



## 4 Week Period Reporting Pack 08/09

**Project Title:**  
Edinburgh Tram Project

**Reporting Period:**  
Period 07 2008/09

**Transport Scotland Project Manager:**  
John Ramsay

**Progress Meeting Date:**

Report authorised by: **Susan Clark**

Signature

Date: 17/10/08

For and on behalf of **tie Limited**

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# 1 Executive Summary

## 1.1 Key issues

### HSQE

There were no RIDDOR incidents in the Period and the project AFR is continuing to reduce and is now 0.08, with 1,233,410 project hours worked to date. Continued focus is being applied to ensure a range of initiatives are implemented to maintain this trend.

The project recently received a commendation from the HSE on safety performance, although the project team will not become complacent.

### Programme

Overall progress remains behind the master programme. This is due primarily to:

- Design slippages between v26 / v31 at the time of Contract Close;
- Design slippage since novation of design to Infraco (now recorded in v35 of the design programme); and
- Slow mobilisation of Infraco.

A four-month detailed construction programme has been agreed with BSC which is now underway. Progress against this is being monitored weekly.

**tie** has agreed with BSC a process to agree a re-calibrated programme. This involves a process, starting on 20<sup>th</sup> October, with members of both organisations taking time out to review slippage, opportunities for improvement and work on agreeing a revised contract programme. These opportunities include use of additional resources, improved productivity, use of alternative technology for OLE installation and track-laying and better use of integrated traffic management (TM). The underlying contractual issues are complicated and their resolution will require a concentrated management effort. This is also a need for a reasonable degree of engagement from BSC. Taking this into account, it is anticipated that a revised Infraco contract programme and overall revision to the Tram Master Project Programme will be ready by the end of this calendar year in good time for the commencement of extensive works in January 2009. Infraco proposals for recovering the effects of their slow mobilisation will be included within the revised programme.

Whilst a straight import of the progressed programme into the master programme forecasts a potential revenue service slippage of up to five months, **tie** is confident that sufficient float and false logic constraints exist in the programme, along with methodology improvements, to maintain the open for revenue service date as July 2011, with a range of May 2011 to December 2011. The table in section 4.2 identifies the geographic areas of slippage and the types of action that can be taken to improve the programmed end date.

Additionally, the MUDFA Rev07 programme has now been agreed and this will be reflected in the overall update to the Tram Master Project Programme. The commercial impact of revised programmes will be addressed in line with the final agreement of those programmes.

The practical experience arising from the closure of the Mound junction on 1<sup>st</sup> October (see below) has pointed to the need for a revision to the means of developing and implementing TM procedures, especially those affecting Princes Street. Should different TM procedures be deemed necessary for Princes Street, compared to those embedded in the current programme, there will be consequences for the programme and a need to manage cost implications carefully. This dimension will be introduced to the Infraco and MUDFA negotiations sensitively over the next few weeks.

Progress – Design

- IFCs – Phase 1a 51 issued out of 78 , the slippage is being addressed as part of the re-assessment of programme;
- Prior Approvals are progressing well – there are some design issues to resolve but approvals are now over 80% complete and only five remain to be submitted. These are related to the resolution of long-running 3<sup>rd</sup> party issues (SRU, Forth Ports, RBS);
- Structures approvals are progressing well – five structures remain to be approved and timescales remain tight versus IFC;
- Roads and drainage approvals remain difficult although positive progress has been made to resolve CEC detailed comments. Three further sections are approved subject to the resolution of comments;
- Scottish Water are making slow progress with drainage outfall consents; and
- Roads Technical Approvals – the situation is improving but needs continuing effort to broker positive resolution of remaining issues by CEC and SDS.

Phase 1a only	Submitted to CEC		Granted by CEC		% complete
	v31	Actual	v31	Actual	
Prior approvals (53)	53	48	53	43	81%
Technical approvals (73)	72	65	65	53	73%
IFC (submitted to tie) (86)			78	51	58%

Slippage against the programme will be addressed as part of the re-calibration of the programme.

Progress – MUDFA

During the period the new TM diversions associated with the Mound closure were implemented. This included the conversion of the George St / Hanover St / Frederick St roundabouts to signalised junctions with controlled pedestrian crossings. The planning for the traffic management arrangements at the Mound had been executed in the same manner as for other major locations, involving the Traffic Management Review Panel (TMRP) which comprises CEC, TEL, Lothian buses and tie, in addition to other key stakeholders. This junction conversion did not operate on the day as expected leading to traffic congestion throughout the city centre in the morning peak. The decision was made during the day to switch off the signalled junctions and revert to buses westbound back along Princes St. Subsequently the traffic signals have been switched back on over the past two weeks with additional changes being made to TM to ensure they operate successfully. Useful lessons have been learned from this experience and these are being fed into the planning process for further major traffic diversions.

Carillion has appointed a new Project Director as a result of tie's management intervention to address Carillion's poor performance. Additionally, their Managing Director, Major Projects, has been supporting the project in Edinburgh for 3 – 4 days / week. Over the past period an improvement in management approach has been noticeable and improved outputs are expected as a direct result. This is due to improved management meetings and an improved technical query process.

During the period significant progress was made at the bottom end of Leith Walk to complete diversions ahead of the Infracore tramworks commencement.

Progress – Infraco (including Tramco)

Summary against the agreed Infraco contract milestones is shown in the table below (number of milestones).

	Period (short term plan)			Cumulative (short term plan)			Cumulative (contract)		
	Planned	Achieved	%	Planned	Achieved	%	Planned	Achieved	%
Prelims	3	3	100%	21	21	100%	21	21	100%
Construction	13	0	0%	19	0	0%	85	0	0%
<b>Total</b>	<b>22</b>	<b>3</b>	<b>14%</b>	<b>40</b>	<b>21</b>	<b>53%</b>	<b>106</b>	<b>21</b>	<b>20%</b>

The project continues to experience problems with slow mobilisation and, in particular, appointment of direct BSC resource and final appointment of the main package contractors. However, work has commenced on a number of worksites including the Haymarket and Edinburgh Park Viaducts and the A8 underpass. Significantly, the on-street works also commenced with roadworks on Leith Walk using sub-contractor resources.

Progress against the four-month programme agreed to get construction work started and build confidence is detailed in the table below.

Baselined at week 5 of 12	Cumulative		Delta
	Plan (hours)	Actual (hours)	
Infraco 4 month programme progress	9.7%	5.5%	-4.2%

The progress is reported against five weeks for a 16 week programme.

Key reasons for slippage include:

- The concrete pour at Edinburgh Park and Haymarket viaducts was delayed due to a lack of test and inspection plans. This is now ongoing;
- Haymarket viaduct re-design work at bankseat is now required. This work is in progress; and
- The Leith Walk works have been delayed due to utility works not being completed to programme. Works commenced on 8 October.

The Tram mock-up is on programme with a final sign off meeting taking place in October.

Progress – Other

Planning is underway for the Christmas embargo in the city centre and the implementation of the Princes St blockade in January 2009. Project Managers have been appointed by **tie** to ensure robust management of both Princes St and Haymarket worksites and TM.

Pollution prevention works at the Scotrail Haymarket depot are reported to be on the NR programme for completion in November 2008.

Construction works for the relocation of the Murrayfield training pitches are progressing with approximately 2-3 week's slippage reported due to bad weather. Weather permitting, the contractor aims to recover this over the next two periods.

Cost

The AFC for Phase 1a of the project remains unchanged from last period at £512m, including a risk allowance of £28.9m. Funding available remains at £545m.



Cumulative expenditure to date (end of P7 08/09) on Phase 1a is £183.0m. COWD year to date, at £52.9m, is £16.4m lower than the 'budget' for the year to date. This is primarily due to delayed closure of the Infraco contract suite and slow Infraco mobilisation.

The F/Y 08/09 outturn forecast remains at £138.8m, including a conservative risk allowance of £8.0m.

