, Managing Director, Finance
Email: SteveAllen@tfl.gov.uk
Phone: 020 7126 4918



Investment Programme Report

Second Quarter, 2009/10

Table of Contents

| | | |
|----|---|--------|
| 1. | Programme Highlights..... | - 3 - |
| 2. | Projects (over £50m) and Programmes (over £10m per annum) | - 4 - |
| | LU line upgrade – BCV | - 5 - |
| | LU line upgrade – PPP JNP..... | - 6 - |
| | LU line upgrade – Sub-Surface Railway | - 7 - |
| | Channel Tunnel Rail Link at King’s Cross | - 8 - |
| | Bond Street Congestion Relief..... | - 9 - |
| | Paddington (Hammersmith & City) Congestion Relief..... | - 10 - |
| | Victoria Station Upgrade | - 11 - |
| | Tottenham Court Road Congestion Relief | - 12 - |
| | Bank Congestion Relief | - 13 - |
| | Olympics Step-Free Access | - 14 - |
| | Cooling the Tube | - 15 - |
| | Operational Accommodation..... | - 16 - |
| | Connect and Connect Airwave | - 17 - |
| | Connect and Connect Airwave | - 17 - |
| | Major Power Works..... | - 18 - |
| | Thameslink..... | - 19 - |
| | Central Line Bogie Modifications | - 20 - |
| | Track Renewal BCV/SSR | - 21 - |
| | Track Renewal JNP..... | - 21 - |
| | Civils BCV/SSR | - 22 - |
| | Civils JNP..... | - 23 - |
| | Station Upgrades – BCV/SSR | - 23 - |
| | Station Upgrades – JNP | - 24 - |
| | East London Line Extension..... | - 25 - |
| | East London Line Phase 2 | - 26 - |
| | London Rail Concession Rolling Stock | - 27 - |
| | North London Railway Infrastructure Project..... | - 28 - |
| | DLR Three Car Infrastructure..... | - 29 - |
| | DLR Stratford International Extension | - 30 - |
| | DLR Railcars | - 31 - |

| | |
|--|--------|
| iBus..... | - 32 - |
| Congestion Charging Re-Let..... | - 33 - |
| TLRN Capital Renewal..... | - 34 - |
| A406 Bounds Green..... | - 35 - |
| Blackwall Tunnel Northbound Refurbishment..... | - 36 - |
| Cycle Hire..... | - 37 - |
| Two Cycle Superhighways..... | - 38 - |
| Ten Cycle Superhighways..... | - 39 - |
| West Ham Bus Garage..... | - 40 - |
| IM Strategic Investment Programme..... | - 41 - |
| ITSO..... | - 42 - |

Transport for London

Investment Programme Report

Second Quarter, 2009/10 (28 June 2009 – 19 September 2009)

I. Programme Highlights

The key highlights from the second Quarter of 2009/10 were:

- DLR Railcars – final Stratford International car delivered and first additional Games capacity vehicle
- Final acceptance of iBus and project closure
- Cycle Hire contract award
- IMSIP – Data Centre operationally ready

Post Quarter events include:

- East London Line test running commenced
- South Quay DLR station move undertaken
- Oxford Circus remodelling
- First Victoria line train running with new signalling and control centre
- First Sub Surface Rail train delivered to London

Cover picture:

Imperial Wharf station, on the London Overground network, opened in September 2009. The station features Oyster ticketing, a staffed ticket office, step-free access, CCTV, and the latest security and information features. From 2011, it will be served by four London Overground trains per hour, every day. Southern trains also call at the station. The station is operated and part funded by TfL and built by Network Rail.

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 range of smaller activities. These are delivered by TfL directly, through our partners in the London Boroughs or through long-term partnerships with the private sector such as the PPP on London Underground and Private Finance Initiatives (PFI).

This report covers discrete projects with a total cost greater than £50m and programmes over £10m per annum. For each project, key milestones are given with a forecast date compared against the March 2009 baseline and, if appropriate, additional milestones from the 2009/10 Budget Deliverables document.

Key to RAG status:

| Status | Discrete Projects | Annualised Programmes |
|--------|----------------------------|-------------------------|
| ● | Within 1 month of target | 100% of target achieved |
| ▲ | Between 1 - 3 month delay | >75% of target achieved |
| ■ | Greater than 3 month delay | <75% of target achieved |

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

The estimated final cost (EFC) of some of the projects are not included (marked as *) for reasons of commercial confidentiality.

London Underground

LU line upgrade – BCV

| Year to date as at Q2 2009/10 £m | EFC £m |
|----------------------------------|--------|
| 73.7 | 908 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|--|-------------------|--------------------|-----------|
| Start Testing T1/T2 in traffic hours without passengers (V2.1) | 26/01/2009 | 21/07/2009 | Completed |
| Start trialling the new service control centre (signalling control) in passenger hours | 23/03/2009 | 13/09/2009 | Completed |
| Power supply upgrade complete | 16/06/2009 | 16/06/2009 | Completed |
| Start trialling T2 in traffic hours with passengers | 14/10/2009 | 21/07/2009 | Completed |
| Full approval to operate production trains on the Victoria line | 27/11/2009 | 27/11/2009 | ● |
| All track works complete | 14/01/2010 | 10/01/2010 | ● |
| Start to control Victoria Line operations from the new service control centre | 15/08/2011 | 15/08/2011 | ● |
| Victoria Line Upgrade programme completion | 07/04/2013 | 07/04/2013 | ● |

The Victoria line is the first major line upgrade on the Bakerloo, Central and Victoria lines (BCV) network. The works include new rolling stock, signalling, control equipment, depot and track.

Signalling software development progressed during the quarter which enabled the start of train testing on the line. The critical milestone to test T1 and T2 in passenger hours without passengers slipped five weeks to 21 July, but intense signal testing during engineering hours then enabled this to be combined with a single running of T1 with passengers on the same date on schedule. The train testing programme has progressed from a single train operating a single round trip to the train now operating two round trips from 2200 hours, each returning ahead of timetable. The latest software version has been successfully deployed and is expected achieve final acceptance in early November 2009.

The first production train (T3) is complete and undergoing full eight-car testing at the Old Dalby Test Track, however delivery has slipped one month to 23 November 2009 due to a number of known production issues. T5 is now in production as planned. The decommissioning of the first 67 Tube Stock train remains on target for 29 January 2010.

London Underground

The Service Control Centre successfully completed its first stage trial operations in September, with the second stage successfully completing on 10 October, followed by operation in passenger hours on 26 October 2009.

The completion date of May 2012 for the Journey Time Capability (JTC) remains ahead of the PPP contractual date of August 2013.

LU line upgrade – PPP JNP

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| Jubilee Line - TBTC Contract - J2/3 Ready for revenue service - Seltrac PM Mode | 06/09/2009 | TBA | ■ |
| Jubilee Line - Power Upgrade - power on | 28/09/2009 | 10/09/2009 | Completed |
| Jubilee line - J5 - ready for revenue service | 15/04/2010 | TBA | ■ |
| Northern Line - 50% of trains converted | 31/01/2010 | 01/04/2010 | ▲ |
| Northern Line - full journey time capability | 26/10/2011 | TBA | ■ |
| Piccadilly line upgrade - select rolling stock supplier | 31/12/2009 | 07/12/2009 | ● |
| Piccadilly line upgrade - contract award | 02/08/2010 | 01/06/2010 | ● |

The PPP contractual date for the Jubilee line upgrade to achieve full journey time capability (JTC) is 31 December 2009. In April, Tube Lines Ltd (TLL) was granted 12 additional short-notice weekend closures to support its revised programme, which included achieving J23 – the first two sections of the line to be swapped over to the new signalling system – by mid August. TLL’s programme has slipped further since the previous report and is based on closures that are known to be unavailable. The J23 section is now planned to be combined with the J4 section in one step. The plan to complete J234 by 31 December has proven beyond Tube Lines, despite additional short notice access being provided. The programme is now expected to run well into 2010. LU and TLL are working together to agree a realistic programme through to the delivery of J5 that can be supported by the known available line closures. The power upgrade has progressed, with “power-on” achieved on 10 September, ahead of target.

