

**TRANSPORT FOR LONDON**

**FINANCE COMMITTEE**

**SUBJECT: TfL INVESTMENT PROGRAMME REPORT –  
THIRD QUARTER 2008/09**

**DATE: 27 JANUARY 2009**

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**1 PURPOSE AND DECISION REQUIRED**

- 1.1 The Investment Programme report for the third quarter of 2008/09 (14 September 2008 - 06 December 2008) is attached to inform the Finance Committee of Transport for London's Investment Programme performance.
- 1.2 This report will be considered by the Board at its meeting on 10 February 2009.

**2 RECOMMENDATION**

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

**3 CONTACT**

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# Investment Programme Report

Third Quarter, 2008/09

# Transport for London

## Investment Programme Report

Third Quarter, 2008/09 (14 September 2008 – 6 December 2008)

### I. Programme Highlights

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The key highlights from the third Quarter of 2008/09 were:

- East London Line – sidings 1-4 at New Cross Gate were completed.
- DLR Stratford International Extension – the platform structure, canopy and finishes at Stratford International were completed.
- DLR Railcars – 8 of the 16 vehicles delivered to date have entered into service.
- Sub Surface Upgrade – the S-Stock test train is now in dynamic testing.
- Green Park Step Free Access – the planning application for the scheme has been approved.
- Victoria Station Upgrade – tenders have been returned for the main works contract and the objection to the Transport and Works Act Order from Land Securities has been removed.
- Connect – train radio went live on the final line (Northern).

Post Quarter events include:

- DLR Woolwich Arsenal Extension – new service began operations on 10 January 2009.

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

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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.

This section reports on 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 against the current planned date for 2008/09, and if appropriate, additional milestones from the 2008/09 Budget Deliverables document.

### Key to RAG status:

Within 1 month of target	●
Between 1 - 3 month delay	▲
Greater than 3 month delay	■

This report focuses on delivery of investment projects. For a discussion on financial performance see the Quarter 3 Operational and Financial Report.

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

## London Underground

### LU Line Upgrade – PPP BCV

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Victoria Line upgrade: Second pre-production train delivered	09-07-2008	11-07-2008	Completed
Victoria Line upgrade: Full overlay available	17-07-2008	17-07-2008	Completed
Victoria Line upgrade: Start Testing the New Service Control Centre (in Engineering Hours)	30-11-2008	06-10-2008	Completed
Victoria Line upgrade: Start Testing T1/T2 in traffic hours without passengers	26-01-2009	18-05-2009	■
Victoria Line upgrade : Approval to trial signalling control in passenger hours	22-03-2009	06-07-2009	■
Full Journey Time Capability	31-08-2013*	26-04-2012	●

\*PPP Contract Date

The Victoria Line is the first major line upgrade on the Bakerloo, Central and Victoria lines network. The works include new rolling stock, signalling, control equipment, depot and track. Although there have been delays to individual milestones the achievement of full journey time capability is still expected to be significantly before the contractual date.

Software development remains on the critical path for the overall programme. There is now a new version of the signalling software under test. If successful this will be the version used to enter into traffic (without passengers). These developments have caused a slippage of the next milestone, to start testing Train 1 and Train 2 in traffic hours by a further month to 18 May 2009. Rolling stock is also delayed due to material shortages and lack of engineering resources.

Despite these rolling stock and signalling issues, the completion date of April 2012 for the Journey Time Capability remains ahead of the contractual date of August 2013.

## LU Line Upgrade – PPP JNP

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Jubilee Line – Transmission Base Train Control Rolling Stock – Delivery of Train 59	26-10-2008	01-10-2008	Completed
Jubilee Line – Jubilee Line Section 1 - Maturity Level 3 Testing	27-11-2008	09-02-2009	▲
Jubilee Line – JLS2 - Maturity Level 3 Testing	13-03-2009	02-03-2009	●
Jubilee Line – TBTC Contract - J2/3 - Ready for Revenue Service	16-03-2009	08-06-2009	▲
Jubilee Line J5 Ready for Revenue Service	01-09-2009	15-04-2010	■
Northern Line N6 Ready for Revenue Service	07-12-2011	07-12-2011	●
Piccadilly Line Upgrade – new fleet contract award	10-01-2009	05-12-2009	■

2009 sees a period of intense activity for the Jubilee Line Upgrade work to achieve its programme by the end of the year. The installation work is over 75% complete and testing activities are well advanced on the first section of the line. Testing of the signalling, which is on the critical path, continued to slip in Quarter 3 but the critical line conversion milestone (J2/3 Ready for Revenue Service) has held to June 2009 (from March 2009). This is the conversion of 2 sections of the line between Stratford and Westminster to the new signalling system, which were formerly to be converted separately. The forecast completion date for the line upgrade (J5 Ready for Revenue Service) is now three months beyond the PPP contract delivery date of 31 December 2009 but did not slip further in Quarter 3. The Quarter ended with a successful 4 day closure of the line during the Christmas holiday when Tube Lines Ltd was able to complete a significant amount of work. Sectional closures are planned on the line during every weekend in Quarter 4. The progress of the project will depend on Tube Lines Ltd effective utilisation of the closures to support the testing programme.