The current 12-week look ahead Infraco programme maintains a realistic forecast linked to the completion of key milestone activities to the end of December 2008. Further detailed analysis of the programme, including discussion with BSC is in progress to confirm the full year programme up to the end of March 2009. This detailed exercise is in addition to the full recalibration exercise described above and is targeted at sustaining a robust 12-week look ahead and clarity on financial year spend. The completion of this exercise, together with the finalising of the MUDFA Rev07 programme, will provide better confidence of the new full year forecast. The position stated in Period 6 remains, that the current year end figure of £138.8m should be treated as an interim position, with the understanding that it may be further reduced.

Based on the revised outturn above, the TS share of Phase 1a costs in FY08/09 at 91.7% (500/545) would be between £120m of Base Costs, excluding risk allowance, or £127m of the total costs, including Risk Allowance. This is being kept under review in the context of FY0809 funding allocated to the project by TS of £120m.

### Risk

The detailed development of the Infraco element of the Project Risk Register and associated treatment plans has progressed well in Period 7. The QRA was reviewed in the period and the total risk and contingency for the project remains at £28.9m

In Period 6 four broader risks and with potential to impact the Infraco works were identified as were treatment plans. These risks and their treatment plans were reviewed in Period 7 with the Infraco Director:

- Infraco unable to commence works or work is delayed or disrupted (includes mobilisation by Infraco, conflicts with utilities work completion and TM interface requirements) – this risk is still causing concern and the treatment plan will continue to be monitored by the Infraco Director;
- Changes to the final design during approvals / final design completion (the design and consents task force provides focus and control for identifying and addressing any such items) – a workshop is planned for Period 8 with the Engineering Services Director who will be responsible for all design issues;
- "Partnership" approach between **tie** and BSC is not effective with the potential to impact third party relationships (**tie** continue to lead and engage with the Consortium Directors and their parent companies in addition to effectively measuring and reviewing BSC engagement with third parties) – engagement with BSC has shown signs of improvement following intervention by the Project Director with senior members of the consortium; and
- Shortage of competent resources within BSC to effectively deliver the Infraco works (key personnel recruitment, mobilisation and performance is being scrutinised and formally tracked to ensure BSC are addressing any areas of weakness) – the appointment of sub-contractors has provided some assurances regarding this risk. However, progress will continue to be monitored by the Infraco management team.

A further risk was identified in Period 7:

- Potential changes to planned traffic management procedures, especially in relation to Princes Street, have impact on programme (the lessons from the Mound closure are being assessed and the implications of lessons learned will be fully taken into account in finalising the re-calibrated Infraco programme).

### Communications

The team has been working closely with stakeholders throughout the tram route regarding all upcoming tram works through notifications, face to face engagement and website updates. Particular focus has been on the utility diversions at The Mound and the city centre and the preparation for the tram works on Leith Walk.

The TRO design presentations have taken place in the West End, Leith Walk and city centre. These will be ongoing in the next period. .

The development of the new Edinburgh Trams website is ongoing and a soft launch will take place next period. The final launch will take place in December 2008.

A meeting was held on Thursday, 25 September to agree how best to deploy the remaining resources available from the Small Business Support Scheme. It was agreed that Open for Business would receive an extra £200,000 budget and money was allocated to fund the Leith Champion.

## 2 Progress

### 2.1 General / overall

- Construction progress is now gaining momentum, albeit mobilisation is still slow;
- Carillion performance is greatly improved at management level; and
- CAF are progressing well with Tram mock-up.

#### Land and Property

- NR – the Bridge Agreements drafting is expected to be concluded by the end of October and agreement of an Operating Agreement with NR is expected by mid-November;
- Forth Ports – SDS will deliver agreement plans by end of October and **tie** will finalise commercial arrangements with Forth Ports to conclude the agreement;
- Haymarket carpark compensation – **tie** have established a range in compensation estimates, within budget, for both First ScotRail and Network Rail but final settlement will depend on Transport Scotland's position on the extension of the First Scotrail Franchise Agreement; and
- Building fixings – deemed consent has been obtained from 306 owners as well as 63 consents with the owners' agreement. There are 23 fixings (23 owners) where matters remain unresolved and negotiations remain ongoing. However, there remains a possibility that all some or all 23 owners may have to be referred to the Sheriff for resolution. CEC are leading the legal process, supported by the project team.

#### Network Rail

- The scope and programme for the NR immunisation work is being developed with Infraco. The preferred approach is to avoid invasive changes to NR infrastructure and this will be verified by means of a detailed simulation study by Infraco;
- Infraco will be developing the full assurance case for NR acceptance. NR has now assigned their approvals specialist to assist Infraco with this, which is expected to be completed by August 2009;
- The lift and shift project scope is complete. Additional works identified are
  - Scottish Power cable – mitigation is to work around the route of the cable;
  - C&W cable at the Water of Leith bridge – SDS has designed a diversion and the works will be transferred into Infraco scope although the apparatus will be moved by C&W; and
  - Commissioning of a new point heater supply is being delayed due to long lead time for connection of power by Scottish Power. NR has stated that tram works in the NR area may proceed;
- The pollution prevention project at Haymarket depot remains on NR's programme for completion in November 2008. A local agreement with First ScotRail has been reached to accommodate any potential overlap between completion of the pollution prevention activities and commencement of the Infraco works.

#### General

- Construction works for the relocation of the Murrayfield training pitches are progressing with approximately 2-3 week's slippage reported due to bad weather. It is anticipated that this will be recovered in the next two periods, weather permitting.

### 2.2 Critical path

- The critical path continues to grow as the impact of delays on the contract programme logic impacts through the programme. This will not ease until an agreed re-calibrated programme is in place;
- SDS, as part of the Infraco consortium, continue to work closely with BSC to mitigate any remaining design issues although the following remain as design critical activities:
  - Section 2A and 5B track and roads – contract programme track gang logic forces on-street track installation into embargo periods, thus delaying the overall programme;



- W18 Murrayfield tramstop retaining wall – approvals process delayed, awaiting change control estimate from BSC;
- S26 South Gyle access bridge (IFC design issued but clash with sewer);
- Section 5C track and roads; and
- Depot roads;
- Revision 07 of the MUDFA Construction Programme was signed off at the end of Period 7. This programme revision takes account of the more detailed information available from IFC designs, the TM / enabling works requirements and the potential interface with Infraco, but highlights potential conflicts in the following areas:
  - London Road roundabout south on Leith Walk chainage 0-375m to allow Infraco road works to proceed;
  - Edinburgh Park tramstop to Bankhead tramstop to allow Bankhead Drive retaining wall and South Gyle access bridge to progress;
  - Gogarburn tramstop to Edinburgh Park tramstop to allow Gyle tramstop retaining wall and track installation to progress; and
  - Gogar depot 800mm water main delaying full access to earthworks

These are all being addressed by mitigation / treatment plans to minimise any impact;

- The Infraco construction programme continues to be reviewed. The current Infraco critical activities are as follows:
  - Section 1a roads / track;
  - Section 1b roads / track;
  - Section 2 track;
  - S20 Russell Road bridge;
  - W18 Murrayfield tramstop retaining wall;
  - S21B Murrayfield retaining wall;
  - S23 Carricknowe bridge;
  - Section 5B track and roads;
  - S26 South Gyle access bridge (IFC design issued but clash with sewer);
  - W11 Bankhead drive retaining wall;
  - Section 5C track and roads;
  - W16 Gyle tramstop retaining wall;
  - A8 underpass;
  - Depot earthworks; and
  - S29 Gogarburn under-bridge.

### 2.3 Procurement consultant

- This phase is now complete.

### 2.4 Design

Phase 1a only	Submitted to CEC		Granted by CEC		% complete
	v31	Actual	v31	Actual	
Prior approvals (53)	53	48	53	43	81%
Technical approvals (73)	72	65	65	53	73%
IFC (submitted to tie) (86)			78	51	58%

Slippage is reflected in the live programme dates and will be addressed as part of the programme re-calibration.

### 2.5 Financial / funding / procurement strategy

- This phase is now complete.