For the Northern line, the programme is suffering from the focus of TLL resources on the Jubilee line. The full journey time capability contract date remains targeted for early 2012, but the programme is now considerably compressed. The period of time between the commissioning of the first section (N1) and the final section (N6) is now reduced from twelve to six months. A revised programme was expected in P6 but is now further delayed. Driver recruitment was due to commence in October, but has been deferred.

London Underground

The conversion of the trains to Transmission Based Train Control (TBTC) is underway. The conversion cycle time has improved from 40 days for T7, through 27 days for T9, to 15 days for T20. The target cycle time of 14 days is expected by T21, enabling full conversion by October 2010, but with the TBTC signalling slipping, full train conversion is not now needed until December 2010.

For the Piccadilly line upgrade, TLL has further revised the programme, putting back the contract award for the new rolling stock fleet a further month to June 2010. The Invitation To Tender was issued on 29 May 2009, tenders were returned in September and the technical and commercial evaluation is underway. Selection of the preferred bidder is planned for December 2009.

LU line upgrade – Sub-Surface Railway

| Year to date as at Q2 2009/10 £m | EFC £m |
|----------------------------------|--------|
| 113 | 3,315 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|--|-------------------|--------------------|-----------|
| Old Dalby Test Track - All items in place to enable test track to receive and first test train | 13-Apr-09 | 23-Mar-09 | Completed |
| First pre-production S Stock delivered to Old Dalby | 30-Apr-09 | 26-Feb-09 | Completed |
| Issue ATC invitation to tender | 31-Aug-09 | 16-Jul-09 | Completed |
| Train Delivery - first train delivered to London Depot | 01-Nov-09 | 21-Oct-09 | ● |
| Signalling - Phase 1a immunisation works - operational segment 1 | 26-Nov-09 | 13-Sep-09 | Completed |
| First train ready to use on network | 30-Sep-10 | 31-May-10 | ● |
| Start of full infrastructure integration testing | 31-Jul-11 | 31-Jul-11 | ● |
| S Stock migration complete | 31-Jul-15 | 31-Jul-15 | ● |

The Sub-Surface Railway network (consisting of the Circle, District, Hammersmith & City and Metropolitan lines) upgrades will provide new rolling stock, new signalling and a new control centre, in order to increase capacity and reduce journey times. The programme is scheduled to complete by 2018.

The new rolling stock continued testing at the Old Dalby test track. Train integration onto the network has been affected by the additional possessions granted to Tube Lines in the

London Underground

Neasden area on the Jubilee Line, but the first train was delivered to the London depot on 21 October, 10 days early. Testing during engineering hours commenced on 8 November 2009.

Procurement for the new signalling contract is underway and the Invitation To Tender was issued 17 July as planned with returns expected in December.

Improvement works to the Neasden Depot will need to be reconfigured because the design inherited from Metronet does not provide sufficient space and facilities for the maintenance of the new 8-car S-Stock trains. Revised cost estimates for the work were received in September and are now under review.

Channel Tunnel Rail Link at King's Cross

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 822 | 870 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|--|-------------------|--------------------|-----------|
| Completion of escalator installation & commissioning | 14/09/2009 | 31/07/2009 | Completed |
| Northern Ticket Hall (NTH) - open to public | 31/12/2009 | 29/11/2009 | ● |
| Completion of Phase II Works (excl post NTH works) | 30/04/2010 | 01/04/2010 | ● |
| Completion of Phase II works (incl post NTH works) | 01/10/2010 | 01/09/2010 | ● |

King's Cross Congestion Relief delivers increased capacity at King's Cross St Pancras. Phase 1 included an expanded Tube ticket hall and new Western Ticket Hall. Phase 2 includes a new Northern Ticket Hall, step-free access and improved links to Northern, Victoria and Piccadilly lines, and the new Channel Tunnel Rail Link Terminal. The King's Cross project is funded by the Department for Transport and contracted by London Underground.

Phase 1 included refurbishment of the Metropolitan and Circle line platforms and was completed on 10 December 2006.

Phase 2 is nearing completion on site and on target for the opening of the Northern Ticket Hall on 29 November. During Quarter 2, the main premises work was completed on 24 July 2009 and the focus is now on testing of the fire and communications systems, which are on the critical path. Training and test operations began on 5 October and the site is no longer a "hard hat" area.

London Underground

Bond Street Congestion Relief

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 12.6 | * |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| Stage D design complete | 30/01/2009 | 31/10/2008 | Completed |
| ITT issued detailed design and construction | 03/08/2009 | 14/12/2009 | ■ |
| Main contract award | 08/02/2010 | 26/07/2010 | ■ |
| Completion | 29/09/2016 | 03/03/2017 | ■ |

Bond Street station is a key interchange between the Jubilee and Central lines. Long term demand and congestion is forecast to increase further as a result of growth in employment and leisure travel and the completion of Crossrail in 2017. In addition to congestion problems, the station does not have step-free access. 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 both Central and Jubilee line platforms, interchange and street levels; and
- A step-free route to the Crossrail station will also be available.

The RIBA Stage D design was completed ahead of plan on 31 October 2008. The project will return to the Finance and Policy Committee outlining possible cost options while continuing with the design work. The Invitation To Tender documents have been on hold during the Business Plan process, and are now planned for issue on 14 December 2009, with contract award forecast for 26 July 2010.

London Underground

Paddington (Hammersmith & City) Congestion Relief

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 5.9 | * |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---------------------------------|-------------------|--------------------|-----------|
| Stage D (Final Report) sign off | 14-Dec-09 | 12-Jun-09 | Completed |
| Completion | 25-Nov-2013 | 18-Aug-2014 | ■ |

Paddington (Hammersmith & City line) station is amongst LU's top priorities for congestion relief because of demand growth associated with local area redevelopment and the Sub-Surface line Upgrade. The project seeks to deliver congestion relief and step-free access benefits and ensure the continued safe operation of the station. There are interfaces with Network Rail and Crossrail, who require part of the adjoining "Triangle Site" for a re-located taxi access to the main line station.

The Network Rail, Crossrail and LU project components are now combined into the Paddington Integrated Project with co-located project teams and a joint project steering board.

The design was completed to RIBA Stage D on 12 June 2009 and formally handed over to Crossrail for detailed design and construction. Crossrail has now taken responsibility for the delivery of the station box, with the fit-out of the station to be completed by LU. The detailed design is now underway and enabling works on site have commenced. The tender for the ground works was drafted during the quarter and the main works tender is now under preparation. Critical to the Crossrail programme is the delivery of the taxi ramp, which remains on target for March 2011. The 'delay' until August 2014 reflects a conscious re-phasing of the project reflecting both funding availability and the Crossrail programme requirement.

London Underground

Victoria Station Upgrade

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 69.7 | * |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|--|-------------------|--------------------|-----------|
| Financial approval (main works) | 21/10/2009 | 21/10/2009 | Completed |
| Main works contract award | 28/10/2009 | 11/05/2010 | ■ |
| Handover sites to main works contractor | 21/04/2010 | 08/04/2011 | ■ |
| Asbestos removal and finishes – all works on site complete | 15/10/2010 | 29/11/2010 | ▲ |
| Delivery into service | 26/06/2017 | 12/10/2018 | ■ |

With 80 million people passing through it each year, Victoria is one of the most congested stations on the Underground network. Temporary station closures are regularly used to manage congestion, particularly during the morning peak. This project will provide a significant increase in passenger circulation space in key congested areas of the station and step-free access from street to platform for the Victoria line.

The Transport and Works Act Order Public Inquiry was completed on 23 January 2009, and the tenders for the main works were returned on 23 December 2008. The Transport and Works Act Order was made on 28 August and came into effect on 18 September 2009.

Project approval was granted by the TfL Board on 21 October and the delivery milestones have been re-set in the table above. Further value engineering is planned to establish ways of reducing the overall cost. A further paper will be presented to the Finance and Policy Committee detailing the opportunities. The enabling works have continued to plan, including further utilities diversions and water management works.

