

AGENDA ITEM 5

**TRANSPORT FOR LONDON
FINANCE AND POLICY COMMITTEE**

**SUBJECT: TfL INVESTMENT PROGRAMME REPORT –
FOURTH QUARTER 2010/11**

DATE: 25 MAY 2011

1 PURPOSE AND DECISION REQUIRED

- 1.1 The Investment Programme report for the fourth quarter of 2010/11 (12 December 2010 – 31 March 2011) is attached to inform the Finance and Policy Committee of Transport for London's Investment Programme performance.
- 1.2 The report will be considered by the Board at its meeting on 29 June 2011.

2 RECOMMENDATION

- 2.1 The Committee is asked to NOTE this report.

3 CONTACT

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



Investment Programme Report

Fourth Quarter 2010/11

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Transport for London

Investment Programme Report

Fourth Quarter, 2010/11 (12 December 2010 – 31 March 2011)

I. Programme Highlights

The key highlights from the fourth quarter of 2010/11 were:

- Congestion Charging Re-let – AutoPay went live for registered customers
- Jubilee line upgrade – automatic train operation tested successfully
- Victoria station upgrade – utility diversion works completed
- Sub Surface Railway upgrade – S7 test train delivered to London and available for testing
- Bank station upgrade – outline design proposal completed
- Marble Arch station modernisation – delivery into service
- London Overground rolling stock – completion of 24 North London Railway three car units to four car units
- Split Cycle Offset Optimisation Technique (SCOOT) – 634 sites installed to date
- Tube Lines station upgrades – Stratford and Finsbury Park delivered into service

Post quarter events include:

- Track Renewal Programme – Bakerloo, Central and Victoria lines 1,500 metres of track reballast and replacement achieved
- North London Railway Infrastructure Project – project completion

Cover picture:

The first of a fleet of eight hybrid buses came into operation on 18 December 2010. The new buses use the latest hydrogen fuel cell technology, emitting nothing but water vapour. The buses will form the only hydrogen bus fleet in the UK and the largest currently in Europe. These state-of-the-art vehicles were specifically designed for TfL using pioneering technology developed by ISE, Wrightbus and Ballard. All eight buses are expected to be phased into operation in 2011, creating the UK's first zero-emission bus route.

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

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

This main body of this report covers discrete projects with a total cost greater than £50m and programmes spending over £10m per annum. For each project, key milestones are listed with a forecast date compared against the March 2010 baseline. If appropriate, milestones listed as deliverables for the year in the 2010/11 Budget document are included.

Committed schemes and milestones listed in Annex B of the 2010 Spending Review funding settlement letter are included in this report. The Deep Tube Upgrade programme will be included after feasibility works are completed.

The milestones contained in Annex B are identified in the project pages with the note '(Annex B: date)' listed after the description.

Key to RAG status:

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

This report focuses on the delivery of investment projects. For discussion on wider financial performance, see the Quarter 4 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

Sub-Surface Railway Upgrade

Spend to end Q4 2010/11 £m	EFC £m
1,374.1	4,305.6

Milestones	Current Plan Date	Actual/Forecast Date	RAG
ATC supply – confirm approved shortlist	26/06/2010	08/07/2010	Completed
ATC – appoint contractor (Annex B: 2011)	05/02/2011	17/05/2011	■
Enabling Works – Lillie Bridge depot ready for operational use for Working Timetable 10	08/01/2011	12/12/2010	Completed
Neasden Depot – new cleaning shed operational	18/09/2010	18/09/2010	Completed
Aldgate to Barking infrastructure ready for route clearance testing	20/08/2011	20/08/2011	●
S8 enabling works – Baker Street complete (incl. train arrestors)	01/05/2010	31/07/2010	Completed
Trains – S7 test train delivered to London and available for testing	31/03/2011	31/03/2011	Completed
Trains – first S8 train in passenger service (M2)	18/09/2010	31/07/2010	Completed
S Stock migration complete (excl ATC test trains)	31/07/2015	30/06/2015	●

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

Rolling Stock

Six S Stock trains have now been delivered to London from the Old Dalby test track, and a further 5 are accumulating mileage at Old Dalby. Three S Stock trains have consistently been in passenger service since December on the Metropolitan line routes north of Baker Street. A first run to Aldgate in passenger service was carried out on 3 April 2011.

The first S7 test train was delivered to Neasden to be ready for the start of integration testing on the network. S stock accumulated running distance to date is 144,429km.

London Underground

Automatic Train Control

Following an extensive tendering process, the ATC preferred contractor, Bombardier Transportation UK, was nominated in the quarter. The contract to deliver a new signalling system across the Sub Surface Railway is due to be formally awarded on 17 May 2011. The Service Control Centre building is now externally complete and watertight (on schedule).

Infrastructure for Trains

The new ticket office at Hammersmith station was completed in the quarter as part of the station remodelling works. A train driving simulator for the new S Stock trains was delivered to the Hammersmith depot. Enabling works at Great Portland Street and to Baker Street platforms 2 and 3 were completed.

SSR Major Power Works (Signalling)

Spend to end Q4 2010/11 £m	EFC £m
	56.0

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

In Quarter 4, orders were placed for a number of circuits planned for installation while contractors are on site undertaking other activities, minimising disruption. Scoping and development works for future phases of the power works were commenced. Now that the ATC preferred bidder has been announced, work can concentrate on a single design option.

London Underground

SSR Major Power Works (Traction)

Spend to end Q4 2010/11 £m	EFC £m
196.1	*

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Package 1b (Eastcote civil works) – start of Construction	24/07/2010	29/06/2010	Completed
Package 4 – completion of Edgware Road bulk supply point boundary wall piling	18/09/2010	16/06/2010	Completed
Package 1b (Eastcote transformer rectifier 2) – commission/energise QICC Part 8	16/10/2010	05/08/2011	■
Package 1a (Neasden Depot) – available to supply traction power	23/12/2010	13/05/2011	■
Substation full beneficial use (all S7 sites)	28/02/2013	07/03/2013	●

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

To ensure delivery of capacity against a background of slippage on Package 1a, low-priority works have deliberately been slipped. Packages 1a and 1b are being managed against dates dictated by the S8 train workstream, not against the original milestones that were set on a contractual basis.