## 2.6 *Parliamentary process / approvals*

- This phase is now complete.

## 2.7 *Procurement construction works*

- This phase is now complete.

## 2.8 *Construction works*

### MUDFA

- Constitution Street – Works are largely complete in Sections D2 and E2 on the northbound side of Constitution Street between Queen Charlotte Street and Bernard Street and in Section F2 on the northbound side of Constitution Street between Baltic Street and Tower Street. Traffic management arrangements at Baltic Street / Constitution Street junction were removed on Sunday 12<sup>th</sup> October in line with Forth Ports embargo;
- Leith Walk – Clearance works in area chainage 100-350 are largely complete. The majority of outstanding work in this area is at the Manderston Street junction. The programme of clearance works is progressing south ahead of Infraco work schedule;
- London Rd – TM switch from Phase 1 to Phase 3 is planned to be complete by Monday 20<sup>th</sup> October – works in advance of this include overlay of the London Road roundabout, traffic signal modifications at the Annandale Street junction and switching of physical TM deflection;
- St. Andrew Square – North St. Andrew Street and South St. Andrew Street are closed for MUDFA works. Side entry manhole work at the north east and south east of St. Andrew Square commenced. BT crossing of Princes Street at its junction with South St. Andrew Street completed;
- The Mound – Commencement of works on The Mound with a series of trial holes for route proving taking place;
- Section 1D Haymarket – Twin water diversion has been laid and testing commenced. The BT manhole adjacent to the retaining wall is 90% complete. The TM was approved to remove the taxi rank and the enabling works have been completed and will allow the diversions to progress in this area;
- Section 2A Haymarket Yards – No progress has been made in the period due to re-assessment of the gas and water main diversions with SDS, tie and CUS;
- Section 5B Carricknowe – Trial holes on the existing HV and pilot cables have been completed and revised diversion has been agreed in principle with Scottish Power Systems. Jointing date has been agreed with SPPS for the first week in November 2008;
- Section 5B Bankhead Drive – The civil works for the utility diversions is now complete and the testing of ducts is to commence prior to cabling works is underway;
- Section 6 Gogar depot 800mm water main – Due to further issues with delivery of final 800mm valves (the two outstanding 800mm valves were delivered on 4 October 2008) the completion of phase 1 will now be 20 October 2008. This will allow unrestricted access to Infraco. Phase 2 will be completed by 31 October 2008; and
- A8 1,500 sewer diversion – CUS completion of the shaft ready for pipe jacking across the A8 was delayed due to problems with slow progress through difficult splintered boulder clay and breakdown of shaft craneage. Pipejack to progress 20 October 2008. Current programme shows completion 6 February 2009. This is due to slow progress with shaft works. Currently there are no interface issue with Infraco which requires completion by 31 March 2009.

### Infraco

As stated above, compared to the contract programme, mobilisation is slower than expected. Work has now progressed against the four-month detailed construction programme. Activities started, in progress and completed include:

- TM commenced in Leith Walk to facilitate the road widening construction;
- S19 Haymarket viaduct piers 2 and 3 poured;

- Demolitions in progress at Roseburn Street / Russell Road;
- W8 Baird Drive site clearance;
- S27 Edinburgh Park Station bridge;
- A8 underpass works Phase 1; and
- S20 Russell Road bridge, S21E Water of Leith bridge and S23 Carricknowe bridge works are all at their early stage of mobilisation and clearance works. Main construction works are expected to start during Period 8 following pre construction activities approval (including WPP and Form C).

#### Advanced works

- Preparation for the removal of remaining 50,000m<sup>3</sup> of earthworks and other major works at the depot site are now underway; and
- Invasive species final treatment for 2008 during November.

### **2.9 Testing and commissioning**

- Inspection and test plans are being produced as part of the construction activities.

### **2.10 Hand over and service operations**

- This phase has not yet commenced

### **2.11 Network output programme interface (with Transport Scotland)**

- N/A

### **2.12 Interface with other projects**

A matrix of the risks associated with the interface with other external projects has been prepared and has identified the following:

- CEC St. Andrew Square Streetscape works – integrated with MUDFA and enabling works;
- Invasive species eradication programme – final visit of the year to take place at the end of November;
- Airdrie to Bathgate – Integrated with Infraco for disruptive possessions;
- NR pollution prevention works – Interfaces with Infraco works at Murrayfield and particularly S21A Roseburn St viaduct;
- St James centre development – to be reviewed with CEC;
- Waverly re-roofing programme – to be reviewed with TS;
- Waverley steps programme – has been reviewed with Waverley Steps project team. No issues;
- Gogar surface station programme – to be reviewed with TS;
- National Portrait Gallery refurbishment;
- Murrayfield pitches relocation –The works are progressing but are 2-3 weeks behind programme;
- Haymarket interchange Project (HISAM);
- Haymarket Station refurbishment;
- RBS tramstop at Gogarburn;
- Tiger Development – new hotel at Haymarket junction; and
- St. Andrew Square development – Proposal for demolition of existing buildings bordering South Side St. Andrew Square, South St David Street and Meuse Lane.

This has been sent to TS for their input for projects they are sponsoring and will continue to be reviewed by **tie** to identify any potential impacts on the Tram programme as early as possible in order to manage them. A review of the TS projects was arranged with TS for Period 7 but later postponed and re-arranged for early in Period 8.



### 3 Headline cost report

#### 3.1 Current financial year

- Year to date COWD is £16.4m lower than 'budget' (Period 6 £11.5m) due to:
  - Delayed award of Infraco and Tramco and slow mobilisation - £13.3m (Period 5 £8.3m) – note that, although the contracts were awarded four weeks later than was anticipated, at the time the 'budget' profile was established, the key milestones in the contractual programme including the commencement of revenue service in July 2011 were unaffected; and
  - £2.5m of profiled Risk to P7 which has not been utilised to this point;
- Effective mitigation of programme slippages are being developed and agreed with both the MUDFA and Infraco contractors with a view to ensuring there are no conflicts between the utilities and infrastructure programmes and the scheduled opening date of the tram in July 2011 is not delayed;
- The full year FY08/09 expenditure remains at £138.8m, as profiled in the table below. The current 12-week look ahead of the Infraco programme has maintained a realistic forecast linked to the completion of key milestone activities to the end of December 2008. Further detailed analysis of the programme, including discussion with the Infraco contractor is in progress to confirm the full year programme up to the end of March 2009. The completion of this exercise, together with the finalising of the MUDFA Rev07 programme, will provide better confidence of the new full year forecast. The previous period's stated position remains, that the current year end figure of £138.8m should be treated as an interim position, with the understanding that it may be further reduced;
- In the event that expenditure forecasts point to a drawdown on main programme spend which would result in less than £120m being called from Transport Scotland, acceleration of parallel works will be sought to absorb the shortfall; and
- Payment applications submitted by CEC to TS have been adjusted to reflect the cumulative cash requirements of the 12-week look ahead and the full value of GVD land, as agreed with TS.

#### Reforecast profile for FY08/09

£m	YTD	P8-9	P10-13	Total FY08/09
Infrastructure and vehicles	15.5	11.7	49.8	77.0
Utilities diversions	24.1	5.5	1.9	31.5
Design	3.5	0.4	0.4	4.3
Land and compensation	1.1	0.7	0.8	2.7
Resources and insurance	8.7	2.2	4.5	15.4
<b>Base costs</b>	<b>52.9</b>	<b>20.5</b>	<b>57.4</b>	<b>130.8</b>
Risk allowance	0.0	0.0	8.0	8.0
<b>Total Phase 1a</b>	<b>52.9</b>	<b>20.5</b>	<b>65.4</b>	<b>138.8</b>
Phase 1b	0.0	0.0	3.7	3.7

- The Phase1b costs are provided for information only and reflect the commencement of Phase 1b utility diversions in late 2008 if there is a resolution to the additional funding requirements for Phase 1b to the satisfaction of CEC and Transport Scotland at that time;
- The proportion of the overall risk allowance allocated to the year, proportionate to the level of forecast base costs, is £8.0m, which is considered conservative;



- Based on the outturn above, the TS share of Phase 1a costs in FY08/09 at 91.7% (500/545) would be between £120m of Base Costs excluding risk allowance or £127m of the total costs, including Risk Allowance. This is being kept under review in the context of FY0809 funding allocated to the project by TS of £120m; and
- As previously reported and agreed with CEC and TS, initial milestones under the Infraco and Tramco contracts, in respect of advance material purchases, will be classified as prepayments. The aggregate amount of these payments for advance material purchases is £24.2m. These prepayments will be reclassified as expenditure against funding in the periods in future years when the related materials are delivered to site and incorporated in the works.