London Underground

Tottenham Court Road Congestion Relief

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 116 | * |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---------------------------------------|-------------------|--------------------|-----------|
| Detailed Design RIBA Stage F complete | 30/01/2009 | 26/01/2009 | Completed |
| Start on site demolition | 30/06/2009 | 19/01/2009 | Completed |
| Funding approval for full project | 16/02/2010 | 21/10/2009 | Completed |
| Main Construction - tender award | 19/02/2010 | TBA | ● |
| Start on Site - main construction | 21/02/2010 | TBA | ● |

Tottenham Court Road station is currently operating in excess of its capacity and suffers from significant congestion. Demand at the station is forecast to increase further with Crossrail. The congestion relief scheme includes a new upgraded and enlarged ticket hall, three new entrances, additional escalator access to the Northern line platforms, improved circulation space, step-free access throughout and interchange with Crossrail.

During the quarter, major utilities diversions and demolition works continued. Buildings on Denmark Place are now down to ground level and basement clearance has begun. The electricity diversions are also complete at two sites. Highway works in Soho Square, Falconberg Mews and Sutton Row have been accelerated in order to avoid the Christmas period, with working hours now running from 06:00 to 22:00hrs.

The London Borough of Camden has made late comments on the design of the proposed roof canopies. English Heritage and the Commission for the Built Environment have approved the designs and a satisfactory resolution is expected.

The TfL Board approved the project on 21 October with the revised timetable and budget to meet the Business Plan constraints. Further examination of the project scope and value engineering will be undertaken to contain the additional costs of the revised programme.

London Underground

Bank Congestion Relief

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 7.6 | * |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|--|-------------------|--------------------|-----------|
| Bank Northern LUL review of stage B feasibility Report | 21/06/2009 | 18/05/2009 | Completed |
| Bank Northern FGM Financial approval stage C design | 18/08/2009 | 30/06/2009 | Completed |
| Bank Northern Contract award RIBA C design | 31/03/2010 | 02/11/2009 | Completed |

The Bank project consists of two workstreams:

Bank- Walbrook Square aims to provide more convenient access to streets south and south-west of the station, reduce congestion on the Waterloo & City (W&C) line platforms, and provide step-free access to the W&C line. LU will fund the construction of the station box shell which will be delivered by the developer. Thereafter, LU will fit out the station box to complete the new entrance. Following the withdrawal of the Legal and General building lessee, the project is likely to be delayed by at least one year.

Bank Northern Line Congestion Relief aims to relieve current and expected congestion in Bank station, which would lead to increasingly frequent congestion of the Northern line/DLR area and station closures. Design work has continued on the preferred option that relocates the southbound running tunnel of the Northern line. This option provides greater benefit, reduced disruption to the service during construction and a reduced overall cost. Further design, to RIBA Stage C+ is now underway.

London Underground

Olympics Step-Free Access

| | |
|----------------------------|--------|
| Spend to end Q2 2009/10 £m | EFC £m |
| 26.6 | 119 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| Green Park Start on site | 25/07/2009 | 15/04/2009 | Completed |
| Green Park Delivery into service (as agreed with ODA) | 19/12/2011 | 24/10/2011 | ● |
| Southfields Start on site | 30/07/2009 | 01/06/2009 | Completed |
| Southfields Delivery into Service | 01/10/2010 | 06/08/2010 | ● |

This programme provides step-free access at two stations critical to the Games: Southfields and Green Park.

Southfields – This project provides step-free access from platform to street and is an Olympic Deliverable. The detailed design was completed in March and work began on site in June 2009. Work is currently progressing well, with the planned work during the August closures completed. The station is due to be completed in October 2010 but is currently ahead of target at 6 August 2010.

Green Park – The programme is currently on target to meet the Olympic delivery date. In Quarter 2, escalator four was closed on 31 August to allow the installation of the jacking system and underpinning followed in September. Utilities diversions continued and the new sewer connection was made into the main Thames Water sewer in Piccadilly. Delivery Into Service has slipped by one month to 24 October 2011 due to an extension of the lift installation programme in a design review. This may be recovered when the lift contractor's programme is finalised.

London Underground

Cooling the Tube

| | |
|----------------------------|--------|
| Spend to end Q2 2009/10 £m | EFC £m |
| 111.5 | * |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| Mid Tunnel Vents Tranche 1 – contract awarded (3x sites) | 29/06/2009 | 27/03/2009 | Completed |
| Evaporative cooling at Charing Cross –report issued | 18/08/2009 | 03/07/2009 | Completed |
| Out of service fans – Phase 1 fans available for use | 18/08/2009 | 22/07/2009 | Completed |
| Mid Tunnel Vents Tranche 1 – Drayton Park brought into beneficial use | 07/09/2009 | 02/08/2009 | Completed |
| Mid Tunnel Vents Tranche 1 – Tynemouth Road brought into beneficial use | 30/10/2009 | 30/10/2009 | Completed |

This is a long term programme to control ambient temperatures, which are already high, and without intervention could rise as more energy is used within the tunnels to provide the line upgrade train service capability. Planned mitigation measures include improved energy efficiency, increased ventilation, and selected station cooling systems.

Due to budgetary pressures, only the works to support the Victoria line upgrade are being progressed. These comprise refurbishment and upgrading of thirteen mid-tunnel vents, Station cooling works have been deferred and the projects at Green Park, Euston, Oxford Circus and Victoria will be halted following the completion of detailed design.

Work is on site for the first two of three tranches of the mid-tunnel ventilation upgrades, which require the removal of the old fans and structural work to the shafts before new (higher capacity) fans are installed. Eight of the upgrades have commenced work on site but there have been delays at two of the sites. The LU project team is working closely with the contractors to mitigate the extent and impact of the delay. The first high capacity fan was brought into use at Drayton Park on 2 August. The second site at Tynemouth Road is planned to be brought into beneficial use by 30 October 2009. On Tranche 2, the detailed design and construction contract was awarded on 27 March 2009. Site set up is now complete on all three locations and work is on plan.

At Green Park, the trial boreholes were completed ahead of programme and the second phase is on target to begin in November.

London Underground

Operational Accommodation

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 50.5 | 75.8 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|--|-------------------|--------------------|-----------|
| Brixton Operations Centre - practical completion | 30/06/2009 | 08/07/2009 | Completed |
| Leytonstone TOM - contract award | 15/09/2009 | 21/07/2009 | Completed |
| High Barnet- New Depot - practical completion | 25/09/2009 | 21/09/2009 | Completed |
| Edgware Rd - Construction contract award | 22/11/2009 | 02/11/2009 | Completed |
| Harrow on the Hill TCA - 1st floor occupation | 22/01/2010 | 11/12/2009 | ● |

This programme is to improve the condition, ambience, and capacity of staff accommodation.

- Brixton Train Crew accommodation – Work was completed on 16 July 2009.
- High Barnet – The main works contract commenced on site on 31 July 2008 and completion was achieved on 21 September 2009, four days ahead of target.
- Harrow on the Hill – the phase I fit out is complete and the furniture delivered. Occupation is on plan for 11 November, ahead of target.
- Leytonstone – the modular accommodation has been installed and fit out is proceeding to plan.

London Underground

Connect and Connect Airwave

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 115 | * |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| Tube Lines Video Cut-in - installation complete 1-20 (of 80) | 30/06/2009 | 12/05/2009 | Completed |
| Tube Lines Video Cut-in - present plan for Batch 2,3 and 4 to be delivered into service | 31/07/2009 | 26/06/2009 | Completed |
| Metronet Video Cut-in - installation complete 26-50 (of 100) | 17/08/2009 | 22/05/2009 | Completed |
| Tube Lines Video Cut-in - installation complete 21-40 (of 80) | 28/10/2009 | 22/09/2009 | Completed |
| Rationalisation of LUL video circuits - complete | 05/10/2009 | 04/12/2009 | ▲ |
| Additional Connect Resilience - 2nd Stage 'Quick Wins' (Equipment and Process) | 28/10/2009 | 06/10/2009 | Completed |

Connect is a 20-year PFI contract to upgrade and maintain the radio and transmission system used on the Underground.