For the Northern Line, closure planning has begun, based on the original south-to-north migration sequence. The programme is suffering from the focus of Tube Lines resources on the Jubilee line. Tube Lines submitted a revised programme during the quarter which shows completion of the line in December 2011.

The train conversion programme was suspended in Q2, pending a second design configuration. The prototype train is now being fitted out and train production is planned to re-commence in January 2009.

For the Piccadilly Line upgrade, Tube Lines has submitted a revised programme with later start dates than previously stated although the line completion date remains October 2014. Supplier selection for the new fleet of trains has been rescheduled on the basis of supplier information from Jan 2009 to late 2009 and the contract award is not planned until June 2010. The Plan milestone for the Piccadilly Line will be rebaselined to reflect Tube Lines new programme in 2009/10.

### LU Line Upgrade – PPP Sub-Surface Line (SSL)

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Complete delivery into service of refurbished D-Stock fleet	01-07-2008	01-04-2008	Completed
Review and accept the Design Compliance Report for new trains	28-08-2008	29-10-2008	Completed
Issue Programme Assurance Plan for approval	29-08-2008	20-06-2008	Completed
Complete preparations for platform works at High St Kensington	01-02-2009	01-02-2009	●
LUL Approve OPO CCTV Train Design	13-03-2009	11-02-2009	●
T1 S-Stock train delivered to Old Dalby	13-04-2009	28-02-2009	●
T1 ready for operation in Engineering Hours	30-04-2010	03-10-2009	●

The SSL 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 main effort continues to be the rollout of new trains (to be known as S-Stock), and related enabling works, which is progressing to plan. The first S-Stock train is expected to be delivered to the test track at Old Dalby in February 2009 and is expected to be ready for testing on the network during engineering hours in October 2009. The Test Train is now undergoing dynamic testing at Bombardier's test track in Derby.

Procurement for the new signalling contract is underway. Responses to the Pre Qualification Questionnaire were returned on 28 November 2008, and the Programme team is now evaluating these. The Programme team is working to ensure that the lessons learnt from the Victoria and Jubilee Line Upgrades are incorporated into the final tender documents.

### Channel Tunnel Rail Link at King's Cross

Spend to end of Q3 (£m)	EFC (£m)
760.6	873.5

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Handover roof slab to NR	01-09-2008	01-09-2008	Completed
Handover the site known as the bomb gap to NR	30-09-2008	19-09-2008	Completed
PFI power complete installation of LUL power supply	07-01-2009	03-11-2008	Completed
Open Northern Ticket Hall	28-02-2010	01-12-2009	●

King's Cross Congestion Relief covers 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 well advanced on site. During Quarter 3 the major milestone of handover of the Northern Ticket Hall roof structure to Network Rail was achieved on programme, and progress included substantial escalator and lift installation, tunnel lining and commencement of fit out of the Northern Ticket Hall. The programme has been accelerated to allow opening of the Northern Ticket Hall in December 2009 to coincide with the introduction of Kent Commuter services into St. Pancras. The Northern Ticket Hall is now forecast to be opened two months ahead of the original schedule in December 2009.

#### Bond Street Congestion Relief

Spend to end of Q3 (£m)	EFC (£m)
10.8	*

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Stage D Design Complete	30-01-2009	31-10-2008	Completed
Completion	29-09-2016	29-09-2016	●

Bond Street station is a key interchange between the Jubilee and Central Lines. 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 Disability Discrimination Act compliant 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 Royal Institute of British Architects Stage D design was completed ahead of plan on 31 October 2009.

### Paddington (Hammersmith & City) Congestion Relief

Spend to end of Q3 (£m)	EFC (£m)
2.1	*

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Outline / Scheme Design approved RIBA C/D	30-04-2009	18-12-2009	■
Completion	25-11-2013	18-08-2014	■

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 a joint project steering board. As a consequence of this, the programme has been re-structured with delay to the design.