### 3.2 Next financial year

- The forecast COWD for FY09/10 is shown in the table at 3.3 below. The sensitivities of this amount are the same as for FY08/09 above; changes to the programme, significant variations to the works and the extent to which there will be call on the risk allowance profiled to that year of £13.0m. Note that all utility diversions costs are currently anticipated to be spent by the end of FY08/09.

### 3.3 Total project anticipated forecast cost

#### Phase 1a AFC and profiling

£m	Cum FY0708	FY0809	FY0910	Balance	AFC
Infrastructure and vehicles	30.7	77.0	128.0	69.3	304.9
Utilities diversions	18.4	31.5	0.0	0.0	49.9
Design	21.4	4.3	0.6	0.5	26.8
Land and compensation	16.8	2.7	0.3	0.8	20.6
Resources and insurance	42.7	15.4	8.0	14.7	80.9
<b>Base costs</b>	<b>130.0</b>	<b>130.8</b>	<b>137.0</b>	<b>85.2</b>	<b>483.1</b>
Risk Allowance	0.0	8.0	13.0	8.0	28.9
<b>Total Phase 1a</b>	<b>130.0</b>	<b>138.8</b>	<b>150.0</b>	<b>93.2</b>	<b>512.0</b>
Phase 1b	3.0	3.7	29.3	51.3	87.3

- As previously agreed, cumulative costs incurred to the end of FY07/08 also include £3m incurred on Phase 1b design, meaning that total costs to the end of FY07/08 were £133m; and
- The estimate for Phase 1b is based upon unit costs in the Infraco and Tramco contracts and is subject to finalisation in accordance with a value engineered and approved / consented design and programme. The finalised price will be valid if an option under the Infraco contract is exercised in sufficient time to allow construction of Phase 1b to commence in July 2009. Infraco have commenced formally estimating this finalised price to inform the current update of the Phase 1b Business case and capital expenditure.

### 3.4 Change control

- The current change control position is summarised in the table below:

<b>BASE ESTIMATE</b>	498.10	87.30	585.40
<b>APPROVED CHANGES - to Financial Close</b>	13.91	0.00	13.91
<b>CONTROL BUDGET - Baseline</b>	<b>512.02</b>	<b>87.30</b>	<b>599.32</b>

<b>APPROVED CHANGES - post Financial Close</b>	0.00	0.00	0.00
<b>REVISED CONTROL BUDGET</b>	<b>512.02</b>	<b>87.30</b>	<b>599.32</b>

<b>ANTICIPATED CHANGES</b>	0.00	0.00	0.00
<b>CURRENT AFC</b>	<b>512.02</b>	<b>87.30</b>	<b>599.32</b>

<b>PREVIOUS AFC</b>	<b>512.02</b>	<b>87.30</b>	<b>599.32</b>
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- Base estimate – The position at Final Business Case (Oct 2007);
- Approved changes to Financial Close – The financial impact of the project control budget having been reset to reflect final Infraco and Tramco Contract Award levels and a consequential reappraisal of the risk allowance. This was approved at the Tram Project Board on 4<sup>th</sup> June;
- Control budget baseline (New Project Control Budget) – The baseline within which all future project change control will be reported against;
- Approved changes post Financial Close – Tram Project Board approved changes from this point on. There are none to report with financial effect on the Control Budget at this point. The funding for the utility (sewer) diversionary work at Gogar and the Infraco main site office rental costs have been met from a drawdown of funds from the project risk allowance; and
- Anticipated changes – Future potential changes that are work in progress prior to formal approval. There are none to report at this point. Risks to this position are described in Section 5 below.

## 4 Time schedule report

### 4.1 Report against key milestones

The agreed baseline programme reference for this project is that at Financial Close leading to revenue service in July 2011.

Milestones	Baseline programme date	Actual / current forecast date
Approval of DFBC by CEC	21 Dec 06A	21 Dec 06A
TRO process commences		23 Sept 08
MUDFA – commencement of utility diversions	02 Apr 07A	02 Apr 07A
Approval of FBC by TS – approval and funding for Infraco / Tramco	09 Jan 08	Dec 07A
Tramco / Infraco – award following CEC / TS approval and cooling off period and SDS novation.	28 Jan 08	14 May 08A
Construction commences	14-Apr-08	14-May-08A
Haymarket viaduct commences	08-May-08	01-Sep-08A
Edinburgh Park viaduct commences	06-Aug-08	01-Sep-08A
A8 underpass commences	08-Aug-08	28-Aug-08A
Carricknowe Bridge commences	21-Aug-08	19-Aug-08A
All demolition work complete	22-Aug-08	25-Nov-08
Tram mock-up delivered	Oct 2008	Oct 2008
First track installation commences – on street	03-Nov-08	03-Nov-08
MUDFA works complete	Nov 2008	Mar 2009
Haymarket viaduct complete	08-Dec-08	28-Apr-09
Roseburn viaduct commences	20-Jan-09	28-May-09
Design assurance complete	20-Jan-09	15-May-09
All Issue for Construction (IFC) drawings delivered	21-Jan-09	21-Jan-09
Princes Street closed	03-Feb-09	03-Feb-09
Roseburn viaduct complete	20-Apr-10	02-Jul-10
Carricknowe bridge complete	11-May-09	29-Jul-09
All consents and approvals granted	18-May-09	18-May-09
Edinburgh Park viaduct complete	24-May-09	24-May-09
A8 underpass complete	14-Jul-09	03-Sep-09
Princes Street re-opened	01-Aug-09	01-Aug-09
NR immunisation complete	Nov 2009	Nov 2009
TRO process complete	01-Dec-09	01-Dec-09
1 <sup>st</sup> OHL installed	11-Dec-09	14-Jan-10
Commission Section 2 (Haymarket to Roseburn junction)	11-Jan-10	26-May-10
Commission Section 6 (depot)	25-Mar-10	20-Jul-10
1 <sup>st</sup> Tram delivered	09-Apr-10	09-Apr-10
Test track complete	23-Apr-10	20-Sep-10
1 <sup>st</sup> section (other than depot) complete ready for energisation	25-June-10	26-May-10
Commission Section 7 (Gogar to Edinburgh Airport)	25-June-10	16-Nov-10
Driver recruitment commences	July 2010	Feb 2011
Commission Section 5 (Roseburn junction to Gogar)	09-Nov-10	09-Jun-11
Driver training commences	Nov 2010	Jul 2011
System testing complete off street	09-Dec-10	09-Jun-11
Final tram delivered	17-Jan-11	17-Jan-11
Construction Line 1a complete	17-Jan-11	27-Jun-11
System testing complete on street	16-Feb-11	12-Sep-11
Commission Section 1 (Newhaven to Haymarket)	11-Mar-11	27-Jun-11
Letter of “no objection” from Independent Competent Person to commence tram running	17-Apr-11	12-Sep-11
Shadow running starts	18-Apr-11	13-Sep-11

Shadow running complete	July 2011	Dec 2011
Letter of "no objection" from Independent Competent Person to commence revenue service	July 2011	Dec 2011
Open for revenue service	July 2011	Dec 2011

**Guidance for Completion:**

Legend for colouring of Actual / forecast date text

Green: Actual / forecast date is ahead or in line with baseline  
Yellow: Slight slippage – readily recoverable with action.  
Pink: Significant slippage but expect recovery can be achieved  
Red: Notable / significant slippage – difficult to recover, even with action.