Packages 1b, 4 and 6 progressed to plan in the quarter. Package 1a continued to slip, as a result the lead on scheduling and commissioning will be taken over from the contractor by the LU project team. Previous slippage on the Package 2 design phase was not recovered, but a plan to prevent this adversely impacting construction has been implemented. The invitation to tender for Package 3a has been prepared.

London Underground

Victoria Line Upgrade Programme

Spend to end Q4 2010/11	EFC £m
881.5	1,040.9

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Start trialling the new service control centre (line control) in passenger hours	26/06/2010	23/05/2010	Completed
10 production trains accepted for service	24/07/2010	20/07/2010	Completed
Demonstrate operation of the new service control centre	21/08/2010	20/07/2010	Completed
20 production trains accepted for service	11/12/2010	22/11/2010	Completed
Start to control Victoria line operations from the new service control centre	15/08/2011	15/08/2011	●
Full service operation for 09 Tube stock	23/09/2011	23/09/2011	●
Demonstration of line upgrade capability	26/04/2012	26/04/2012	●
Victoria line upgrade programme completion (Annex B: 2013)	07/04/2013	07/04/2013	●

The Victoria line upgrade includes new rolling stock, signalling, control equipment, depot and track works. The programme remains on target and budget to complete ahead of the contractual completion date of August 2013. Fleet production and system reliability remain the primary focus.

Rolling Stock

A further ten 09 Stock trains were accepted for service on the Victoria line in the quarter. A total of 31 new trains are now in operation. Full service operation for the entire new fleet remains on schedule for September 2011.

Signals and Operations

Overall reliability continued to improve throughout the period. The progress of signalling design and installation works for asset replacement is being closely managed on a daily basis in readiness for the first commissioning this year. 24-hour operational proving from the new Service Control Centre was undertaken in the quarter.

Four more level access platform humps have been installed.

London Underground

Underground General Renewals

Spend to end Q4 2010/11 £m	EFC £m
109.5	283.5

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Central Line Bogie Mods – 960 frames delivered to fleet	13/07/2010	18/06/2010	Completed
Central Line Bogie Mods – 1,420 frames delivered to fleet (manufacture complete)	05/03/2011	24/02/2011	Completed
Central Line Train Refresh – start on site	23/07/2011	19/05/2011	●
Concept Approval for Tunnel Cleaning Train	12/11/2011	04/10/2011	●

The Central Line Bogie Modifications project was instigated following the Chancery Lane incident, to address the issues identified and comprises the re-design, manufacture and fitting of 1,420 new bogie assemblies to the entire Central line fleet.

Bogie Modifications

The manufacture of the new bogie frames began in January 2009 and the delivery schedule is complete. The Bogie Modification project team is working with the Asset Performance Directorate to resolve an issue with a shortage of a specific component that has delayed the train lift programme.

92 Tube Stock Refresh

Enabling works in the Ruislip cleaning shed were completed on schedule, ready to start the refresh programme. The design has been completed for window replacements, new seating and car body ends. Contracts for windows, seats and car body end panels have been placed with suppliers.

New Tunnel Cleaning Train

The final draft of the Motive Power Unit technical specification has been released for review by the engineering team. The Tunnel Cleaning Unit conceptual design submission has been received and comments returned to the contractor. Enabling works on the Motive Power Units (MPU) have started at Acton works on schedule.

London Underground

Victoria Station Upgrade

Spend to end Q4 2010/11 £m	EFC £m
122.5	656.2

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Main works contract award	28/10/2009	15/04/2010	Completed
Bring into use ticket office	13/09/2010	01/11/2010	Completed
Birse utility works planned completion date	31/03/2011	24/12/2010	Completed
North ticket hall – civils complete (inc removal of traffic management)	15/12/2014	11/12/2014	●
North ticket hall – access to Victoria line and London Fire and Emergency Planning Authority shaft, delivery into service (Annex B: 2016)	23/10/2016	29/07/2016	●
South ticket hall – station operations room complete	06/12/2017	27/06/2016	●
Delivery into service (Annex B: 2018)	01/02/2019	12/02/2018	●

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 and District & Circle lines.

Possession was taken of Elliot House, 5-11 Bressenden Place, 120-124 Victoria Street; asbestos survey works have commenced prior to demolition. A value engineering proposal to replace the North ticket hall paid area link tunnel construction with an open-cut excavation was accepted in the quarter. This avoids a clash of the Kings Scholar Pond Sewer piles with the VSU tunnels resulting in a saving.

Intrusive surveys continue within the station and condition surveys have commenced in third party buildings. Completion of baseline ground/structures monitoring was achieved one month ahead of schedule.

London Underground

Green Park Station Upgrade

Spend to end Q4 2010/11 £m	EFC £m
41.3	48.8

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Detailed design approved RIBA EF (Phase 3) – below ground	24/07/2010	22/03/2010	Completed
Lifts 5 and 6 installation start	31/03/2011	13/09/2010	Completed
On Site Staff Training Commences	23/06/2011	21/04/2011	●
Green Park delivery into service (as agreed with ODA)	19/12/2011	01/09/2011	●

This project provides step-free access at Green Park station, to provide a key interchange for mobility impaired passengers travelling to 2012 Games events using the Underground. The programme is ahead of the targeted Games delivery date of December 2011.

The project remains ahead of schedule with a forecast completion date of 1 September 2011. Cladding of the street-level canopy has commenced and is progressing to plan. Floor tiling in the Victoria line lower circulation area and ticket hall has been renewed. The new switch rooms have been brought into use during the quarter. Final electrical fit-out works in the ticket hall are ahead of schedule.