In Quarter 3, the Finance Committee approved the project and design has begun. The first critical construction milestone is delivery of the Crossrail taxi ramp in March 2011.

### Shepherd's Bush/White City

Spend to end of Q3 (£m)	EFC (£m)
67.9	*

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Escalator replacement – finish on site	29-09-2008	01-09-2008	Completed
Modernisation – station reopens	06-10-2008	06-10-2008	Completed
Delivery into Service Post Compensation Event	31-01-2009	05-10-2008	Completed

Shepherd's Bush (Central Line) station is the principal public transport gateway to the Westfield Shopping Centre, which opened in October 2008. The station modernisation, including escalator replacement, was completed on time on 6 October 2008. Wood Lane station also opened on target on 12 October 2008.

Difficulties with cost and design led to the suspension of the step free access element of the project. LU has commissioned a study to examine the options for use of the two shafts already constructed, for future step free access schemes.

### Finsbury Park Congestion Relief

Spend to end of Q3 (£m)	EFC (£m)
3.9	*

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Complete Stages E-G (SFA scheme)	31-03-2009	31-03-2009	Deferred
Spiral staircases start on site	31-07-2009	31-07-2009	●

Finsbury Park station is one of the network's busiest bus, Underground and National Rail interchanges.

During Quarter 3, the project was de-scoped to include only refurbishment works to two double spiral staircases that will relieve congestion. Detailed design has begun on these works with a start on site due in August 2009. The step free access component of the scheme has been deferred to 2016.

### Victoria Station Upgrade

Spend to end of Q3 (£m)	EFC (£m)
53.3	695.5

Milestones	Current Plan Date	Actual / F'cast Date	RAG
ITT main works implementation	29-09-2008	02-09-2008	Completed
Main Works ITT return	23-04-2009	23-12-2008	Completed
Asbestos removal – practical completion	26-05-2009	10-02-2009	●
Stage 2 Main Works contract instructed	04-02-2010	01-02-2010	●
Delivery Into Service	01-05-2017	01-05-2017	●

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 Tenders for the Main Works were returned on 23 December 2008. The Transport and Works Act Order Public Inquiry began in October 2008, and is scheduled to complete on 23 January 2009. Major objections, from Land Securities, Thames Water and Victoria Palace Theatre, have now been removed by agreement. While supporting a favourable / timely decision by the Secretary of State, and reducing / removing constraints to works on site, the commitments in the Agreements will require re-pricing of certain tender elements and delay the Stage 1 Contract Award from March 2009 to July 2009. The main contract award (Stage 2) remains on plan for February 2010 and the overall effect on programme is broadly neutral. Delivery Into Service remains at May 2017. Under the enabling works, asbestos removal is continuing to plan with completion on target for February 2009.

## Tottenham Court Road Congestion Relief

Spend to end of Q3 (£m)	EFC (£m)
50.8	*

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Completion of Stage E design	28-02-2008	31-05-2008	Completed
Contract award –delivery demolition	16-01-2009	19-12-2008	Completed
Detailed design RIBA stage F complete	30-01-2009	30-01-2009	●
Start on site – demolition	30-06-2009	02-02-2009	●
Completion	15-08-2016	03-08-2016	●

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 an enlarged ticket hall, improved, additional entrances to the station, additional escalator access to the Northern Line platforms improved circulation space and step free access throughout the station.

During the Quarter, approval was granted to commence the demolition works which are expected to begin in February 2009.

The main works are planned to begin in November 2009.

## Bank

Spend to end of Q3 (£m)	EFC (£m)
5.5	*

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Bank (Walbrook Sq) – Complete design of tunnel breakthrough	28-02-2009	28-02-2009	●
Review of Stage B feasibility report complete	30-04-2009	25-03-2009	●

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 Line platforms, and provide step free access to the Waterloo & City Line. LUL will fund the construction of the station box shell which will be delivered by the developer. Thereafter LUL will fit out the station box to complete the new entrance. Legal and General have entered into an agreement to lease with Metrovacesa who have indicated that they may wish to re-design the scheme. This may delay start of construction to late 2010.

Bank - Congestion Relief aims to relieve current and expected congestion in Bank station, which would lead to increasingly frequent station closures (notably of the Northern Line/DLR area) if nothing is done. There are two options under feasibility/engineering review and one will be progressed. The design is continuing, with the feasibility report due in March 2009.