**4.2 Key issues affecting schedule**

A number of specific areas are being examined to support July 2011 Revenue Service in line with the contract programme. Each area is being managed with full visibility and ownership by tie's project management team. The table below indicates the areas of slippage and opportunities for recovery which will form the basis of discussions with BSC for a revised programme:

Section	Contract Programme Finish	Live Programme Finish	Opportunities
Section A – Depot commissioned and energised	25 March 2010	20 July 2010	BSC have commenced.
Section B – Test track	23 April 2010	20 Sep 2010	Test track can be completed with OLE whilst tramstop furniture is completed.
Section C – construction works complete	17 Jan 2011	15 June 2011	Track installation logic can be reversed to allow earlier commencement, additional track resources, parallel installation of track and OLE and improved productivity.
Section D – open for revenue service	16 July 2011	16 Dec 2011	As above

A wide range of detailed specific programme issues is being examined to achieve the recovery required.

**4.3 12-week look-ahead**

	MUDFA	INFRACO
October-08	Baltic St	Commence Leith Walk roads chainage 100-350 (Cassel bank Street up the Walk)
	Forth Ports	S19 Haymarket viaduct – foundations and sub-structure – abutment and temporary support at gridline 1 currently being re-designed.
	Continue Leith Walk south	2A Haymarket to Roseburn junction track excavation, drainage and ducts (2 manholes discovered during site clearance that may delay)
	Continue Leith Walk close-out	W3 / W4 Russell Road retaining walls
	St Andrews Square	W18 Murrayfield tramstop retaining wall site clearance



	York Place / Picardy Place	Demolition of Roseburn Street buildings
	The Mound	S21C Murrayfield underpass – demolition – <b>delayed due to additional site investigation and G.I.</b>
	Haymarket	Continue Murrayfield pitches – Souters
	Continue Edinburgh tramstop to Gogarburn roundabout	S23 Carricknowe viaduct – South abutment – <b>further G.I. required at both north and south abutments.</b>
	A8 sewer	5b Bankhead to Edinburgh Park Station track excavation
	Airport	S26 South Gyle access bridge – substructure – <b>delayed awaiting diversion of existing sewer</b>
		S27 Edinburgh Park viaduct – approach ramps and piers – <b>additional G.I. required and re-design. Only piers 5-6-7 progressing</b>
		A8 underpass – Phase 1 (North side) – Piling
		Depot – earthworks
		Depot – building
		S30 Gogarburn Culvert No.1
		S29 Gogarbridge surcharge and piling for abutments
<b>November-08</b>	Forth Ports	Leith Walk Roads chainage 100-350 (Cassel bank Street up the Walk)
	Tower Street and Constitution Street	Leith Walk Roads chainage 350-600
	Complete Leith Walk south	Leith Walk Roads chainage 0-375
	Complete London Rd to Picardy Place	1D Roads – Preparation for Lothian Rd junction (Jan09) – bagging bus-stops etc.
	Continue Picardy Place to York Place	1D Roads – Preparation for Haymarket junction (Jan09) – bagging bus-stops etc
	Continue St Andrew Square	S19 Haymarket viaduct – foundations and sub-structure – <b>abutment and temporary support at gridline 1 currently being re-designed.</b>
	Continue The Mound	2A Haymarket to Roseburn Junction track excavation, drainage and ducts <b>(two manholes discovered during site clearance that may delay)</b>
	Continue Haymarket	S20 Russell Road Bridge – piling and abutments – <b>delayed as additional G.I. generated further re-design of temporary works</b>
	Continue A8 sewer	W3 / W4 Russell Road retaining walls
	Continue airport	W18 Murrayfield tramstop retaining wall foundations – <b>temporary works design on hold as tied to option “A” of S21A Murrayfield viaduct</b>

	Continue Leith Walk close-out	S21C Murrayfield underpass – demolition and earthworks – <b>delayed due to additional site investigation and G.I.</b>
		Continue Murrayfield pitches – Souters
		S23 Carricknowe Viaduct – south and north abutments – <b>further G.I. required at both north and south abutments.</b>
		5b Balgreen to Saughton track excavation
		5b Saughton to Bankhead Track excavation (Busway) – <b>expected to be delayed to Jan.09</b>
		5b Bankhead to Edinburgh Park Station Track Foundations and drainage
		S26 South Gyle access bridge – substructure – <b>delayed awaiting diversion of existing sewer</b>
		S27 Edinburgh Park viaduct – Approach ramps and piers. <b>Only piers 5-6-7 progressing</b>
		5c Edinburgh Park to Gyle track excavation and foundations
		A8 underpass – Phase 1 (north side) – piling and entrance portal
		Depot – earthworks
		Depot – building
		Depot – sub-station
		S30 Gogarburn Culvert No.1
		S29 Gogarbridge access roads and abutments
		S31 Gogarburn Culvert No.2
		S34 Gogarburn Culvert No.3
<b>December-08</b>	Forth Ports	Leith Walk Roads chainage 350-600
	Continue Leith Walk close-out	1D roads – Preparation for Lothian Rd junction (Jan09) – bagging bus-stops etc.
	Continue Haymarket	1D Roads – Preparation for Haymarket junction (Jan09) – bagging bus-stops etc
	Continue A8 Sewer	S19 Haymarket Viaduct – foundations and sub-structure – <b>abutment and temporary support at gridline 1 currently being re-designed.</b>
	Continue Airport	2A Haymarket to Roseburn junction track excavation, drainage and ducts <b>(two manholes discovered during site clearance that may delay)</b>

		S20 Russell Road bridge – piling and abutments – <b>delayed as additional G.I. generated further re-design of temporary works</b>
		W3 / W4 Russell Road retaining walls
		W18 Murrayfield tramstop retaining wall reinforced earth wall – <b>temporary works design on hold as tied to option “A” of S21A Murrayfield viaduct</b>
		S21C Murrayfield underpass – demolition and earthworks – <b>delayed due to additional site investigation and G.I.</b>
		S23 Carricknowe Viaduct – south and north abutments – <b>further G.I. required at both north and south abutments.</b>
		5b Balgreen to Saughton track excavation
		5b Saughton to Bankhead track foundations, drainage and ducts (busway) – <b>expected to be delayed to Jan.09</b>
		5b Bankhead to Edinburgh Park Station track foundations and drainage
		S26 South Gyle access bridge – substructure – <b>delayed awaiting diversion of existing sewer</b>
		S27 Edinburgh Park viaduct – Approach ramps and piers. <b>Only piers 5-6-7 progressing</b>
		5c Edinburgh Park to Gyle track excavation and foundations
		A8 underpass – Phase 1 (north side) – Piling and entrance portal
		Depot – earthworks
		Depot – building
		Depot – sub-station
		Depot – access roads
		S30 Gogarburn Culvert No.1
		S29 Gogarbridge access roads and abutments
		S31 Gogarburn Culvert No.2
		S34 Gogarburn Culvert No.3

## 5 Risk and opportunity

### 5.1 Summary

#### Infraco Risk Review

The development of the Infraco element of the Project Risk Register is progressing well and continued in Period 7. In Period 6 four broader risks and with potential to impact the Infraco works were identified as were treatment plans. These risks and their treatment plans were reviewed in Period 7 with the Infraco Director:

- Infraco unable to commence works or work is delayed or disrupted (includes mobilisation by Infraco, conflicts with utilities work completion and TM interface requirements) – this risk is still causing concern and the treatment plan will continue to be monitored by the Infraco Director;
- Changes to the final design during approvals / final design completion (the design and consents task force provides focus and control for identifying and addressing any such items) – a workshop is planned for Period 8 with the Engineering Services Director who will be responsible for all design issues;
- “Partnership” approach between **tie** and BSC is not effective with the potential to impact third party relationships (**tie** continue to lead and engage with the Consortium Directors and their parent companies in addition to effectively measuring and reviewing BSC engagement with third parties) – engagement with BSC has shown signs of improvement following intervention by the Project Director with senior members of the consortium; and
- Shortage of competent resources within BSC to effectively deliver the Infraco works (key personnel recruitment, mobilisation and performance is being scrutinised and formally tracked to ensure BSC are addressing any areas of weakness) – the appointment of sub-contractors has provided some assurances regarding this risk. However, progress will continue to be monitored by the Infraco management team.