London Underground

Paddington Station Upgrade

Spend to end Q4 2010/11 £m	EFC £m
18.8	*

Milestones	Current Plan Date	Actual/Forecast Date	RAG
LU approve Crossrail Detailed design for interim and final scheme	13/11/2010	20/10/2010	Completed
LU start on site – station fit out final scheme	28/05/2012	17/04/2012	●
Completion (Annex B: 2014)	25/11/2013	22/03/2013	●

Paddington (Hammersmith & City line) station is one of LU's top priorities for congestion relief because of demand growth associated with local area redevelopment and the Sub-Surface Railway upgrade. The project seeks to deliver congestion relief and step-free access benefits to ensure the continued safe operation of the station.

The outstanding property documents have now been completed by Aviva, and this now finally resolves the issues of LU's right to utilise the new escape stair and service the new station. Piling works on Hammersmith & City line platforms have been completed. Pile capping within the triangle site is 50 per cent complete. Structural steel has been erected on platforms 15 and 16.

London Underground

Tottenham Court Road Station Upgrade

Spend to end Q4 2010/11 £m	EFC £m
172.6	499.6

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Completion of demolition of Goslett Yard	21/08/2010	04/06/2010	Completed
Commence Oxford Street new entrance civil works	11/12/2010	03/11/2010	Completed
Completion of Goslett Yard Box	30/09/2013	28/06/2013	●
Delivery into service (Annex B: 2016)	09/09/2016	09/09/2016	●

The congestion relief scheme includes an upgraded and enlarged ticket hall, three new entrances, additional escalator access to the Northern line platforms, improved circulation space, step-free access throughout and an interchange with Crossrail.

From 2 April 2011 for a period of eight months, Northern line services will not stop at Tottenham Court Road to allow essential preparatory and major structural works to be completed at the station.

Excavation works progressed in the Northern line escalator box. Pile probing was completed on the West wall of the New Plaza ticket hall on schedule. 33 out of 44 diaphragm wall panels for the Goslett Yard box have now been cast, and the first phase of the new escalator incline is also complete. The protection slab over the future Crossrail tunnel has been cast on schedule.

London Underground

Bond Street Station Upgrade

Spend to end Q4 2010/11 £m	EFC £m
70.5	314.8

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Main works contract award	18/09/2010	04/08/2010	Completed
Take Possession of 354-358 Oxford Street	08/01/2011	22/11/2010	Completed
Start of main tunnelling operations (Annex B: 2013)	15/07/2013	02/04/2013	●
Early hand back Jubilee line platforms, Escalators 3 to 8, into public use	02/05/2015	12/10/2014	●
Completion (Annex B: 2017)	28/04/2017	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 2018. The scheme provides:

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

A Considerate Contractor audit report has rated the project worksite "Excellent". Soft strip demolition of 354-358 Oxford Street and 2 Stratford Place continues to plan. Bus diversions have been implemented to allow utility diversion works to commence. The first phase of the installation of the fire protected route within the station has been completed. Removal of the porters lodge was completed and the historic lion monument has been removed to safe storage.

London Underground

Bank Walbrook Square

Spend to end Q4 2010/11 £m	EFC £m
12.2	*

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Detail design compliance submission	13/11/2010	13/12/2010	Completed
Complete design of box fit out	30/08/2010	11/02/2011	■
Delivery into service (Annex B: 2015)#	10/07/2015	14/10/2015	■

The original Annex B milestone stated 2014 in error, this has now been replaced by a 2015 plan date

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

The original developer, Legal and General, has entered into an agreement with a new developer for the site, Walbrook Square Limited (WSL). The Deed of Variation to cover amendments to the LU station box layout has been agreed in principle. Delays to the project are due to the developer's relocation and reconfiguration of the station box as the design of the above-ground development continues to evolve.

London Underground

Bank Station Upgrade

Spend to end Q4 2010/11 £m	EFC £m
7.5	*

Milestones	Current Plan Date	Actual/Forecast Date	RAG
RIBA C Design Accepted / Phase Complete	05/02/2011	02/02/2011	Completed
RIBA D Design Accepted Phase Complete PAM (Target Date 31/08/12)	31/08/2012	09/08/2012	●
Delivery into service (Annex B: 2021)	23/01/2021	20/12/2021	■

The Bank Northern line congestion relief project will relieve current and expected congestion in Bank station. By mitigating increasingly frequent congestion of the Northern line/DLR area, station closures will be reduced.

Work on RIBA Stage D (scheme design) has commenced following a kick-off meeting with the contractor Mott Macdonald. The design programme has been rephased following the completion of RIBA Stage C (outline proposal) in the quarter. A review of the schedule with Mott MacDonald has led to a revision to the schedule. Given the early stage of the design, and the lack of a detailed construction programme it is probable that the likely date for completion will remain fluid, particularly on a date ten years in the future.

A number of positive working group meetings have taken place with the Corporation of London (CoL) aimed at progressing the Transport Works Act submission. CoL will also recommend a £2m Section 106 contribution to the new station control room.

London Underground

Station Condition Renewal

Spend to end Q4 2010/11 £m	EFC £m
578.9	875.5

Planned funding for Finsbury Park, Highbury & Islington, Vauxhall and a general provision for Congestion Relief schemes are now included in this programme.

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Notting Hill Gate station modernisation – practical completion	16/10/2010	15/10/2010	Completed
Notting Hill Gate station modernisation – delivery into service	18/11/2010	18/11/2010	Completed
Marble Arch station modernisation – practical completion	08/01/2011	07/01/2011	Completed
Marble Arch Station modernisation – delivery into service	31/01/2011	31/01/2011	Completed
Former Silverlink Stations Upgrade – Deliver Into Service Last Station (Approved by LU)	23/12/2010	31/03/2011	Completed

The programmes are generally on target. At Notting Hill Gate, works on the station modernisation were completed on 15 October 2010. The station was formally delivered into service on 18 November 2010.

At Stratford, the mezzanine ticket hall opened to passenger service on 20 March 2011. At Highbury & Islington, the project completed platform works ahead of the East London line extension opening on 28 February 2011. The new Stations Operation Room was also completed in the quarter. The last of the Silverlink Stations was delivered into service on 31 March 2011; the delivery was delayed due to subcontractor resource shortages and Network Rail works.