### Olympic Works (Station Accessibility)

Station	Spend to end of Q3 (£m)	EFC (£m)
Green Park	3.7	97.0
Baker Street	8.9	74.4
Southfields	2.1	17.4

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Southfields contract award – detailed design	17-09-2008	24-06-2008	Completed
Southfields Delivery into Service	01-10-2010	01-10-2010	●
Green Park Delivery into Service	17-12-2011	17-12-2011	●
Baker St Delivery into Service	22-11-2011	22-11-2011	●

This programme provides step free access at three stations critical to the Games: Southfields, Green Park and Baker Street (SSL only).

**Southfields** – The project scope now includes the stations refurbishment works. The design and build contract has been let and detailed design is on target for completion by March 2009 with construction due to begin in April 2009.

**Green Park** – The planning application was submitted in August 2008 and two objections were received. These have now been resolved and a revised planning application has been approved. The programme is currently on target to meet the Olympic delivery date.

**Baker Street** – The planning application for access to Platforms 5 and 6 was withdrawn following a recommendation to refuse permission by City of Westminster planning officers. This would affect the provision of step free access to the Circle and Hammersmith & City Lines. The alternative consent strategy to obtain a Transport and Works Act Order for this component of the scheme is still under consideration. Step free access to Platforms 1-5 can still be achieved within the planned programme.

### Stations Accessibility Works (2010 target)

Station	Spend to end of Q3 (£m)	EFC (£m)
Amersham step free access	0.3	*
Greenford step free access	0.2	*
Newbury Park step free access	0.2	*
West Kensington step free access	1.0	*
Osterley step free access	0.5	*
Kingsbury step free access	1.0	*

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Amersham step free access Delivery Into Service	23-12-2010	28-10-2010	●
Greenford step free access Delivery Into Service	23-12-2010	28-10-2010	●
Newbury Park step free access Delivery Into Service	23-12-2010	28-10-2010	●
West Kensington step free access Delivery Into Service	23-12-2010	28-10-2010	●
Osterley step free access Delivery Into Service	23-12-2010	28-10-2010	●
Kingsbury step free access Delivery Into Service	31-12-2010	05-11-2010	●

**Amersham, Greenford, Newbury Park & West Kensington:** These projects will contribute to the 25 per cent 2010 Department for Transport accessibility target. Contracts were awarded in Quarter 3 for the detailed design and build of the four stations.

Both Osterley and Kingsbury stations are 2010 target stations. Osterley station will complete detailed design on 11 December 2009. Kingsbury station is expected to complete detailed design on 30 March 2009.

### Cooling the Tube

Spend to end of Q3 (£m)	EFC (£m)
81.9	921.6*

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Portable fan rollout summer 2008	31-08-2008	18-07-2008	Completed
Central services tunnel – Royal Institute of British Architects (RIBA) C approval	15-09-2008	15-09-2008	Completed
Victoria Line – Start on site MTV 1	01-10-2008	29-09-2008	Completed

\* Programme over current business plan period to 2017/18

Decommissioning of portable fans	31-01-2009	05-01-2009	Completed
Kings Cross RIBA D CDS approved	28-02-2009	28-02-2009	Deferred
All Mid Tunnel Vents commissioned	31-07-2012	31-07-2012	●

This is a long term programme to control ambient temperatures, which are already high, and without intervention could rise to unacceptable levels 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.

Priority is being given to the work needed to enable the planned Victoria Line upgrade train service. The Victoria Line Cooling works consist of Mid Tunnel Vent Shaft upgrades, and cooling at specific stations. The Design and Build contracts for the first two (of up to sixteen) Mid Tunnel Vent sites are now underway and work started on site on 29 September 2008. Designs for Green Park station are at an advanced stage and interfaces with other projects at the station, and with Royal Parks, are being finalised. Designs for Victoria and Oxford Circus are progressing; designs for King's Cross have been shelved as a result of a value management review which has resulted in an improved approach to work at Euston, thereby covering cooling needs in the area.

Research and development for air conditioning on deep tube trains is continuing. A full scale demonstration of a system on two cars in service is planned to take place in 2010.

#### Operational Accommodation (OAIP)

Spend to end of Q3 (£m)	EFC (£m)
37.1	92.8

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Brixton Train Crew Accommodation (TCA) - Start on Site – Main Works	15-05-2008	04-04-2008	Completed
High Barnet TCA - Tender Award Completed	21-06-2008	20-06-2008	Completed
High Barnet - Start on Site	31-07-2008	31-07-2008	Completed
Edgware TCA - Commence Stage D-G	31-08-2008	29-08-2008	Completed
Brixton TCA - Practical Completion	30-06-2009	14-04-2009	●
High Barnet TCA – practical completion	25-09-2009	25-09-2009	●

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

- Brixton Train Crew accommodation – Work began on site in April 2008 with completion forecast ahead of target in April 2009.
- High Barnet – The main works contract commenced on site on 31 July 2008 with completion due in September 2009.
- Edgware Train Crew Accommodation – The detailed design began on 29 August 2008.