Phase 2 is now underway, which provides increased functionality on the new equipment and improved video capability. The Piccadilly, Circle and District Lines went live on 26 July 2009. The Hammersmith and City line also completed and testing of the last two sections of the District line is now complete. Outages on the system have required further work to improve system resilience. A revised resilience strategy is now in place and the technical scope is agreed. The resilience quick wins programme recovered from a two week slippage to complete early on 6 October 2009.

The Connect Airwave project enhances the emergency services' communication system on the Underground by expanding coverage and capacity. Airwave Phase 2, including an extension of coverage to Stratford, has now been agreed with the National Police Information Authority (NPIA). The conceptual designs for all 39 additional stations have now been re-submitted following quality issues with the first submissions.

London Underground

Major Power Works

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 182 | * |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| Jubilee Line - Alaska St, install 22kV cables complete | 23/04/2009 | 15/04/2009 | Completed |
| Jubilee Line - Power On | 28/09/2009 | 10/09/2009 | Completed |
| Victoria Line - Overall completion and power audit | 08/12/2009 | 08/12/2009 | ● |
| SSL - Award Invitation To Tender (Met Line detailed design and build) | 01/03/2009 | 27/03/2009 | Completed |
| SSL - Approval of baseline contractor programme for package 1 | 03/07/2009 | 02/07/2009 | Completed |
| Piccadilly Line - Award contract scoping and development | 18/10/2009 | TBA | ● |

The power system upgrade programme will deliver the additional power capacity that is required to support the line upgrades.

The delivery phase of the Victoria line power upgrade remains on programme with overall completion forecast for December 2009. There has been a one month delay to the installation of the high voltage (132kV) cabling to the bulk supply point (BSP) at Manor House, which provides network resilience. This scope provides resilience to the overall network and is now expected to complete in November 2009. Progress remains on target, with the effective power-on achieved in June 2009, in line with the requirements of the line upgrade.

The Sub-Surface power upgrade is progressing from scoping and development to detailed design and build. The design and build for the first two packages (1A and 1B) was awarded on 20 March 2009. Packages 2 and 3 and 5 (substation plant, cabling and switchgear) are being prepared for tender for the design and build phases. The Package 4 detailed design and build (Bulk Supply Point at Griffith House) has received TfL Board approval and the contract was awarded in September 2009.

For the Northern line power upgrade, LUL's 630v conceptual design has been formally accepted by TLL. The scope of the power works for the Piccadilly line is now minimal.

On the Jubilee line power upgrade, power-on was achieved on 10 September 2009 and snag clearance has begun.

For the Piccadilly line power upgrade, options are being developed to maximise the efficiency of the existing infrastructure prior to the development of new scope and all milestones will be revised.

London Underground

Thameslink

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 16.9 | 36.6 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|--|-------------------|--------------------|-----------|
| Borough Market - NR commence viaduct works | 03/05/2009 | 06/04/2009 | Completed |
| Blackfriars - Complete protective shield | 14/05/2009 | 17/04/2009 | Completed |
| NR and LU sign Project Implementation Agreement | 29/05/2009 | 12/06/2009 | Completed |
| Blackfriars - NR commence main works | 16/06/2009 | 19/05/2009 | Completed |
| Farringdon - NR commence main works | 29/11/2009 | 02/11/2009 | ● |
| Farringdon - NR complete works | 28/01/2012 | 30/09/2011 | ● |
| Blackfriars - NR Deliver Station back into service | 28/01/2012 | 30/09/2011 | ● |

The LU Thameslink Programme safeguards LU assets and manages the interfaces with the Thameslink Project. The key works interfacing with the LU network are at Blackfriars and Farringdon stations.

LU is seeking the finalisation of the Project Implementation Agreement with Thameslink that sets out the formal terms of the work that impacts the LU network. This has been under discussion for some time and subject to month on month slippage. During Quarter 1, LU secured agreement to a Universal Works Letter that allows for works at Farringdon and Blackfriars to continue. Work is underway but the 30-month closure is at risk of extending. At Farringdon Station, the footbridge contractor has gone into receivership and the possession planned to complete the works on 26 September was cancelled.

London Underground

Central Line Bogie Modifications

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 30.1 | 51.7 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| Commence manufacture | 28/02/2009 | 05/01/2009 | Completed |
| 48 Frames Delivered to fleet | 02/06/2009 | 29/04/2009 | Completed |
| 960 Frames Delivered to fleet | 13/07/2010 | 11/06/2010 | ● |
| 1420 Frames Delivered to Fleet (Manufacture Complete) | 31/01/2011 | 03/01/2011 | ● |

Following the Chancery Lane incident, this project was instigated to address the issues identified in the Aylward Inquiry. The project comprises the re-design, manufacture and fitting of 1420 new bogie assemblies to the entire Central Line fleet, known as 1992 Stock.

The manufacture of the new bogie frames began in January 2009 and the delivery schedule is on target with 48 frames delivered ahead of target on 29 April 2009 and the plan to deliver 480 frames by 11 December 2009 is ahead of target. The Programme Lift, the 4.5-year maintenance cycle that this project feeds into, began on 6 April. By the end of Quarter 2, 160 bogies have returned to service. The programme rate has now improved to the planned rate of one train (four units) per week.

London Underground

Track Renewal BCV/SSR

| Year to date as at Q2 2009/10 £m | EFC £m |
|----------------------------------|--------|
| 65.7 | 1,127 |

| BCV Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| Ballasted Track Replacement & reballast - 1,415m achieved | 31/03/2010 | 31/03/2010 | ● |
| Points & Crossings - five units achieved | 31/03/2010 | 08/03/2010 | ● |
| Class 1 (Expected trackform life of 40 years) - 2,429m achieved | 31/03/2010 | 31/03/2010 | ● |
| SSR Milestones | Current Plan Date | Actual/F'cast Date | RAG |
| Ballasted Track Replacement & reballast – 18,680m achieved | 31/03/2010 | 31/03/2010 | ● |
| Points & crossings - 11 units achieved | 31/03/2010 | 06/07/2009 | Completed |

During Quarter 2, production was broadly on target, with 10,487m of Ballasted Track Renewal against the year-to-date target of 11,113m. Two points and crossings improvements have been deferred, reducing the year end forecast to 14.

Track Renewal JNP

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|--------------------------------|-------------------|--------------------|-----------|
| Tube reconditioning 1,270m | 26/05/2009 | 26/05/2009 | Completed |
| Track replacement 1,000m | 07/09/2009 | 07/09/2009 | Completed |
| Workbank 5 - Project close out | 16/10/2010 | 30/06/2010 | ● |

JNP Track is split into Enhanced Track Replacement and Deep Tube Reconditioning. This work is devised, planned and managed by TLL and agreed with LU through the Annual Asset Management Plan (AAMP).

The total completed Enhanced Track Replacement increased to 983m for the year to date against the target of 1,200m but TLL has now achieved all 37,301m planned in the AAMP since the start of the PPP contract. Remaining work for this year is focused on tube reconditioning works and pit block renewal. Both these programmes are also nearing completion. The work plan for points and crossings has now been revised to focus on heavy maintenance rather than replacement.

London Underground

Civils BCV/SSR

| Year to date as at Q2 2009/10 £m | EFC £m |
|----------------------------------|--------|
| 17.2 | 724 |

| BCV Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| C164-EM2 Northolt to South Ruislip C164 Practical Completion | 08/10/2009 | 05/06/2009 | Completed |
| C156 EM3, 4, 7, 8 & 9 - Perivale to Greenford C156 Practical Completion | 23/05/2010 | 23/03/2010 | ● |
| SSR Milestones | Current Plan Date | Actual/F'cast Date | RAG |
| D164-EMI,2,4,5 East Putney to Southfields D164 Start on Site | 10/07/2009 | 21/07/2009 | Completed |
| D164-EMI,2,4,5 East Putney to Southfields D164 Practical Completion | 20/09/2010 | 21/07/2010 | ● |

Following the integration of Metronet, BCV and SSR structures are jointly managed. The programme comprises a range of improvement and monitoring works to the civils assets on the BCV and SSL networks. It is a two-year rolling work bank that is prioritised annually. The civil engineering assets are grouped and managed in four categories: Bridges & Structures, Earth Structures, Deep Tube Tunnels, and Pumps & Drainage.