London Underground

Cooling the Tube Programme

Spend to end Q4 2010/11 £m	EFC £m
159.0	264.7

Milestones	Current Plan Date	Actual/Forecast Date	RAG
MTV Tranche 1 and 1A – all sites brought into beneficial use	21/08/2010	23/07/2010	Completed
Victoria line: mid tunnel vents tranche 2 – first site brought into beneficial use	16/10/2010	14/08/2010	Completed
Victoria line: mid tunnel vents tranche 3 – first start on site	11/12/2010	21/10/2010	Completed
Out of service fans, phase 3 and 4 – approved detailed design	19/12/2011	25/07/2011	●
Out of service fans phase 4 – all fans available for beneficial use	04/09/2012	19/09/2012	▲

This is a long term programme to control ambient temperatures on the Underground. Without intervention, temperatures will rise as more energy is dissipated within the tunnels due to increased train service capability delivered by the deep-tube line upgrades. Planned mitigation measures include improved energy efficiency, increased ventilation and selected station-based tunnel cooling systems.

Mid-tunnel vents:

All Tranche 1 sites have now been fully handed over to operations and maintenance teams. All Tranche 2 sites are now in beneficial use and one site has been fully handed over to operations and maintenance. All Tranche 3 sites have been stripped out and construction of upgraded systems is progressing to plan.

Restoration of out-of-service fans:

Phase 3 has been dropped due to the poor business case. The Phase 4 programme is being restructured to ensure that the minor slippage in the quarter is recovered. At Weston Rise and Clapham Substation Shaft, final designs and tendering information are being prepared. Site investigations at Clapham revealed weaknesses in the building structure that have necessitated some re-design resulting in a two week slippage.

London Underground

Crossrail Services and Safeguarding

Spend to end Q4 2010/11 £m	EFC £m
108.8	241.7

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Provided all LU input and support to facilitate MPRG (Major Project Review Group) Review Point 4	05/02/2011	15/12/2010	Completed
Barbican interlocking machine room – deliver into service	22/05/2011	22/01/2011	Completed
Communications Equipment Room – complete at Liverpool Street	21/12/2011	11/05/2011	●

The interlocking machine room at Barbican was delivered into service during the quarter. At Liverpool Street, Platform 3 works to relocate cables for telephone services, advertising screens and Passenger Help Points have all now completed on plan. Utility diversions at the Tottenham Court Road Goslett Yard site were completed.

London Underground

BCV/SSR Stations Lifts and Escalators and Accommodation

Spend to end Q4 2010/11	EFC to 2017/18 £m
1,407.4	2,678.7

Stations	Current Plan Date	Actual/Forecast Date	RAG
King's Cross station modernisation – delivery into service	16/10/2010	16/10/2010	Completed
Aldgate East station modernisation – delivery into service date agreed by LUL	31/03/2010	15/07/2010	Completed
Warren Street station modernisation – delivery into service	13/11/2010	13/11/2010	Completed
BCV Asset Stabilisation (2009-10 workbank) – replacement of obsolete fire control system	24/07/2010	24/07/2010	Completed
King's Cross station modernisation – Gate 6 completion	06/05/2011	05/06/2011	▲
Lifts and Escalators	Current Plan Date	Actual/Forecast Date	RAG
Piccadilly Circus escalators 1 to 11 refurbishment – returned to service (escalator 1)	10/07/2010	01/07/2010	Completed
Bank escalators 1,2,3 refurbishment – approval of practical completion submission (escalator 2)	26/11/2010	22/11/2010	Completed
Victoria escalators 1,2,3 refurbishment – approval of practical completion submission (escalator 1)	06/01/2012	04/11/2011	●

Stations

At Harrow on the Hill, bridge and first floor fit out were delivered on schedule in the quarter. At Bond Street, the low-voltage mains supply from the sub-station was completed. At West Brompton, work to repair the station roof commenced on schedule.

Lifts and escalators

At Bank station, enabling works were completed on schedule for the refurbishment of escalators 9 and 10. At Victoria, carriage and tracking works were completed and the step chain and steps installed as part of the refurbishment of escalator 3.

London Underground

Track Renewal (BCV/SSR)

Spend to end Q4 2010/11	EFC 2010/11 £m
103.6	121.7

SSR Milestones	Current Plan Date	Actual/Forecast Date	RAG
SSL Points and Crossings - three units achieved (year to date, 2009/10 deliverable)	29/05/2010	06/04/2010	Completed
SSL Ballasted Track Replacement and Reballast metres – 6,750 metres achieved (year to date)	18/09/2010	21/08/2010	Completed
Track drainage – 5,950m replaced (year to date)	18/09/2010	21/08/2010	Completed
SSL Ballasted Track Replacement and Reballast – 13,250 metres achieved (year to date)	31/03/2011	10/01/2011	Completed
Track drainage – 8,250m replaced (year to date)	31/03/2011	29/11/2010	Completed
BCV Milestones	Current Plan Date	Actual/Forecast Date	RAG
BCV Ballasted Track Replacement and Reballast metres – 1,500 metres achieved (year to date)	31/03/2011	18/04/2011	▲
BCV Points and Crossings – six units achieved (year to date)	31/03/2011	21/03/2011	Completed
BCV Class 1 (expected trackform life of 40 years) – 2,400m achieved year to date	31/03/2011	30/06/2011	■

Points and Crossing renewals for the year were delivered on target in the quarter such that the Track Programme has delivered all ballasted track renewal and Points and Crossings planned for the year. The year-end milestone for renewals in the deep Tube of 2,400m remains forecast for completion in 2011/12 as works were delayed on the Central line asbestos sites. A safe system of work is now in place and work commenced in the quarter.