During Period 7 a further risk was identified:

- Potential changes to planned traffic management procedures, especially in relation to Princes Street, have impact on programme (the lessons from the Mound closure are being assessed and the implications of lessons learned will be fully taken into account in finalising the re-calibrated Infraco programme).

Additionally, in order to maintain focus on the Infraco Risk Register and, in particular, monitor treatment plans, risk will be a bi-weekly item at the weekly Infraco Project Manager Review meeting.

#### MUDFA

The MUDFA Risk Register was reviewed with the MUDFA Construction Director. The Construction Director has identified a potential drawdown on Risk Id 139 to deal with the diversion of a 800mm gas main at Ingliston. This is being reviewed with SGN to minimise any diversion requirement.

#### Risks closed

There were no risks closed in the period.

#### QRA

There was no change to the QRA in period 7 and the total risk and contingency for the project remains at £28.9M.

### 5.2 Review project risk register

#### Top risks

The top risks in the Primary Risk Register are:

- **Risk Id 918:** CEC are unable to honour their funding commitments:



- Two of the mitigating actions are complete and one will be ongoing as the project progresses. Effective action is in place here from CEC and good visibility is provided to the project team;
- **Risk Id 139:** *Uncertainty of utilities location and consequent required diversion work / unforeseen utility services within LoD, and Risk Id 164: Unknown or abandoned assets or unforeseen / contaminated ground conditions affect scope of MUDFA work:*
  - These risks pertain to the MUDFA contract and are being mitigated by trial excavations in order to confirm the location of utilities. This information is then passed to the designer. This process will continue until the design is complete;
- **Risk Id 31:** *Bankhead Drive retaining wall: BT and Easynet diversion work not due to be completed till the end of January 2009. However, work on the structure was due to start mid-June 2008, and Risk Id 30: South Gyle access bridge: BT diversion work not due to be completed till the end of September 2008. However, work on the bridge was due to start mid-June 2008:*
  - Both risks 30 and 31 are caused by a delay in the MUDFA diversion works. The Infraco and MUDFA project managers have met on site to try and find a resolution to this issue although additional resources will be required to complete the BT diversion works to mitigate impact on the Infraco programme.
- **Risk Id 1033:** *Failure of Infraco to mobilise in time to commence work in line with programme.*
  - This risk was added in Period 3 to reflect tie's concern at Infraco's slow mobilisation. Mitigation includes the programme integration review currently underway.

### 5.3 Risk action plan for next period

Risk mitigations are identified in the Primary Risk Register and treatment plans are under further development.

### 5.4 Review project opportunity register

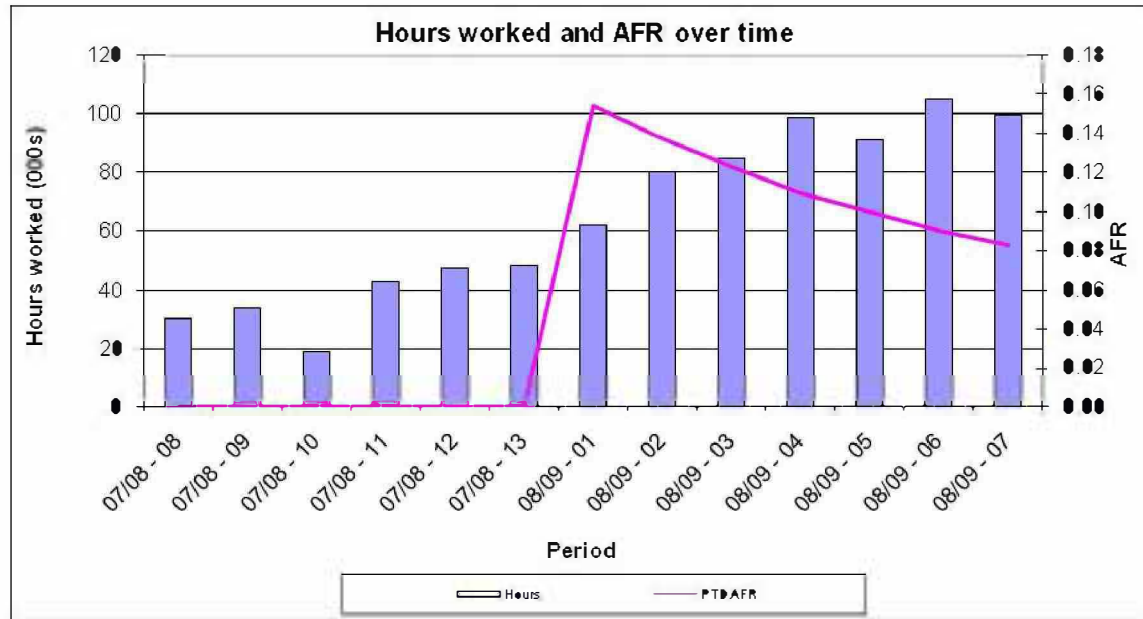
On Contract Award, a number of value engineering initiatives were instructed and will be progressed in line with the contract. Meetings are ongoing with BSC to monitor achievement.

## 6 Health, safety, quality and environment

### 6.1 H and S accidents and incidents, near misses, other or initiatives

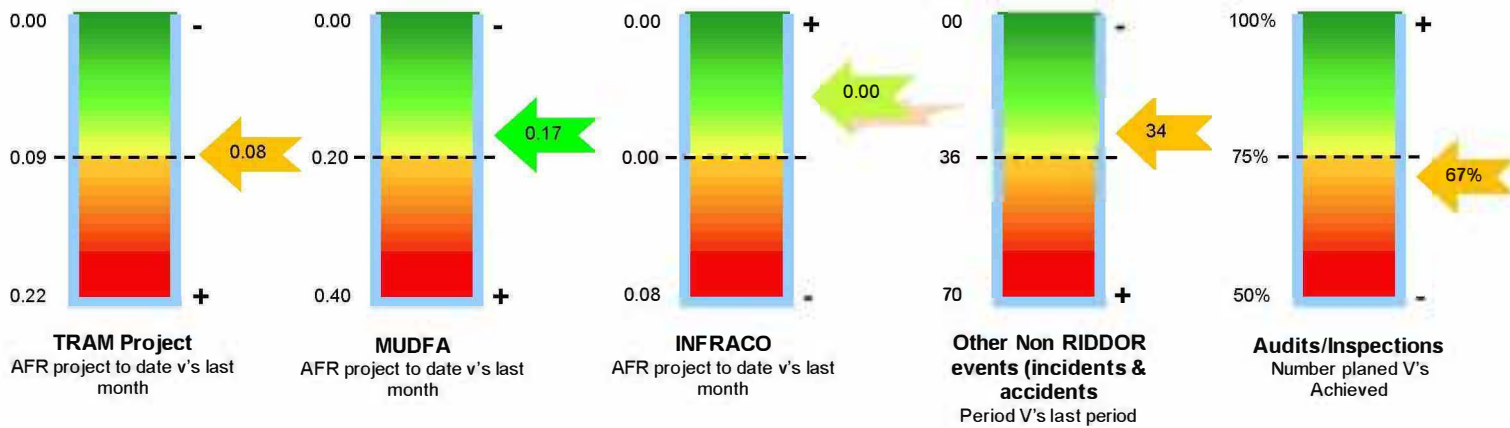
- There were no RIDDOR incidents in Period 7;
- The AFR for the project continues to reduce and is now 0.08 (one reportable accident for 1,233,410hrs worked project to date).

The trend in AFR and hours worked is shown in the table below.