The current two-year programme comprises approximately 40 separate remediation projects across the four asset groups. In addition, special or enhanced monitoring of critical assets is being carried out at a number of key locations. The condition of the assets in the programme is generally well known, but the Civils team is working to complete the asset condition database and a Whole Life Cost Model for each of the four asset classes.

On bridge projects, work is on programme. One project is now on site and contracts for three further sites were awarded in the quarter and are planned to commence in October.

Earth structures projects are generally on programme. Three of the six projects that were on site at the start of the financial year have now completed, with the rest progressing well. Of the seven projects planned to begin in 2009/10, one has been deleted following better than expected condition analysis results. Of the remaining six projects, two are now on site, with the remainder under commercial negotiation.

On track drainage, 4,528m had been replaced year to date, ahead of the planned 3,062m.

London Underground

Civils JNP

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| Earth Structures – complete environmental surveys for remediation sites | 05/06/2009 | 26/05/2009 | Completed |
| P273 Drainage discharge – complete drainage discharge final scope | 20/12/2009 | 20/12/2009 | ● |

The JNP Civils Programme comprises the same scope as the BCV/SSR programme, aimed at maintaining the civils assets to a defined condition. In 2009/10, work is focused on earth structures (embankments) and drainage projects.

Four earth structures are planned for the year, with work on site underway at Dollis Hill. Drainage improvement works are planned at 31 locations and work has begun at 15 of these.

Station Upgrades – BCV/SSR

| Year to date as at Q2 2009/10 £m | EFC £m |
|----------------------------------|--------|
| 82.2 | 983 |

| BCV Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| Oxford Circus Station Modernisation - Delivery into service agreed by LUL | 25/05/2009 | 22/12/2009 | ■ |
| Hainault Station Modernisation - Delivery into service date agreed by LUL | 30/05/2009 | 19/05/2009 | Completed |
| Wanstead Station Refurbishment - Start on site | 30/06/2009 | 14/06/2009 | Completed |
| Brixton Station Modernisation - Delivery into service date agreed by LUL | 31/01/2010 | 31/01/2010 | ● |
| SSR Milestones | Current Plan Date | Actual/F'cast Date | RAG |
| Aldgate Station Modernisation - Start on site | 16/10/2009 | 14/10/2009 | Completed |
| Earl's Court Station Modernisation - LUL agree delivery into service | 31/12/2009 | 17/07/2009 | Completed |

When Metronet entered into administration in July 2007, there were 26 “live” station projects that were significantly into their lifecycle of works.

These works proceeded and at the end of P6 18 of these stations were completed. Eight stations are in the construction phase, six of which are planned to complete in 2009/10, including Aldgate East and Oxford Circus.

London Underground

At Oxford Circus, the DIS slipped further in the Quarter 2, from 12 October to 22 November 2009 as a result of non-conforming cable installations but the remedial work is now largely complete.

Station Upgrades – JNP

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| Waterloo Modernisation | 30/05/2009 | 30/05/2009 | Completed |
| Stanmore Enhanced Refurbishment | 30/05/2009 | 01/04/2009 | Completed |
| Edgware Station Enhanced Refurbishment | 03/08/2009 | 15/06/2009 | Completed |
| Bermondsey Station Refurbishment | 06/12/2009 | 09/12/2009 | ● |
| Covent Garden Station Modernisation | 09/09/2009 | 06/05/2009 | Completed |
| Oval Station Refurbishment | 27/09/2009 | 31/07/2009 | Completed |
| Clapham Common Station Refurbishment | 07/10/2009 | 31/07/2009 | Completed |
| Southwark Station Refurbishment | 20/10/2009 | 15/12/2009 | ▲ |
| Green Park Station Modernisation | 23/10/2009 | 23/10/2009 | Completed |
| Hatton Cross Station Enhanced Refurbishment | 29/05/2010 | 19/03/2010 | ● |

The JNP Stations programme was devised as part of the PPP contract. The station works are planned in tranches, with Tranche 5 stations due to be completed by 30 May 2009. All of these stations have now been declared as completed by Tube Lines. Of the 97 stations planned for the first PPP Contact Review Period, 71 were declared as Delivered Into Service by the end of Quarter 2 and the programme is on target.

In Quarter 2, the scope of the station works on the Jubilee Line Extension was under further negotiation with TLL in order to achieve costs savings and facilitate earlier work to Colliers Wood, South Wimbledon and Hounslow East, which were not previously planned for upgrades until Review Period 2.

London Rail

East London Line Extension

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 894 | 986 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|--|-------------------|--------------------|-----------|
| Complete Crossrail enabling works at Whitechapel | 30-Jun-09 | 30-Jun-09 | Completed |
| Submit planning application to LBH & TH to discharge conditions 14/17/19 (noise demonstration) | 10-Apr-09 | 30-Nov-09 | ■ |
| Complete Dalston podium slab | 31-Jul-09 | 31-Jul-09 | Completed |
| Establish infrastructure maintenance depot | 31-Oct-09 | 31-Oct-09 | ● |
| SCADA temporary master station and system commissioned for the 3 TSS sites (A lines only) | 01-May-09 | 13-Sep-09 | Completed |
| Commission all TSSs including Hoxton, Shadwell & Canal Junction (for 33kv only) | 04-Jun-09 | 20-Oct-09 | ■ |
| Test running commences | 31-Jan-10 | 05-Oct-09 | ● |
| East London Line (Phase 1) complete | 30-Jun-10 | 30-Jun-10 | ● |

The upgraded and extended East London Line is planned to open in June 2010 with TfL as the passenger service operator through a joint East London Line / North London Railway concession with London Overground Rail Operations Ltd. This project is an Olympic deliverable.

During quarter 2, the Crossrail enabling works at Whitechapel were completed on time in late June and the Dalston podium slab was completed on time in late July. The SCADA temporary master station and system was commissioned four and a half months late in mid-September.

The SCADA and further TSS (Traction Substation) delay to 20 October is due to a delay in being able to energise the system. The planning application for discharge of noise conditions was also delayed further and is now expected on 30 November (five of the six applications have already been submitted).

Crystal Palace Station Enhancement (Package 2) has been subject to continued design delays which have resulted in a further delay to issuing the invitation to tender for construction. The

London Rail

intention is now to commission the new infrastructure and platforms at Crystal Palace in January 2010 with completion of other works scheduled for October 2010 after services commence.

Despite these delays, the project is largely on schedule and services are expected to commence in June 2010. Several major milestones have been achieved. Energisation of traction power from Dalston down to Shadwell was achieved on 30 September via the Shadwell traction sub-station and the Canal Junction traction sub-station was energised on 11 October. Test running began on the line on 5 October. Another milestone achieved is the telecommunications network becoming operational line wide during August.

East London Line Phase 2

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 0.9 | 55.4 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|--|-------------------|--------------------|-----------|
| Technical Advisor Phase 2 Award Contract | 15-May-09 | 15-May-09 | Completed |
| Commence GRIP 5 Design | 05-Oct-09 | 31-Dec-09 | ▲ |
| Commence Passenger Services | 14-May-12 | 14-May-12 | ● |

East London Line (ELL) Phase 2 will provide an additional four trains per hour on the core ELL. 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). Passenger service is scheduled to commence in May 2012.

A key scope issue for the project relates to the Kensington sidings. A study has been commissioned to consider both the technical viability and the cost to refurbish the existing sidings for the storage of eight trains. Network Rail has also been asked to provide an estimate of costs for these works as this is covered under the Regulatory Asset Base.

The next major milestone is the commencement of GRIP 5 design, however this has recently slipped from 5 October 2009 to 31 December as a result of earlier delays to GRIP 4 preliminary designs.

London Rail

London Rail Concession Rolling Stock

This programme is delivered under an operating lease. No direct costs are reported.