London Underground

Civils (BCV/SSR)

Spend to end Q4 2010/11	EFC to 2010/11 £m
20.4	22.6

BCV Milestones	Current Plan Date	Actual/Forecast Date	RAG
C156 EM3, 4, 7, 8 and 9 - Perivale to Greenford C156 – practical completion	26/06/2010	19/02/2010	Completed
C172 CTS1C and CT52 West Acton to Hanger Lane Junction Cutting Stabilisation – Start on Site	21/08/2010	26/07/2010	Completed
SSR Milestones	Current Plan Date	Actual/Forecast Date	RAG
M072 EM2 – Pinner to North Harrow M072 - Practical Completion	16/10/2010	23/07/2010	Completed
EM12 and 13 Rickmansworth to Moor Park – practical completion	11/12/2010	08/09/2010	Completed
M020 EM10, EM11 and EM12 Chalfont and Latimer to Amersham embankment stabilisation – start on site	16/10/2010	17/09/2010	Completed
D164-EM1,2,4,5 East Putney to Southfields D164 practical completion	20/09/2010	20/08/2010	Completed
M020 EM1,2,3 Amersham to Chalfont and Latimer Practical Completion	28/11/2011	25/11/2011	●

Three projects were completed on site in the last quarter (strengthening to roof girders near embankment station, strengthening of embankments and cuttings between East Acton / North Acton and strengthening of embankments and cuttings between Upminster / Upminster Bridge) bringing the total completed in 2010/11 to 13 against the plan of 12.

Tube Lines

Tube Lines Station Upgrades

Spend to end Q4 2010/11 £m	EFC to 2017/18 £m
5.2	18.0

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Kingsbury – delivery into service	30/10/2010	09/09/2010	Completed
Stratford ODA Platform 3A – delivery into service	16/11/2010	05/09/2010	Completed
Stratford ODA – delivery into service	24/11/2010	28/02/2011	Completed
Finsbury Park – delivery into service	08/02/2011	08/02/2011	Completed
Heathrow T 1, 2 and 3 – delivery into service	30/09/2011	30/09/2011	●

The Stations programme consists of five stations: Kingsbury, Finsbury Park, Stratford, Heathrow Terminals 1, 2 and 3 and Green Park Step Free Access (of which the cost and progress are reported separately by LU). In addition, the Stations programme will deliver the Northern line Signal Equipment Rooms (SERs) that are part of the Northern line upgrade enabling works.

All projects within the Station Upgrade programme are progressing to schedule. In Quarter 4, work at Heathrow Terminals 1, 2 and 3 continued to schedule, the percentage complete increased by 5.1 per cent to 75.7 per cent. At Finsbury Park Station, the percentage completion of works increased by 5.6 per cent to 96.3 per cent, and the delivery into service milestone was achieved.

Works on the Signal Equipment Rooms Programme continued to schedule, the percentage complete increased by 0.3 per cent to 99.8 per cent.

Tube Lines

Tube Lines Lifts and Escalators (L&E)

Spend to end Q4 2010/11 £m	EFC to 2017/18 £m
7.9	193.5

Milestones	Current Plan Date	Actual/Forecast Date	RAG
North Greenwich E6 module 3 refurbishment – return to service	21/12/2010	21/12/2010	Completed
West Ham E2: module 3 – return to service	18/01/2011	18/01/2011	Completed
Southwark E5: module 3 – return to service	22/03/2011	22/03/2011	Completed
Bounds Green E3 Refurbishment – Return to Service (BIU)	28/05/2011	03/05/2011	●
Leicester Square E3 Refurbishment – Return To Service (BIU)	28/05/2011	12/05/2011	●
North Greenwich E2 Refurbishment – Return To Service (BIU)	28/05/2011	13/05/2011	●
West Ham E1 Refurbishment – Return To Service (BIU)	25/06/2011	27/05/2011	●
Southwark E6 Refurbishment – Return To Service (BIU)	17/09/2011	17/09/2011	●
Leicester Square E2 Refurbishment – Return To Service (BIU)	15/10/2011	15/10/2011	●
West Ham E3 Refurbishment – Return To Service (BIU)	15/10/2011	15/10/2011	●
Stratford E1 Replacement – Return To Service (BIU)	12/11/2011	12/11/2011	●
Stratford E2 Like For Like Refurbishment – Return To Service (BIU)	07/01/2012	07/01/2012	●
Southwark E4 Refurbishment – Return To Service (BIU)	07/01/2012	07/01/2012	●
Leicester Square E1 Refurbishment – Return To Service (BIU)	03/03/2012	03/03/2012	●
North Greenwich E8 Refurbishment – Return To Service (BIU)	03/03/2012	03/03/2012	●

In Quarter 4, refurbishment works were completed at North Greenwich (escalator 6), West Ham (escalator 2) and Southwark (escalator 5), with all escalators returned to service. Refurbishment works commence at Southwark (escalator 6), Bounds Green (escalator 3), West Ham (escalator 1).

The refurbishment programme for 2011/12 has been identified, key milestones are listed in the table above.

Tube Lines

Tube Lines Track

Spend to end Q4 2010/11 £m	EFC to 2017/18 £m
12.8	329.1

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Spot re-sleepering – Complete 2,770m	31/03/2011	31/03/2011	Completed
Track replacement – Install 8,800m of rail	31/03/2011	31/03/2011	Completed
JNP Track replacement, install 1,500m	17/09/2011	17/09/2011	●
JNP Enhanced Track replacement, install 983m	17/09/2011	17/09/2011	●
JNP Tube reconditioning, complete 850m	10/12/2011	10/12/2011	●

In Quarter 4, the 2010/11 targets for spot re-sleepering (2,770m total) and track replacement (8,800m total) were completed on schedule. Productivity levels were broadly on target for all works in the track programme, with the following totals completed in the quarter:

- 618m of re-rail
- 136m of Tube reconditioning
- 282m of pit block renewal
- 725m of spot re-sleepering
- 205m of depot plain line
- 2,476m of scrap rail removal

Tube Lines

Tube Lines Civils

Spend to end Q4 2010/11 £m	EFC to 2017/18 £m
2.3	114.9

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Drainage Renewal – Complete 1,200m	31/03/2011	31/03/2011	Completed
Earth Structure Renewal – Complete 350m	31/03/2011	31/03/2011	Completed
JNP Drainage renewal, complete 1,000m	17/09/2011	17/09/2011	●
JNP Drainage renewal, complete 2,400m	31/03/2012	31/03/2012	●
JNP Earth structure renewal, complete 300m	17/09/2011	17/09/2011	●
JNP Earth structure renewal, complete 600m	31/03/2012	31/03/2012	●

In Quarter 4, the 2010/11 targets for drainage renewal (1,200m total) and earth structure renewals (350m total) were achieved. Key milestones for the 2011/12 programme were identified and have been included in the table above. Works to undertake asset condition surveys progressed in the quarter, taking the total to 92 per cent complete.