### Connect Airwave

Spend to end of Q3 (£m)	EFC (£m)
42.3	*

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Upgrade Enhanced Base Transceiver System (EBTS) to new airwave components – Batch 7	02-09-2008	16-05-2008	Completed
Upgrade EBTS to new airwave components – Batch 9	24-11-2008	18-08-2008	Completed

This project enhances the emergency services' communication system on the Underground by expanding coverage and capacity. The contract was awarded in January 2007 and work has progressed to an accelerated plan. The 125 stations required are now fully commissioned and in service. Airwave Phase 2 including an extension of coverage to Stratford has now been agreed with the National Police Information Authority and works are expected to be contracted by the end of January 2009.

### Connect Works

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Connect – 4 Lines Radio Systems Go-Live	29-02-2008	29-02-2008	Completed
Central Line Radio – Commencement of train cutover	26-05-2008	14-07-2008	Completed
Northern Line Radio – Commencement of train cutover	22-09-2008	27-11-2008	Completed
Phase 2 – Bakerloo Line	01-12-2008	01-12-2008	Completed
Video cutover – first Metronet batch delivered (25 stations)	28-02-2009	31-01-2009	●
Radio resilience – present medium term resilience plan	31-05-2009	29-05-2009	●
Video cutover – first Tubelines batch delivered (20 stations)	30-06-2009	30-06-2009	●

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

For the train radio workstream, the final line to be converted (Northern) went live on 27 November 2008. Phase 2 is now underway, which provides increased functionality on the new equipment and improved video capability.

Outages on the system have required further work to improve system resilience. A revised resilience strategy is now in place.

## Power Works

Milestones	Current Plan Date	Actual / F'cast Date	RAG
SSL Met Line DD&B issue of Invitation to Tender (ITT)	07-07-2008	04-09-2008	Completed
Jubilee Line Power Upgrade – Award Finchley Rd & Neasden design and build contract	01-08-2008	05-05-2008	Completed
Piccadilly – Provisional Concept Design Complete	18-08-2008	18-08-2008	Completed
SSL Power Upgrade – S&D package 1 staged project life end	30-09-2008	03-10-2008	Completed
Victoria Line Upgrade (VLU) Power Upgrade – Full completion of 22kV power cable	12-12-2008	27-03-2009	■
VLU Power Upgrade – Civil works complete	25-03-2009	25-03-2009	●
SSL Power Upgrade – Award Met Line design and build contract	01-03-2009	01-03-2009	●
Jubilee Line Power Upgrade – Power On	16-08-2009	10-06-2009	●
VLU Power Upgrade – overall completion (Milestone 4I)	08-12-2009	08-12-2009	●

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

The delivery phase of the Victoria Line Power Upgrade remains on programme with final completion in December 2009. Completion of the 22kV power cable has been delayed to March 2009 as a result of emergency gas works but the completion date is not affected. The completion of civils works is on target for 25 March 2009.

The Sub-Surface Lines Power Upgrade is progressing from scoping and development to detailed design and build. The first two packages (1A and 1B) were tendered on 4 September 2008 and completed supplier proposals were received on 5 December 2008. Project authority is being sought for the award of these packages. Packages 2, 3 and 4 are being prepared for tender, with award planned later in 2009.

For the Northern Line Power Upgrade, activity remains on hold pending the resolution of fundamental project issues with Tube Lines, primarily the traction voltage. Negotiations are underway, with resolution not expected until early 2009.

On the Jubilee Line Power Upgrade, the need for design clarifications has delayed the manufacture of certain transformers, but the completion date remains June 2009.

For the Piccadilly Line Power Upgrade, the current delivery programme and budget is based on a 630V specification rather than on a 750V. 750V offers greater operating efficiency and a new programme and cost is under development.

## London Rail

### East London Line Extension

Spend to end of Q3 (£m)	EFC (£m)
614.4	993.5

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Main contractor takes occupancy of ELL Track way & Stations	31-03-2008	01-03-2008	Completed
Completion of the launch of bridge GE19	31-05-2008	05-05-2008	Completed
Completion of main span New Cross Gate	31-05-2008	11-05-2008	Completed
Handover of bulk supply point to EDF	31-08-2008	31-08-2008	Completed
Operational building complex available for use by employer	31-12-2008	31-03-2009	▲
Test running	31-01-2010	13-08-2009	●
Trains in Service	30-06-2010	30-06-2010	●

The upgraded and extended East London Line is planned to open in 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 this quarter several key milestones were met. Sidings 1-4 at New Cross Gate were completed and the first and second floors key rooms in the Operational Building Complex. The milestone for this building to be available for use by the employer has been re-programmed to the end of March 2009. Other short term milestones include the closure of detailed design comments and approval of mechanical and electrical designs for all four new stations. Signalling work at West Croydon was also completed on 5 October.