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| First NLR unit accepted | 30-Apr-09 | 07-Jul-09 | Completed |
| First Train in Service NLR | 31-May-09 | 29-Jul-09 | Completed |
| First ELR units delivered for Network Rail track test | 31-Jul-09 | 21-Sep-09 | ■ |
| Delivery of NLR fleet | 31-Dec-09 | 31-Dec-09 | ● |
| Delivery of ELR fleet | 31-Mar-10 | 31-Mar-10 | ● |
| First Train in Service ELR | 30-Jun-10 | 30-Jun-10 | ● |

The London Rail Concession Rolling Stock project will provide 216 new vehicles in three-car and four-car formation to be utilised on the North London Railway (NLR) and the East London Railway (ELR). An additional 12 vehicles (three x four-car units) have been added to operate the East London Line Phase 2b from Surrey Quays to Clapham Junction. This brings the total order up to 228 vehicles.

The first North London Railway unit was accepted on 7 July, just over two months late and the first entered service on 29 July. The first East London Line unit was delivered for Track testing on 21 July and which began on 5 October 2009. A revised delivery programme is expected shortly but the current programme shows delivery of the final ELL unit on 12 January 2010. This means that 20 units will not be available for stage 3 tests, however 16 will be available to satisfy the power supply and headway tests. TfL is not confident in the ELL unit delivery programme based on current performance, anticipating only 10 units being available for stage 3 tests. The test programme will be adjusted to take account of the delays to delivery and it is not expected to delay service commencement.

The next milestones are for the NLR fleet to be delivered by the end of December 2009 and for the ELL units to be delivered by the end of March 2010. A revised delivery programme is expected from Bombardier, however, and these dates are expected to slip.

London Rail

North London Railway Infrastructure Project

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 71.2 | 249 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|-------------------------------|-------------------|--------------------|-----------|
| Commence No. 1 lines blockade | 30-Apr-09 | 30-Apr-09 | Completed |
| Commence all lines blockade | 31-Dec-09 | 20-Feb-10 | ▲ |
| Project completion | 31-Jan-11 | 31-Jan-11 | ● |

The North London Railway Infrastructure Project covers a programme of track, signalling and civil infrastructure enhancements to facilitate the operation of the future London Overground service commitment, which is to be introduced in January 2011.

The commencement of the number 1 lines blockade was achieved on schedule on 30 April. The all lines blockade was expected on 31 December 2009, however, this has now been re-phased to 20 February 2010 to combine two separate blockades into one to reduce impacts. This three month possession is out for industry consultation.

Tender evaluation for the systems and power works from Dalston to Highbury and Islington has progressed and contract award is expected shortly.

The design work for the track, drainage and pipe crossing works on the Dalston Western Curve is progressing and, despite being up to two weeks behind the original programme, this is not likely to affect progress on site.

The stage 2 works to the Dalston Lane Covered Way were completed ahead of programme. On Kingsland High Street covered way, demolition of the north deck was completed and the slab was prepared and poured. Demolition of the south deck progressed well.

The brickwork walls on Boleyn Road were completed in the period.

London Rail

DLR Three Car Infrastructure

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 272 | 325 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----|
| P7 Complete installation of new LUL compound and road | 30-Jun-09 | 25-Sep-09 | ▲ |
| Complete Westferry Station (Three Car Package 1 Works) | 31-Jul-09 | 30-Oct-09 | ▲ |
| Complete New South Quay Station (Three Car Package 1 Works) | 30-Sep-09 | 26-Oct-09 | ▲ |
| Bank Lewisham: construction complete | 31-Jan-10 | 31-Jan-10 | ● |
| Bank Lewisham: service operational | 28-Feb-10 | 30-Jan-10 | ● |

This project will deliver the structural works necessary for three car operation on the DLR. This includes platform extensions, track realignment and viaduct strengthening. The project includes three car works on the Bank – Lewisham section, Delta Junction, the Poplar – Stratford Route, Poplar – Woolwich, Tower Gateway, Olympic Station capacity (East Route) and West Route resilience.

The Package 7 installation of the new London Underground compound and road at Canning Town was delivered on 25 September. South Quay station was moved on 26 October following a weekend closure.

The completion of Westferry Station has been delayed by a further two months to the end of October due to problems with steelwork design and fabrication. This has been exacerbated by some earlier problems with c2c on agreements on the Limehouse Link Bridge.

On Package 4, Blackwall and East India stations opened on 11 October, which is in advance of the contractual end date of 7 November 2009. At Royal Victoria, the completion of the Station construction is forecast for mid-November, with the extended platform to be open by the first week of December 2009.

London Rail

DLR Stratford International Extension

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 141 | 198 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| Complete decommissioning at Abbey Road | 25-Apr-09 | 24-Jul-09 | Completed |
| Network Rail Infrastructure Decommissioned (SIE Package 8 Works) | 30-Jun-09 | 19-Jul-09 | Completed |
| Star Lane Station construction work complete (SIE Package 6 Works) | 31-Oct-09 | 13-Nov-09 | ▲ |
| Canning Town Station Construction Work Complete (SIE Package 6 Works) | 30-Nov-09 | 14-Dec-09 | ▲ |
| Complete Works Package 6 - Conversion of NLL to DLR | 30-Jun-10 | 30-Jun-10 | ● |
| Service operational | 31-Jul-10 | 31-Jul-10 | ● |

This project covers the extension of the DLR from Canning Town to Stratford International, using the existing North London Line alignment as far as Stratford Regional Station.

The release of the high level platforms to Network Rail during this period has enabled work to start on the ex-North London Line low level platforms at Stratford.

The final change-over works at the Network Rail platforms at Stratford (Package 8) were successfully completed during the possession of 18/19 July 2009.

The decommissioning at Abbey Road took place on 24 July. The next milestone is the completion of construction at Star Lane Station expected on 13 November and at Canning Town station on 14 December 2009.

The service operational date remains at the end of July 2010.

London Rail

DLR Railcars

| | |
|----------------------------|--------|
| Spend to end Q2 2009/10 £m | EFC £m |
| 28.1 | 58.8 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| 3-Car Woolwich Arsenal: All (24) Railcars accepted into service | 31-Oct-09 | 10-Jul-09 | Completed |
| Games additional capacity: First railcar delivered | 14-Dec-09 | 16-Sep-09 | Completed |
| Games additional capacity: Final railcar delivered | 31-Aug-10 | 23-Aug-10 | ● |
| Games additional capacity: All cars in service | 31-Oct-10 | 04-Oct-10 | ● |
| Stratford International Extension: Final railcar delivered | 30-Nov-09 | 02-Sep-09 | Completed |
| Stratford International Extension: All (9) Railcars accepted into service | 31-Dec-09 | 05-Oct-09 | ● |

This project covers the provision of 24 extra DLR railcars for three-car operation and the Woolwich Arsenal extension, nine for the Stratford International extension and 22 for the Games.

Several milestones were completed during the quarter. Then last of the 24 railcars for the Woolwich Arsenal extension was delivered on 10 July. The first additional Games railcar was delivered on 16 September and the final (ninth) railcar was delivered for the Stratford International extension and all were accepted into service on 5 October 2009.

The next milestones are for the final Games railcar to be delivered by August 2010 and accepted into service by October 2010.

Surface Transport

iBus

| Spend to end Q2 2009/10 £m | EFC £m |
|-------------------------------|--------|
| 81.2 | 81.7 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|--|-------------------|--------------------|-----------|
| All vehicles in fleet installed with iBus | 30-Apr-09 | 21-Apr-09 | Completed |
| Final Acceptance milestone for iBus | 29-May-09 | 09-Jul-09 | Completed |
| Old system decommissioned and all operations transferred to new system | 30-Jun-09 | 30-Jun-09 | Completed |
| Legacy radio system turned off | 31-Aug-09 | 13-Jul-09 | Completed |

The iBus project has been to procure and implement a radio communication and Automatic Vehicle Location system. This has improved the quality of information to customers, both on-bus (through audio-visual next stop information) and at bus stops, and reduce the risk of a system failure.

During this quarter, the old system was decommissioned as expected at the end of June and the legacy radio system was turned off seven weeks earlier than expected in mid July. Final acceptance occurred in early July, which was slightly later than expected as residual tasks were completed and a period of stabilisation had been inserted.