Tube Lines

Tube Lines Jubilee and Northern Line Upgrade Works

Spend to end Q4 2010/11 £m	EFC to 2017/18 £m
	*

This project will provide a significant increase in passenger capacity, faster journey times and reduced waiting time at platforms for the Jubilee and Northern lines.

(*) Northern line – Due to the change of delivery strategy, scope and functionality all reporting milestones are suspended pending resolution. New milestones will be set upon agreement of a cost estimate and programme.

Milestones	Current Plan Date	Actual/Forecast Date	RAG
NL – Complete negotiations with Thales to enable placing of new Supplemental Agreement or Propose new strategy	30/04/2011	30/04/2011	Completed
JLU – J5 section commissioned and revenue service started	15/04/2010	25/06/2011	■

Northern line

Enabling works continue based on the new target programme while discussion on price, risk and contractual agreement are still ongoing – these works include the Control Centre Communications Project (CCCP), trackside installations and testing at various locations.

A provisional programme of works for the line upgrade has been identified and is currently subject to internal approval.

Post quarter update: although negotiations have concluded, a deal with Thales for the Northern line upgrade has yet to be signed due to ongoing final review by Thales.

Jubilee line

The Transmission Based Train Control (TBTC) system in Automatic Train Operation (ATO) has been in operation since 28 December 2010 in J234 (Stratford to Dollis Hill). Passenger reliability continues to improve with further software upgrades over the next three months to supplement reliability further.

J5 trial operations over weekend 19/20 February 2011 went well, taking limited numbers of trains in/out of Neasden Depot. Journey Time Capability testing over the weekend of 12/13 March (Period 13 activity), during engineering hours seven trains ran between Stratford and West Hampstead. The testing was successful, with no major issues to report.

Engineering Vehicle testing was undertaken on the mainline in the J4 area and across the Bakerloo line interface, communication issues were identified. A revised plan is being worked, but the Battery Locos will not be available in TBTC mode until a resolution of the issue has been identified.

Post quarter update: further trial operations in J5 over Easter went to plan and the reliability trend for the line continues to improve.

London Rail

East London Line Extension

Spend to end Q4 2010/11 £m	EFC £m
988.0	1,012.4

Milestones	Current Plan Date	Actual/Forecast Date	RAG
East London Line (Phase I) complete	30/06/2010	23/05/2010	Completed
Contractual completion of works	27/07/2010	27/07/2010	Completed
Croydon crossover operational	31/01/2011	30/01/2011	Completed

The final substantive works on the project, the commissioning by Network Rail of a crossover at South Croydon to allow turnback of trains, was completed on schedule on 30 January 2011. Focus remains on accepting the close out of 'as built' drawings and completion of residual works and defects. The final list of outstanding snagging works is due to be completed on 20 July 2011.

London Rail

East London Line Phase 2

Spend to end Q4 2010/11 £m	EFC £m
8.1	55.5

Milestones	Current Plan Date	Actual/Forecast Date	RAG
TfL South London Line Link GRIP 5 design complete	31/05/2010	02/07/2010	Completed
Award GRIP 6 South London Line Link contract	31/10/2010	07/03/2011	Completed
Commence passenger services	14/05/2012	09/12/2012	■

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).

During the quarter, tenders for the civil and permanent way contract were received and evaluated. The milestone to award the contract was completed ahead of schedule on 7 March 2011 with an instruction to proceed issued to the successful bidders, Birse Metro.

London Rail

London Rail Concession Rolling Stock

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

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Delivery of NLR fleet	30/04/2010	31/08/2010	Completed
Completion of 24 NLR three car units to four car units	31/12/2010	31/01/2011	Completed
Delivery of ELR fleet	30/04/2010	31/03/2010	Completed
First train in service ELR	30/06/2010	27/04/2010	Completed

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).

The conversion of all 24 NLR units into four-car configuration was completed at the end of January 2011. Three additional units have been ordered to provide additional capacity; these units will commence construction in August 2011 for a planned delivery in November.

Issues with traction equipment on the new trains being affected by interference from Class 92 trains has now been resolved by upgrading software across the fleet.

London Rail

North London Railway Infrastructure Project

Spend to end Q4 2010/11 £m	EFC £m
244.6	252.6

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Complete all lines blockade	01/06/2010	01/06/2010	Completed
Core signalling and infrastructure practical completion	31/01/2011	27/02/2011	Completed
Project completion	31/01/2011	26/04/2011	▲

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.

Stages 3, 4 and 5 of the signalling commissioning works were completed in the quarter, with all core signalling and infrastructure works completed on 27 February 2011. The final works on the project to deliver the Latchmere curve improvement also completed post-quarter in April 2011. The improvement works were additional scope not originally included in the core infrastructure (which completed in February 2011), hence the slightly later than forecast completion date.

London Rail

DLR Three-Car Infrastructure

Spend to end Q4 2010/11 £m	EFC £m
287.0	293.9

Milestones	Current Plan Date	Actual/Forecast Date	RAG
North route – three-car service operational	30/06/2010	27/05/2010	Completed
Poplar to Woolwich Arsenal – three-car service operational	30/06/2010	19/04/2010	Completed
East route – practical completion of scissor crossover	21/09/2010	29/05/2010	Completed
East route – construction work complete	28/03/2011	01/12/2010	Completed
East route – service operational for Olympic test	30/05/2011	30/05/2011	●
East route – three-car operational capacity available	31/05/2011	31/05/2011	●

This project delivers the structural works necessary for three-car operation on the Docklands Light Railway (DLR). This includes platform extensions, track realignment and viaduct strengthening. The project includes three-car works on the Bank to Lewisham section, Delta Junction, the Poplar to Stratford Route, Poplar to Woolwich, Tower Gateway, Games station capacity (East route) and West route resilience.