The rate of submission of design proposals by Balfour Beatty Carrillion is now in line with the revised plan. 15 final designs were submitted during the period against the target of 9, taking the total cumulative submissions to 491 against the target of 490. The year end target is 568. Test running commencement is the next major milestone, expected in August 2009.

The expected final cost for this project has increased by £5m from £989m to £994m due to additional works at Crystal Palace funded by Network Rail. The project remains on track for the East London Line to re-open by the scheduled date of June 2010.

## 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	31-10-2008	03-01-2008	▲
First East London Rail unit delivered for NR test track	31-12-2008	31-03-2009	■
Trains in Service – North London Rail	31-12-2008	10-03-2009	▲
Trains in Service – East London Line	30-06-2010	30-06-2010	●
Last NLL unit accepted	14-01-2009	31-05-2009	●
Last ELL unit accepted	14-08-2009	14-08-2009	●

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 and the East London Line. The acceptance of the first unit was delayed further from mid-November and was expected on 3 January but this did not occur. Slippage was due to the availability of parts during construction and also the completion of on track testing. This has delayed the trains in service milestones for the North London Railway from the Q2 forecast of 31 January 2009 to 10 March 2009. A revised plan is expected from the supplier in January. The last units accepted milestones are expected to be delayed.

Delivery of the first East London Line rolling stock has slipped from 31 December 2008 to 31 March 2009, however train production is not currently on the critical path for the East London Line Project, so the delay will not affect the date of service commencement.

## DLR Bank-Lewisham 3 Car Infrastructure

Spend to end of Q3 (£m)	EFC (£m)
151.5	266

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Westferry platform units installed	17-08-2008	09-01-2009	■
Sectional completion package 2	05-01-2009	05-01-2009	●
Sectional completion – Cable Street viaduct	31-01-2009	30-01-2009	●
Sectional completion – Stepney causeway	13-03-2009	13-03-2009	●
Construction/track work/signalling complete	31-01-2010	31-01-2010	●
Service operational	31-01-2010	31-01-2010	●

This project will deliver the structural works necessary for 3 car operation on the DLR from Bank and Tower Gateway to Lewisham.

The installation of precast platform units at Westferry has been delayed until 9 January 2009 following earlier design delays. This milestone is not on the critical path.

On package 1 (Bank – Crossharbour) the Tower Gateway blockade continues with early slippage being retrieved by working through the Christmas period to protect the 15 February re-opening date. The rest of the package is generally adhering to the programme. On Package 2 (Lewisham Extension) all work was due to complete by 5 January, except the automatic passenger counters at Greenwich. Taylor Woodrow has applied for completion but this has yet to be agreed with DLR. Package 7 at Canning Town was 4 weeks behind schedule and some of this was recovered by working through the Christmas period. Further recovery is expected in early 2009.

#### DLR Woolwich Arsenal Extension

This programme is delivered under a Private Finance Initiative. No direct costs are reported.

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Completion of station	27-08-2008	30-09-2008	Completed
Systems testing complete	31-12-2008	31-12-2008	Completed
Project completion	28-02-2009	10-01-2009	●

This project delivers the extension of the DLR from King George V station to Woolwich Arsenal through a Private Finance Initiative contract.

System testing was completed on schedule at the end of December. The expected project completion date has been brought forward from the contractual end date of 28 February to 10 January. This has been possible due to an acceleration of the works schedule.

The fit-out of the new Woolwich Arsenal station continues, with the final installation of lifts, Long Line Passenger Address System, passenger counters, information screens and vending machines underway.

#### DLR Stratford International Extension

Spend to end of Q3 (£m)	EFC (£m)
102.5	192.7

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Stratford Int. Station - Completion of new platform structure	18-07-2008	06-10-2008	Completed
Stratford Int. Station - Completion of main platform canopy and finishes	03-11-2008	03-11-2008	Completed
Completion of construction of Star Lane platform, canopies and signalling equipment room	19-02-2009	13-03-2009	●
Complete works on Package 6	30-06-2010	30-06-2010	●
Service operational	30-07-2010	30-07-2010	●

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.