The project was closed on 9 July and ongoing contractual performance measurement and management has transferred to operations under business as usual. This project is to be removed from this report next quarter.

Surface Transport

Congestion Charging Re-Let

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 81.2 | 94.4 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| e-pay rebranding decision made | 03-Apr-09 | 03-Apr-09 | Completed |
| System Integration Testing starts | 01-Jun-09 | 26-May-09 | Completed |
| Public Information campaign for Retail starts | 01-Sep-09 | 01-Sep-09 | Completed |
| Ready for Service Testing starts | 21-Sep-09 | 07-Sep-09 | Completed |
| Readiness Review | 30-Sep-09 | 02-Oct-09 | ● |
| Release 1 - go live of new system for Congestion Charging and Low Emission Zone | 30-Nov-09 | 31-Oct-09 | ● |
| Release 2 - go live of account-based charging | 01-Nov-10 | 01-Nov-10 | ● |

The Congestion Charging Re-Let project is to establish new contracts for the operation of the zone and to operate the Low Emission Zone. The re-let will allow the introduction of customer accounts and new detection technology to facilitate more flexible charging options.

Two further milestones were achieved during this quarter. The public information campaign began on 1 September and the ready for service testing began two weeks ahead of schedule on 7 September. Subsequent to the quarter, the readiness review was undertaken two days later than expected on 2 October.

The release of the new system for Congestion Charging and the Low Emission Zone – was achieved a month early over the weekend of 31 October and is running well.

Surface Transport

TLRN Capital Renewal

This is an 'annualised programme', where minor schemes are delivered on a rolling basis. Costs are based on an annual budget.

| TLRN Capital Renewal | | £ 000's |
|----------------------|--|---------|
| YTD Actuals | | 16,338 |
| Full Year Budget | | 38,176 |
| Full Year Forecast | | 40,005 |
| Variance to budget | | 1,828 |

| Description | Units | 2009/10 Target | Q1 Forecast | Achieved to Date |
|--|----------------|----------------|-------------|------------------|
| Area of carriageway resurfaced | m ² | 255,000 | 255,000 | 40,581 |
| Area of footways resurfaced | m ² | 60,000 | 60,000 | 22,386 |
| Number of lighting units replaced | No. | 608 | 608 | 334 |
| Number of schemes to achieve a reduction in the total number of structures with special measures | No. | 32 | 32 | 0 |
| Removal of pedestrian guard railing | Km | 35 | 35 | 11.9 |

The Transport for London Road Network (TLRN) Capital Renewal Programme involves the reconstruction and resurfacing of carriageways and footpaths to improve their condition and safety, and the renewal, upgrading and improvements to bridges, tunnels, lighting and other equipment.

By the end of Q2, 40,581 m² of carriageway had been resurfaced, which represents 16 per cent of the annual target. 22,386 m² of footway had been resurfaced, which represents 37 per cent of the annual target and 11.9 km of pedestrian guardrail had been removed, which represents 34 per cent of the annual target. The target for the number of lighting units has been confirmed as 608 in line with budget reductions and 334 have been achieved to date (55 Per cent).

An even delivery profile is not being followed and the project team state that they are on schedule to achieve their targets – this will mean that a significant ramp up in delivery will be necessary approaching year end.

Surface Transport

A406 Bounds Green

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 12.3 | 69.0 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| Commence advance statutory utilities work | 05-Jan-09 | 05-Jan-09 | Completed |
| Commence contract procurement | 01-Jun-09 | 15-May-09 | Completed |
| Award contract | 28-Feb-10 | 28-Feb-10 | ● |
| Commence main works | 29-Mar-10 | 19-Apr-10 | ● |
| Completion of main works | 03-May-12 | 03-May-12 | ● |

The section of the A406 between Bounds Green Road and Green Lanes suffers from congestion and has a poor accident record. The project will create a predominantly two-lane dual carriageway with improved traffic flows at junctions, improved pedestrian crossing facilities, a dedicated cycleway, improved bus journey reliability, and improvements to the local street scene.

During this quarter, utility works have been progressed. The advanced demolition contract was awarded in September and began in October and tenders were invited in early September for the main works contract. There was a slight delay to the production of the contract documents due to quality issues. The mobilisation period has increased to two months and this has led to a slipping of the main works commencement from 29 March to 19 April 2010. This has had no knock on effects onto the completion of main works milestone.

The next major milestone is expected to be the award of contract in February 2010.

Surface Transport

Blackwall Tunnel Northbound Refurbishment

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 4.0 | 60.0 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---------------------------------------|-------------------|--------------------|-----------|
| Award Contract | 29-May-09 | 21-Dec-09 | ■ |
| Start of Main Works | 30-Jun-09 | 02-Feb-10 | ■ |
| Revised procurement strategy approved | 30-Jun-09 | 30-Jun-09 | Completed |
| Construction complete | 21-Jun-11 | 01-Feb-12 | ■ |

This project will bring the Northbound tunnel to European best practice standards. Work includes: shaft alterations, ventilation upgrades, lighting, drainage, signage and public address system works and upgrades to the emergency points and fire detection and fighting systems.

The project is expected to be delivered during night time and occasional weekend possessions, which means that there is unlikely to be any problems during the Olympics as work can cease for that period if necessary.

This project has recently been through an extended procurement process due to the tenders being returned above the budgeted price. The original tenderers were invited back into the process and negotiations have managed to reduce the price. The project was subject to a Corporate Gate Review at the October Project Review Group and is presented separately to the Finance and Policy Committee.

The next major milestone will be the award of contract just before the Christmas period.

Surface Transport

Cycle Hire

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 6.1 | 91.6 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---------------------------------|-------------------|--------------------|-----------|
| ITT published | 31-Mar-09 | 04-Mar-09 | Completed |
| Contract Award | 30-Jun-09 | 11-Aug-09 | Completed |
| Planning Applications Submitted | 20-Nov-09 | 20-Nov-09 | ● |
| Go Live #1 - Website | 31-Mar-10 | 21-May-10 | ▲ |
| Go Live #2 - On Street | 31-May-10 | 30-Jul-10 | ▲ |

The Cycle Hire scheme will deliver 6,000 cycles in central London by May 2010. 400 docking stations will be introduced, which equates to nine docking stations per square kilometre.

The contract award was made on 11 August, which has been delayed by six weeks as a result of clarification meetings with bidders. This has resulted in the website go live milestone to be delayed by two months to 21 May 2010 and the on-street implementation being delayed to the end of June 2010. The next major milestone is the submission of Planning Applications expected on 20 November.

The charging scheme has been agreed in principle with the Mayor and a paper is expected to be presented to the December Board meeting.

Surface Transport

Two Cycle Superhighways

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 1.2 | 22.9 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| Route 3 - Completion of definition of route & measures | 16-Jul-09 | 31-Jul-09 | Completed |
| Route 3 - Completion of Preliminary design and NAT scheme approval | 02-Oct-09 | 16-Nov-09 | ● |
| Route 7 - Completion of Preliminary design and NAT scheme approval | 19-Oct-09 | 05-Nov-09 | ● |
| Commence construction of 2 Cycle Highways to be delivered in May 2010 | 30-Oct-09 | 30-Oct-09 | ● |
| Route 7 - Construction end | 28-May-10 | 28-May-10 | ● |
| Route 3 - Construction end | 28-May-10 | 28-May-10 | ● |

Two Cycle Superhighways is a pilot project to deliver the first two cycle superhighway routes – Routes 3 (Barking to Tower Hill) and Route 7 (South Wimbledon to the City) by May 2010. The remaining ten routes will be delivered in a separate project by 2015. Extensive monitoring is in place to assess the effectiveness of some of the interventions proposed. The project objective is to encourage modal shift to cycles and to enhance the cycling experience for current users by creating wider lanes, improved surfacing and further segregation.

These two routes are to be delivered using the Highways and Maintenance Works Contractors (HMWC) framework agreement that provides resources to deliver streets schemes in Surface Transport.