On the East route works, construction and station finishes are now complete at all stations. A signalling software upgrade to allow three-car services to run completed post-quarter, during the Easter weekend. The software upgrade is the final part of enabling three-car operational capacity on the East Route.

A consolidated snagging list for the complete three-car works at time of handover is steadily reducing. The majority of the snagging items are of a minor nature or consist of outstanding paperwork or drawings. Weekly progress meetings are scheduled between the DLR project team and Taylor Woodrow to ensure the timely completion of snagging and that no safety issues arise as a result of snagging works.

London Rail

DLR Stratford International Extension

Spend to end Q4 2010/11 £m	EFC £m
149.8	182.5

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Complete conversion of North London line to DLR	20/09/2010	21/06/2011	■
Service operational	20/09/2010	04/07/2011	■

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.

The final DLR works associated with Package 8 (Network Rail platforms at Stratford) were completed during the quarter. On Package 6 (conversion of NLL to DLR) works were substantially completed during the quarter, and snagging works have been identified. A request to accelerate the snagging activities has been issued to the contractor.

A system performance demonstration is due to take place on 12 June 2011, with trial operations commencing for two weeks from 21 June 2011.

Surface Transport

Congestion Charging Re-Let

Spend to end Q4 2010/11 £m	EFC £m
74.8	99.8

Milestones	Current Plan Date	Actual/Forecast Date	RAG
IBM functionality complete	31/08/2010	06/11/2010	Completed
Release 2 – go live of automated payment account charging	31/12/2010	29/12/2010	Completed
Project close approved	30/06/2011	30/06/2011	●

The Congestion Charging Re-Let project is to deliver new, more effective contracts to operate and manage the Congestion Charging and Low Emission Zone. The Re-Let will also incorporate more flexible and varied charging options.

The Congestion Charging 'Auto Pay' automated payment account charging functionality went live successfully on 29 December 2010, with the service launched to the public on 4 January 2011 as planned. Changes to the Congestion Charge fee and to some discounts and exemptions also came into effect on 4 January 2011. The Auto Pay public information campaign completed March 2011 with over 100,000 accounts having been registered.

The project is continuing to close, handing over operations into business-as-usual activities. The project will be removed from the report in the next quarter.

Surface Transport

TLRN Capital Renewals Programme

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

Spend to end Q4 2010/11 £m	2010/11 EFC £m
48.1	45.4

Description of works	Units	2010/11 annual target	2010/11 achieved to date
Area of carriageway resurfaced	m ²	468,000	548,202
Area of footways resurfaced	m ²	58,500	65,538
Number of lighting units replaced	No.	1,080	871

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

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

The budget approved for the Capital Renewals 2010/11 programme by PRG in March 2010 was £47.9m, which part comprised £24m for carriageways, £5.7m for footways and £3.5m for lighting.

Carriageway resurfacing

In financial year 2010/11, TfL resurfaced 548,202m² of carriageway against a target of 468,000m², an over delivery of 17 per cent. The additional resurfacing was delivered within the approved budget. Efficiencies were achieved due to streamlining of the delivery process and improved value engineering of solutions. The decision was taken to use the efficiencies to exceed targets due to the recent decline in State of Good Repair due to the severe winter weather.

Footways resurfacing

In financial year 2010/11, TfL resurfaced 65,538m² of footway against a target of 58,500m², an over delivery of 12 per cent. The additional resurfacing was delivered on budget. Efficiencies were achieved due to streamlining of the delivery process and improved value engineering of solutions. The decision was taken to use the efficiencies to exceed targets due to the recent decline in State of Good Repair due to the severe winter weather.

Surface Transport

Lighting column replacements

In financial year 2010/11, TfL replaced 871 lighting columns against a target of 1,080, an under delivery of 19 per cent against an underspend to budget of eight per cent. The variance is due to unforeseen delays in several large schemes caused by supplier resourcing issues.

Surface Transport

A406 Bounds Green

Spend to end Q4 2010/11 £m	EFC £m
30.9	56.1

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Completion of advance statutory works	19/04/2010	19/04/2010	Completed
Commence main works	31/05/2010	19/04/2010	Completed
Complete protection structure for LUL bridge	31/03/2011	21/03/2011	Completed
Completion of main works	03/05/2012	28/02/2012	●

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.

The main contractor Skanska is making steady progress on carriageway widening and building reinforced concrete works for the retaining walls. The Wilmer Way footbridge opened in the quarter on 28 March 2011. Utility diversion works are expected to be substantially complete by the end of April 2011.

The protection structure for the LU bridge was completed on 21 March 2011, one week ahead of schedule. The completion of main works milestone is now forecast to be achieved in February 2012.

Surface Transport

Blackwall Tunnel Northbound Refurbishment

Spend to end Q4 2010/11 £m	EFC £m
52.5	73.3

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Mobilisation Period complete	03/05/2010	03/05/2010	Completed
Shaft 2 complete	18/03/2011	16/02/2011	Completed
Construction complete	02/12/2012	31/12/2011	●

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 being delivered during night time and occasional weekend possessions.

The timeline for the project has been accelerated by a further six months to complete ahead of the London 2012 Games. Spend has been accelerated into 2010/11 but the overall cost is expected to be the same.

Construction has continued well in the tunnel, with the continued installation of the cabling and containment for the permanent lighting. Work is underway on the installation of the permanent fire main, public address system, CCTV, wayfinding signs and radio rebroadcast cabling. The steelwork installation within shafts 1 and 4 has also continued and the installation of the lift in shaft 2 has commenced.

The project completion date has been accelerated to 31 December 2011 due to excellent progress on the construction works.