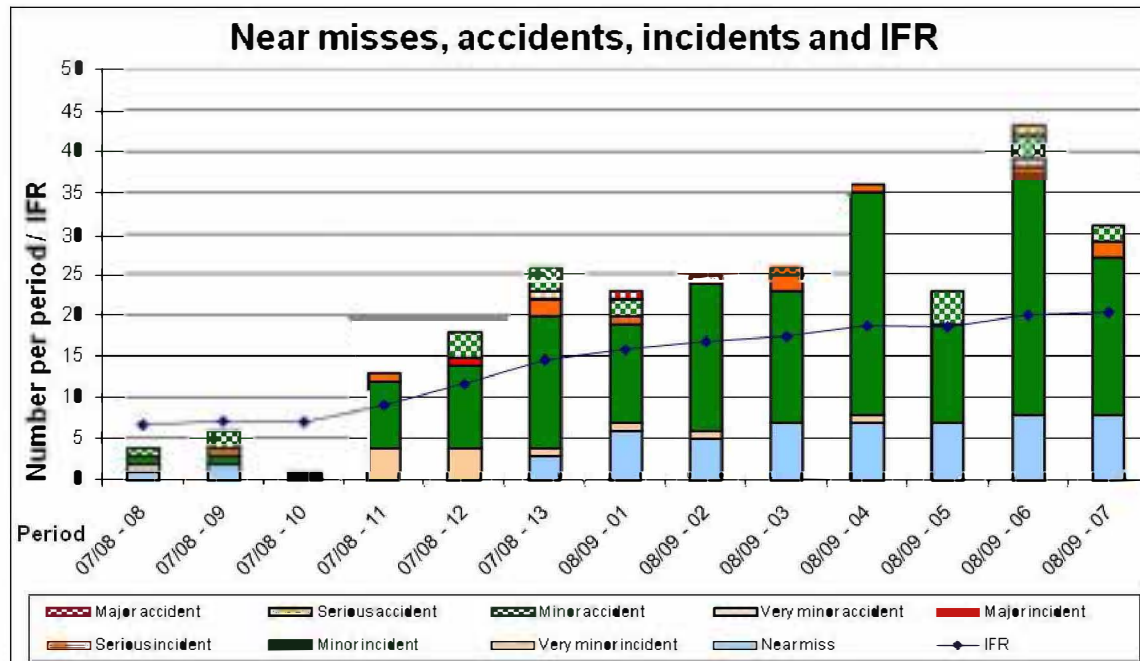


- There were 2 minor accidents and 23 incidents (21 minor, 2 serious);
- 15 of the 23 incidents were service strikes; and
- 7 of the 23 incidents involved to some degree a member of the public, i.e. RTA, confrontation, damage to vehicle.

Baseline (last month's performance or otherwise stated)



The trend in near misses, accidents, incidents and IFR is shown in the table below.



- 318 accidents / incidents have been recorded on the project to date. Of the 318, 52 remain open;
- An exercise is underway to review all open accident / incident investigation reports and to trend accidents to date. This information will be available by the end of Period 8. Incidents involving interaction with members of the public will also be trended; and
- Inspections carried out by **tie** project managers are being analysed and information will be presented from Period 9.

## 6.2 Environment

- There were no environmental incidents reported in the period

## 6.3 Quality

- Formal Audits:
  - Infraco – one audit planned on design process but did not take place;
  - **tie** – one audit planned on project management plan but did not take place; and
  - Audits have been temporarily suspended pending reallocation and review of schedule due to a department restructure;
- Four NCRs have been raised this period, two have been closed out; and
- Out of 57 NCRs raised to date, 12 remain open.

## **7 Stakeholder and communication**

### **7.1 Stakeholder / communication strategy / plan**

The structure and responsibilities of the Communications and Stakeholder team are under review and changes will be made in the next period. The Communications and Stakeholder Strategy will be refreshed once this has happened.

### **7.2 Stakeholder / communication update**

Throughout the last period, the team has engaged, informed and consulted through the following methodologies:

As part of the media strategy releases were distributed for The Mound utility works, the closure of the Small Business Support Scheme and Leith Walk tram works. Coverage included the TRO exhibitions, Hearts Memorial and the archaeological dig on Constitution Street.

The team has been working closely with stakeholders throughout the route regarding all upcoming tram works through notifications, face to face engagement and website updates. Key areas have included Leith Walk, regarding the utilities programme and the preparation for the tram works between Kirk Street and Stead's Place, and the traffic diversions relating to The Mound works.

Marketing materials produced this period have included the autumn 2008 fact sheet and Tram Update 9 - The Mound utility works. New site signage has been produced for both Infracore and MUDFA, featuring the 0800 helpline number and email address.

The TRO design presentations have taken place in the West End, Leith Walk and city centre. These will be ongoing in the next period.

A meeting was held on Thursday, 25 September to agree how best to deploy the remaining resources available from the Small Business Support Scheme. It was agreed that Open for Business would receive an extra £200,000 budget and money was allocated to fund the Leith Champion.

### **7.3 Communication and stakeholder action plan for next period**

The TRO design presentations will continue next period in the city centre and at Newhaven.

Media activity next period will be focused on TM at The Mound, infrastructure and utilities work on Leith Walk, Constitution Street and Haymarket Phase 2. Notifications and stakeholder engagement will also take place to support these works.

Updates will be produced to support all key work areas, particularly for the infrastructure works on Leith Walk and Phase 2 of the utility works at Haymarket.

The development of the new Edinburgh Trams website is ongoing and a soft launch will take place next period. The final launch will take place in December 2008.



## Appendix 'A' Detailed cost report

# FY 08/09: Demand on TS 120.000

**1: HEADLINE FINANCIAL COMMENTARY**

**PERIOD RESULTS:**  
Period is for Phase 1a only

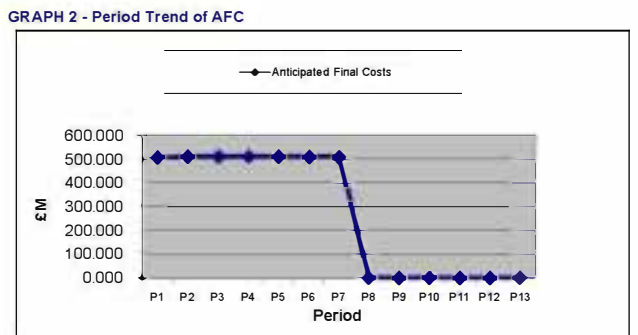
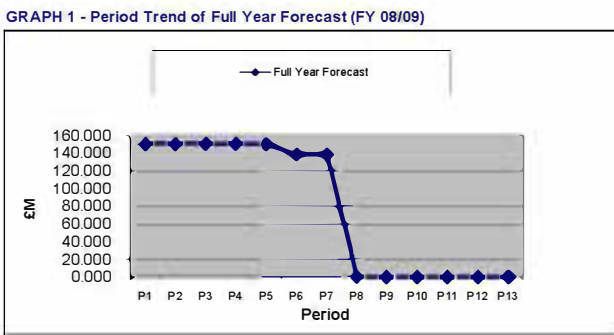
**YTD RESULTS:**  
YTD is for Phase 1a only

**FULL YEAR FORECAST:**  
FY 0809 is for Phase 1a only

**AFC:**  
AFC is for Phase 1a only

**2: SUMMARY**

	FY 08/09			FY 08/09			FY 08/09			COWD To Date	Costs To Go Forecast	Total AFC Forecast
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance			
Total Project COWD	5.531	10.395	-4.864	52.913	69.321	-16.409	138.792	150.851	-12.059	182.953	329.064	512.017
Other Funding	0.457	0.858	-0.402	3.800	5.155	-1.355	18.792	30.852	-12.059	15.106	24.409	39.515
Demand on TS	<b>5.074</b>	<b>9.537</b>	<b>-4.463</b>	<b>49.112</b>	<b>64.166</b>	<b>-15.054</b>	<b>120.000</b>	<b>120.000</b>	<b>0.000</b>	<b>167.847</b>	<b>304.655</b>	<b>472.502</b>