Route 3 Definition of Route and Measures was delivered, two weeks later than expected, at the end of July. Approval of preliminary design for Route 3 is now expected on 16 November. For Route 7 approval of preliminary design is expected on 5 November. Provisional approval was given for both routes in September. Construction commenced on schedule on 30 October.

The timeline remains tight for the first two routes and it is expected that smarter travel measures, junction works and all innovative design requiring DfT approval may have to be delivered beyond May 2010. The largest risk remains the delivery schedule for the first two routes, including a challenging design and build programme and works being carried out by utility companies.

Surface Transport

Ten Cycle Superhighways

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 0 | * |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---------------------------------------|-------------------|--------------------|-----|
| Phase 1 Invitation To Tender Issued | 28/02/2010 | 28/02/2010 | ● |
| Phase 1 preliminary design completed | 31/05/2010 | 31/05/2010 | ● |
| Phase 1 detailed design completed | 31/08/2010 | 31/08/2010 | ● |
| Phase 1 complete (two routes total) | 31/05/2011 | 31/05/2011 | ● |
| Phase 2 complete (four routes total) | 31/10/2012 | 31/10/2012 | ● |
| Phase 3 complete (six routes total) | 31/07/2013 | 31/07/2013 | ● |
| Phase 4 complete (eight routes total) | 30/04/2014 | 30/04/2014 | ● |
| Phase 5 complete (ten routes total) | 30/01/2015 | 30/01/2015 | ● |

As with the pilot routes, the project objective is to encourage modal shift to cycles and to enhance the cycling experience for current users by creating wider lanes, improved surfacing and further segregation.

The Ten Cycle Superhighways scheme will deliver a further ten radial routes into central London following the pilot project. Planning and development is occurring in parallel with the delivery of the first two pilot routes. The ten routes are expected to be delivered in five phases of two routes, annually from May 2011 and the last is expected to be delivered by January 2015. After the agreed changes to the timescale, the project was re-baselined to deliver three years later than previously expected. This accounts for the increase in expected final costs as a result of inflation and additional team costs over those extra years.

The procurement process for these ten routes has not yet been decided. The next major milestone is the issue of Invitation To Tender for Phase 1 at the end of February 2010.

Surface Transport

West Ham Bus Garage

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 36.0 | 53.0 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|--|-------------------|--------------------|----------|
| Access and commence permanent bus parking area (phase 3) | 01-Apr-2009 | 31-Mar-2009 | Complete |
| Access to phase 2 building | 01-Sep-2009 | 01-Sep-2009 | Complete |
| Completion of main garage building (phase 2) | 30-Nov-2009 | 30-Nov-2009 | ● |
| Completion of fuel and wash building | 01-Dec-2009 | 19-Feb-2010 | ▲ |
| Completion of wind turbine | 31-Jan-2010 | 15-Mar-2010 | ▲ |
| Completion of permanent bus parking area | 26-Feb-2010 | 10-May-2010 | ▲ |
| Opening of bus garage | 31-Mar-2010 | 31-May-2010 | ▲ |

This project provides a new bus garage to replace displaced existing garages on the Olympic site. The project has suffered from cost increases as a result of site difficulties and the accelerated delivery programme necessitated by the delays to the planning permission whilst still delivering in time for the Olympics. There is an ongoing discussion with the LDA over the apportionment of costs for this project.

This has also led to the delay to several milestones, including the completion of the fuel and wash building, which has been delayed by seven weeks to 19 February 2010, the completion of the wind turbine has been delayed to 15 March, and the bus parking area has been delayed to 10 May. The opening date has slipped by two months to the end of May 2010.

The next major milestone is the completion of the main garage building, expected on 30 November.

The project was subject to a Corporate Gate Review at the October Project Review Group and is presented separately to the Finance and Policy Committee.

Group

IM Strategic Investment Programme

| Spend to end Q2 2009/10 £m | EFC £m |
|----------------------------|--------|
| 42.5 | 81.06 |

| Milestones | Current Plan Date | Actual/F'cast Date | RAG |
|---|-------------------|--------------------|-----------|
| End User Computing – 14,000 users and 10,600 units migrated | 30/11/2009 | 30/11/2009 | ● |
| Voice and Data Network – Core migration from LAN to MAN completed | 31/10/2009 | 31/03/2010 | ■ |
| Data Centre 2 Operational readiness | 14/09/2009 | 14/09/2009 | Completed |
| Migration of Fujitsu Systems to DC2 hosting | 31/03/2010 | 31/03/2010 | ● |
| Application Portfolio Management – Database delivered | 30/09/2009 | 30/09/2009 | Completed |

The IM Strategic Investment Programme is a programme of works to update TfL's IM infrastructure. There are five remaining work streams (the Enterprise Management work stream has finished and transferred to operations):

End User Computing (EUC) – replaces several separate Domain Servers with one single Domain across the organisation. Microsoft Office 1997 is also updated to the latest version and most desktop computers are replaced with thin client terminals working off a central mainframe computer.

By the end of the second quarter 10,047 users (69 per cent) and 10,283 units (97 per cent) were migrated.

Voice and Data Network (VDN) – provides a highly available, fault tolerant, integrated and secured voice and data network. This is in effect the telephone and data cabling between sites to be known as the Metropolitan Area Network (MAN). There are three phases. Phase 1 addresses known performance and reliability issues with the current infrastructure and analysis work; Phase 2 introduces a TfL wide approach to procuring and running network services; and Phase 3 removes redundant and overly complex technical and commercial arrangements.

By the end of the second quarter, migration had taken place at 23 buildings, including eight core sites. The remaining seven core sites were expected to be migrated by the end of October but this has slipped to the end of March 2010. These sites will be migrated as quickly as possible as technical issues are resolved. Analysis is currently underway to assess what remedial actions are required. All other sites and services are expected to be migrated by mid-2010.

Data Centre (DC) – is to provide a dedicated and highly resilient data centre and to decommission most of the existing computer rooms.

Group

During the second quarter of 2009/10, the first milestone of Data Centre 2 in Woking was completed and is now ready for taking on further operations.

Hosting (HOS) – is to consolidate and rationalise 80% of the TfL server estate into the new strategic Data Centres and migrate externally hosted applications in house.

Migration of Fujitsu’s application services for LU is expected to be complete by the end of March 2010. Four out of five of these have already been migrated. Journey Planner is expected in early 2010.

Application Portfolio Management (APM) – is a small work stream to reduce the cost of software applications. Objectives are to rationalise applications, software licences and improve management of these items. The work stream will deliver a database containing application spend and this will enable more effective licence management.

This work stream delivered the database during September, which will now be transferred to Business As Usual management.

The project was subject to a Corporate Gate Review at the October Project Review Group and is presented separately to the Finance and Policy Committee on the closed agenda for authority.

ITSO

| | |
|----------------------------|--------|
| Spend to end Q2 2009/10 £m | EFC £m |
| 1.0 | 56.7 |

| Milestones | Current Plan Date | Actual/F’cast Date | RAG |
|--|-------------------|--------------------|-----------|
| Agree scope and funding with DfT | 31-Jan-09 | 28-May-09 | Completed |
| System architecture sign off | 18-Sep-09 | 18-Sep-09 | Completed |
| System requirements sign off | 12-Oct-09 | 09-Dec-09 | ▲ |
| Head office processing system operational | 31-Jul-10 | 31-Jul-10 | ● |
| 3G Comms software development complete | 15-Oct-10 | 15-Oct-10 | ● |
| Completion of changes to back-office systems | 30-Apr-11 | 31-May-11 | ▲ |
| Completion of project | 31-Jul-11 | 31-Aug-11 | ▲ |

ITSO (Integrated Transport Smartcard Organisation) is the name of 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 Oyster and ITSO tickets, establishment of a head office processing system (HOPS), new or upgraded communications links and other system changes.

Group

The project is being funded by the DfT as per an agreement between it and TfL dated 28 May 2009.

System architecture was signed off on schedule on 18 September. System requirements are now expected to be signed off on 9 December, two months later than originally planned. The project is dependent upon external stakeholders to some extent such as the DfT and in particular the receipt of the ITSO business rules. The project is due to complete in August 2011.