At Stratford International station the main platform canopy and finishes were completed on schedule on 3 November. At West Ham, the platform works are well advanced, however a

fatality has occurred on site, which is being investigated by the Police and the Health and Safety Executive.

At Stratford Regional station the Western and Central subways have been completed and they are undergoing testing and commissioning.

#### DLR Railcars

Spend to end of Q3 (£m)	EFC (£m)
13.2	58.6

Milestones	Current Plan Date	Actual / F'cast Date	RAG
18 <sup>th</sup> vehicle delivered	18-09-2008	14-01-2009	■
18 <sup>th</sup> vehicle in service	18-10-2008	27-04-2009	■
24 <sup>th</sup> vehicle delivered	16-12-2008	08-04-2009	■
1 <sup>st</sup> railcar delivered for Stratford Int. Extension	09-01-2009	20-06-2009	■
24 <sup>th</sup> vehicle in service	16-01-2009	20-07-2009	■

This project covers the provision of 16 extra DLR railcars for 3-car operation, 6 for the Woolwich Arsenal extension, 9 for the Stratford International extension and 22 for the Games.

The production of railcars by Bombardier has slipped further behind programme. At the end of Quarter 3 (6 December 2008), the Beckton depot had received 16 new vehicles against a target of 18 by 18 September 2008, which is an increase of 5 vehicles in this quarter. The delivery of both the eighteenth and twenty-fourth vehicles has now been delayed by about four months. The delays are as a result of earlier problems in approving the first cars following testing, and production could not continue until these issues had been resolved.

#### North London Railway Infrastructure Project

Spend to end of Q3 (£m)	EFC (£m)
25	£240.1

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Completion of preliminary (GRIP4) design	30-09-2008	30-09-2008	Completed
Prime contract award	31-10-2008	11-02-2009	■
Project completion	31-01-2011	31-01-2011	●

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.

Following the submission of tenders and finalisation of the scope items, Network Rail has confirmed the cost estimate. The TfL Board has already approved the full funding for North London Railway Infrastructure Projects (including East London Line Phase 1a) and the Network Rail Board approved the project on 19 November 2008.

Four live cables of unknown origin were found at Dalston Junction. Discussions took place between the project team, the Utility companies and Network Rail to determine the owner. A risk workshop was also held to discuss the alternative actions to mitigate any potential delay. Notices have been sent out stating the intention to disconnect the cable. This has delayed the start of demolition of the Dalston Junction bridge deck until January 2009, but is not anticipated to cause an overall project delay.

The revised track access option of 6 trains per hour instead of 8 between Camden Road and Stratford is still with the Office of Rail Regulation for a decision. ORR consultation is complete and Network Rail/TfL are awaiting a response. The line opening date remains at January 2011.

## Surface Transport

### iBus

Spend to end of Q3 (£m)	EFC (£m)
64.6	81.8

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Roll out of 3,300 buses	29-07-2008	25-06-2008	Completed
Roll out of new technology to fleet substantially complete (7,300 buses)	28-02-2009	18-02-2009	●
All vehicles in fleet (8,208) installed with iBus	30-04-2009	30-04-2009	●
Old system decommissioned and all operations transferred to new system	28-02-2009	30-06-2009	■

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

The entire fleet (8,208) vehicles will be complete on schedule by the end of April 2009. The milestone to decommission the old system is still forecast to be delivered four months behind schedule at the end of June 2009, due to the earlier delays in rollout of the new system.

### Congestion Charging Re-Let

Spend to end of Q3 (£m)	EFC (£m)
57.7	99.7

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Selection of retail service providers	29-08-2008	30-09-2008	Completed
Release 1 – go-live of new contract for extended zone	01-11-2009	01-11-2009	●
Completion of delivery stage (release 1)	30-11-2009	30-11-2009	●
Financial close (release 1)	28-03-2010	28-03-2010	●
Release 2 – go live of account based charging using ANPR or DSRC enforcement technology	01-11-2010	01-11-2010	●

The Congestion Charging Re-Let project is to establish new contracts for the operation of the extended 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.

The selection of the retail provider (E-Pay) occurred at the end of September. This project is now forecasting a final cost of £99.7m, which is a further reduction of about £5m, largely due to a reduction in the contingency provision, IBM design changes and a reduction in consultancy costs.

The impact of taking the Western Extension out, from 2010 at the earliest, has still to be incorporated.