Surface Transport

Cycle Hire

Spend to end Q4 2010/11 £m	EFC £m
65.1	109.3

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Phase 1: go live #1 – website	Summer 2010	30/07/2010	Completed
Phase 1: on street construction completed	06/07/2010	31/06/2011	■
Phase 1: systems integration end to end testing	28/07/2010	31/12/2010	Completed
Phase 1: go live #2 – on street	Summer 2010	30/07/2010	Completed
Phase 2: expansion sites identified	28/02/2011	28/02/2011	Completed
Phase 2: go live #4 – expansion area on street	02/03/2012	02/03/2012	●
Phase 2: construction complete	05/09/2012	05/09/2012	●

The Barclays Cycle Hire scheme launched successfully on 29 July 2010 to registered members. 54 per cent of registered users have opted for annual membership, which means they get access for 12 pence per day, and as the vast majority of trips are under 30 minutes, this is a low cost as well as convenient alternative for many travellers.

Barclays Cycle Hire will expand to the east of the city in 2012. When complete, the expanded scheme will cover 65km² of the Capital and around 8,000 hire bikes will be available from 14,400 docking points at hundreds of locations across central and eastern London.

Work continues with the contractor Serco to deliver the remainder of the planned 400 docking stations and bring the total number of available hire cycles to circa 6,000. By the end of the quarter, an additional 58 docking stations had been delivered, taking the total to 394. Construction of the remainder of the docking stations is now being forecast to be completed by the end of June 2011.

On Phase 2, locations for all of the additional 4,200 planned docking points were identified in the quarter. Planning applications for new sites will be submitted, commencing in April 2011. Discussions are underway with Serco to ensure that the supply chain for cycles and docking points can support the planned delivery schedules.

Surface Transport

Ten Cycle Superhighways

Spend to end Q4 2010/11 £m	EFC £m
6.7	136.4

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Phase 1 invitation to tender Issued	09/04/2010	09/06/2010	Completed
Phase 1 preliminary design completed	30/09/2010	20/12/2010	Completed
Phase 1 contract award	31/08/2010	31/08/2010	Completed
Phase 1 detailed design completed	28/02/2011	25/02/2011	Completed
Phase 1 complete (two routes total)	31/05/2011	17/06/2011	▲
Phase 2 complete (four routes total)	31/10/2012	31/05/2013	■
Phase 3 complete (six routes total)	31/07/2013	30/09/2013	▲
Phase 4 complete (eight routes total)	30/04/2014	30/04/2014	●
Phase 5 complete (ten routes total)	30/01/2015	30/01/2015	●

The Ten Cycle Superhighways scheme will deliver a further ten radial routes into central London following the pilot project. The ten routes will be delivered in five phases of two routes, annually from June 2011 and the last is expected to be delivered by January 2015.

On Phase 1 (Route 2 – Ilford to Aldgate, Route 8 – Wandsworth to Westminster), works commenced at most junctions along each of the routes. Due to difficulties in gaining permission to access some sections of road, the completion date has slipped two weeks this quarter.

On Phase 2 (Route 5 and Route 12), preliminary design of both routes has now been completed, with detailed design on schedule to complete by the end of 2011. Construction has been rescheduled to commence after the 2012 Games and therefore the completion date for Phase 2 has slightly slipped back.

Outline costs for Phase 3 have been identified, the feasibility has started and design stages will commence in 2011.

Surface Transport

Split Cycle Offset Optimisation Technique (SCOOT)

Spend to end Q4 2010/11 £m	EFC £m
4.8	27.4

Milestones	Current Plan Date	Actual/Forecast Date	RAG
634 sites installed	31/03/2011	04/03/2011	Completed
885 sites installed	31/03/2012	31/03/2012	●
1,000 sites installed (Annex B: 2015)	31/03/2013	31/03/2013	●

The SCOOT programme will upgrade traffic signal technology to help meet the Mayoral objective of smoothing traffic flow. The programme has been added to this report to ensure that all milestones listed in Annex B of the Spending Review 2010 settlement letter are monitored on an ongoing basis. Costs shown are for the New SCOOT Investment project, which will deliver 528 sites of a planned 1,000 sites. The remaining sites are funded and delivered by business-as-usual activities across Surface Transport.

Under the New SCOOT Investment project, 113 sites were installed as planned in the 2010/11 financial year, bringing the total to date to 173 sites installed.

Future Ticketing

Spend to end Q4 2010/11 £m	EFC £m
1.5	*

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Phase 1 – initial bus launch to be implemented, payment of the bus single fare by contactless bank card	Early 2012	Early 2012	●
Phase 2a – multi-modal daily travel and daily capping with contactless bank card to be implemented (Annex B: 2012)	31/12/2012	31/12/2012	●
Phase 2b – 7 day capping to be implemented	31/12/2013	31/12/2013	●

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

On Phase 1 (the initial bus launch), the contractor Cubic continued to submit design documentation during the quarter; the project team are undertaking a design review process. The Phase 1 project plan has also been reviewed and refined.

For Phase 2 (multi-modal travel with price capping), Cubic and TfL have started work on the Concept of Operations document, detailing the security model and the technical architecture.

Corporate

ITSO

Spend to end Q4 2010/11 £m	EFC £m
39.5	58.4

Milestones	Current Plan Date	Actual/Forecast Date	RAG
Head office processing system operational	19/06/2012	12/06/2012	●
3G communications software development complete	15/08/2011	9/09/2011	▲
Completion of changes to back-office systems	10/08/2011	5/12/2011	▲
Completion of project	31/12/2012	24/12/2012	●

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, new or upgraded communications links and other system changes. The project is being funded by the DfT under an agreement with TfL dated 28 May 2009.

During the quarter, production tri-card readers were introduced onto the TfL estate on buses, LU gates and LU Passenger Operated Machines. The new card readers allow Oyster, ITSO and EMV cards to be accepted for payment. Performance monitoring is ongoing. Software downloads have continued to buses, implementing software changes to the tri-card readers. Business Rules for acceptance of ITSO products on TfL estate have been agreed and signed-off.