#### Greenwich Waterfront Transit (Phase 1)

Spend to end of Q3 (£m)	EFC (£m)
5.1	46.4

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Detailed design submitted for approval	12-08-2008	02-09-2008	Completed
Dispatch tender documents	18-08-2008	30-07-2009	■
Complete preparation of Orders and Planning Applications	06-10-2008	07-01-2009	■
Construction commences	31-07-2009	30-11-2009	■
Construction completed	29-08-2011	01-11-2011	▲
Service commences	31-10-2011	10-12-2011	▲

This project is to establish a 13km bus transit route from Abbey Wood to North Greenwich via Woolwich, part of which will be a segregated bus way, to be completed by the end of 2011.

The Greenwich Waterfront Transit detailed design was completed in September. The submission of tender documents has been deferred due to delays with the Compulsory Purchase Order process. The project submitted a full planning application to the London Boroughs of Greenwich and Bexley on 2 December 2008. A planning decision is expected in mid March.

## Programmes (over £10m per annum)

### Transport for London Road Network Capital Renewal

This is an “annualised programme”, where minor schemes are delivered on a rolling basis. Costs are based on a yearly budget.

Spend to end of Q3 (£m)	EFC (£m)
28.1	51.4

Milestones	Current Plan Date	Actual / F'cast Date	RAG
Q1 Target of 14 Capital Renewal schemes to achieve Gate 2 approval	20-06-2008	12-09-2008	Completed
Q2 Target of 60 (cumulative) Capital Renewal schemes to achieve Gate 2 approval	12-09-2008	07-11-2008	Completed
Q3 Target of 144 (cumulative) Capital Renewal schemes to achieve Gate 2 approval	05-12-2008	04-03-2009	▲
Q4 Target of 200 (cumulative) Capital Renewal schemes to achieve Gate 2 approval	31-03-2009	31-03-2009	●

The Transport for London Road Network 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.

At Quarter 2, 37 of the targeted 60 schemes had reached the Gate 2 (Delivery) target. The Quarter 2 target was reached during P8 (end 7 November), when 64 schemes had reached Gate 2 sign off. The Quarter 3 target was 144 schemes, but only 78 schemes had reached Gate 2 by then. It is anticipated that 144 schemes will have reached Gate 2 by the beginning of March 2009.

The forecast spend on this programme has increased to £51.4m since Quarter 2. £2.1m of this increase is for Section 278 schemes, which are fully funded by third parties. An additional £2.7m has also been allocated to this programme as a carry over from 2007/8.

At this point, the programme has spent £28.1m compared to the original £38.7m budgeted. The Quarter 3 forecast shows an accelerated spend towards the year end in line with the delivery profile. Surface Transport is confident that they will achieve the year end target.

### Accident Reduction Road Safety

Spend to end of Q3 (£m)	EFC (£m)
4.5	7.7

Milestones	Current Plan Date	Actual / F'cast Date	RAG
6 cumulative LRSU Gate 2 sign offs at Q2	12-09-2008	02-01-2009	■
38 cumulative LRSU Gate 2 sign offs at Q4	31-03-2009	31-05-2009	▲

The Accident Reduction Road Safety Plan involves making changes to the physical road layout of Borough roads at selected locations, road surfaces, signing and other changes as required for each road safety remedial measure.

The Quarter 2 target of 6 schemes reaching a Gate 2 sign off has still not been achieved and instead only 3 schemes have been achieved. This is an increase of 2 schemes since Quarter 2. The year end target of 38 schemes is anticipated to be achieved by the end of May 2009 and as such £2m has been transferred to 2009/10.

### TLRN Cycling Capacity

Spend to end of Q3 (£m)	EFC (£m)
3.9	8.8

Milestones	Current Plan Date	Actual / F'cast Date	RAG
8 cumulative schemes have Gate 2 sign off at Q2	12-09-2008	02-01-2009	■
55 cumulative schemes have Gate 2 sign off at Q4	31-03-2009	31-09-2009	■

The Transport for London Road Network Cycling Capacity programme delivers new or upgraded assets including cycle advance areas, new crossings, on-highway priority measures, secure parking, access at major junctions, safety improvements, traffic-free areas, green routes through parks and along waterways.

For Transport for London Road Network Cycling only 4 Gate 2 sign offs were achieved from the 2008/9 programme by the end of Quarter 3 against a target of 8 by the end of Quarter 2 and 55 by the year end. The year end target of 55 schemes is anticipated to be achieved by the end of September 2009 and as such £8.6m has been transferred to 2009/10.

From the previous EFC of £23.2m, £8.6 has been transferred to 2009/10 as mentioned above, £2.8m has been transferred to Cycle Hire, £0.5m has been transferred to Brixton Central Square and £2.1m savings have been made on cycling arteries and cycle zones. With other minor variances this brings the new EFC to £8.8m.