**3: RISK AND OPPORTUNITIES TO:**

**FULL YEAR FORECAST:**

**AFC:**

**4: ACCRUALS COMMENTARY**

**5: TOTAL PROJECT ELEMENT SPEND BREAKDOWN (TS & 3rd Party Costs)**

*PLANNED/EMERGING/FORECAST*  
Allocated in accordance with standard WBS. Values relevant to business case or other agreed baseline date to be known as original estimate

Relevant Baseline date: **FBC 20/12/2007**

	Estimated Cost			Actual Cost/Forecast			Variance
	Original Estimate	Escalated Original Estimate	Escalated Latest Estimate	Cost Of Work Done (COWD)	Forecast to Completion	Anticipated Final Costs (AFC)	
General Overall	28.233	28.233	28.842	22.515	6.327	28.842	0.000
Procurement Consultant	68.126	68.126	69.688	44.385	25.303	69.688	0.000
Design	23.683	23.683	26.828	24.950	1.878	26.828	0.000
Financial Issues/Funding/Procurement Strategy	2.258	2.258	2.590	2.108	0.482	2.590	0.000
Parliamentary Process/Approvals	0.329	0.329	0.319	0.319	0.000	0.319	0.000
Procurement Construction Works	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Construction Works	273.102	273.102	296.648	85.037	211.612	296.648	0.000
Testing & Commissioning	1.984	1.984	0.000	0.000	0.000	0.000	0.000
Handing Over & Service Operations	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NOP/Rail Projects Interface (Promoters View)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Interfacing Developments	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TRAMS, Vehicles (Edinburgh TRAMS Use Only)	51.370	51.370	58.152	3.639	54.513	58.152	0.000
Risk	48.974	48.974	28.950	0.000	28.950	28.950	0.000
Opportunity (Negative Value)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OB/Contingency	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Total</b>	<b>498.060</b>	<b>498.060</b>	<b>512.017</b>	<b>182.953</b>	<b>329.064</b>	<b>512.017</b>	<b>0.000</b>

6: Current Year 08/09 - Baseline Budget

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	Total
1 Total Project COWD - Budget	6.457	13.085	14.265	7.667	8.688	8.763	10.395	15.222	23.863	6.198	13.563	12.195	10.490	150.851
2 Other Funding - Budget	-0.036	1.080	1.178	0.633	0.717	0.724	0.858	1.257	1.970	0.512	1.120	10.348	10.490	30.852
3 Demand on TS - Budget	6.493	12.005	13.088	7.034	7.971	8.039	9.537	13.965	21.893	5.686	12.443	1.847	0.000	120.000

7: Current Year 08/09 - Actuals (Updated 4 weekly)

4 Total Project COWD + Revised Forecast	6.457	11.287	10.360	8.162	7.371	3.744	5.531	6.796	13.698	10.695	23.683	14.962	16.045	138.792
7 Other Funding + Revised Forecast	-0.036	0.932	0.855	0.674	0.609	0.309	0.457	0.561	1.131	0.883	1.955	1.235	9.226	18.792
10 Total Demand on TS	6.493	10.355	9.505	7.488	6.762	3.435	5.074	6.235	12.567	9.812	21.727	13.727	6.819	120.000

8: Variance tracker

12 Variance Line 1 to Line 4 - Project Actual vs Budget	0.000	-1.798	-3.905	0.495	-1.318	-5.018	-4.864	-8.426	-10.166	4.498	10.120	2.767	5.555	-12.059
13 Variance Line 2 to Line 7 - Oth Funding Actual vs Budget	0.000	-0.148	-0.322	0.041	-0.109	-0.414	-0.402	-0.696	-0.839	0.371	0.836	-9.113	-1.264	-12.059
14 Variance Line 3 to Line 10 - Demand on TS vs Budget	0.000	-1.650	-3.583	0.454	-1.209	-4.604	-4.463	-7.730	-9.326	4.126	9.285	11.880	6.819	0.000

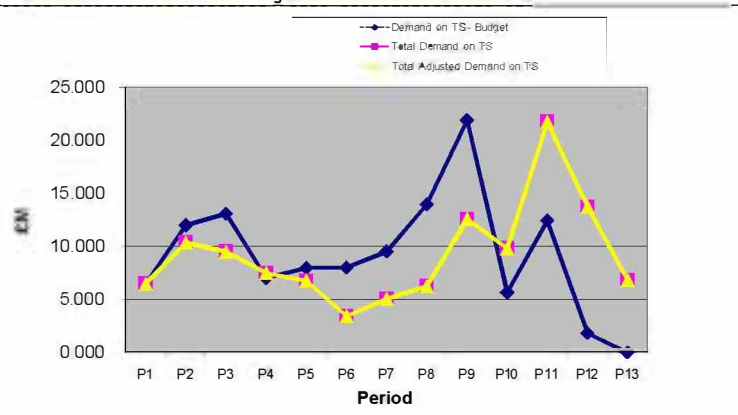
9: Next Year 09/10 - Forecast (Updated 4 weekly)

	Q1	Q2	Q3	Q4	Total	Financial Commentary - FY 09/10 Onwards
16 Total Project COWD	32.700	28.749	38.800	49.710	149.959	All costs are for Phase 1a only
19 Other Funding	-7.963	2.374	3.204	4.105	1.719	
22 Total Demand on TS	40.662	26.376	35.596	45.606	148.240	

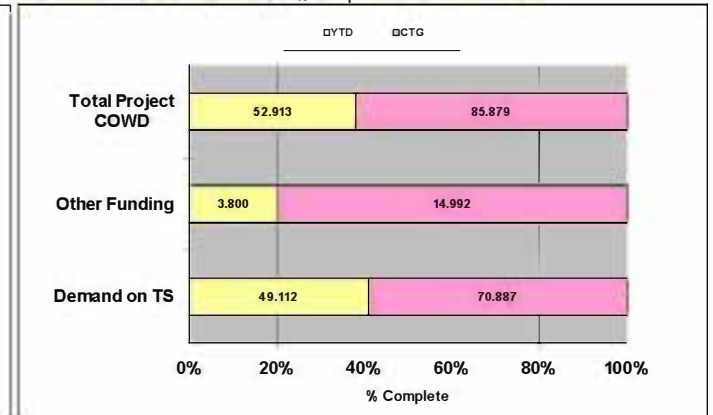
10: All Years (Escalated) (Updated 4 weekly)

	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FUTURE	TOTAL
24 Total Project COWD	0.000	3.093	10.664	30.431	85.852	138.792	149.959	78.285	14.940	0.000	0.000			512.017
27 Other Funding	0.000	0.000	1.000	0.019	10.287	18.792	1.719	6.464	1.234	0.000	0.000			39.515
30 Total Demand on TS	0.000	3.093	9.664	30.412	75.565	120.000	148.240	71.821	13.707	0.000	0.000	0.000	0.000	472.502

GRAPH 3 - Demand on TS: Actual/Budget Run Rate - Current Year FY 08/09



GRAPH 4 - Year To Date/ Costs To Go - % Complete - Current Year FY 08/09



11: Other Funding

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	Total
<b>Budget (Current Year 08/09)</b>														
CEC	-0.036	1.080	1.178	0.633	0.717	0.724	0.858	1.257	1.970	0.512	1.120	10.348	10.490	30.852
Other Funding Stream														0.000
Other Funding Stream														0.000
Other Funding Stream														0.000
<b>Total Budget Other Funding</b>	-0.036	1.080	1.178	0.633	0.717	0.724	0.858	1.257	1.970	0.512	1.120	10.348	10.490	30.852
<b>Actual (Current Year 08/09)</b>														
CEC	-0.036	0.932	0.855	0.674	0.609	0.309	0.457	0.561	1.131	0.883	1.955	1.235	9.226	18.792
Other Funding Stream														0.000
Other Funding Stream														0.000
Other Funding Stream														0.000
<b>Total Actual Other Funding</b>	-0.036	0.932	0.855	0.674	0.609	0.309	0.457	0.561	1.131	0.883	1.955	1.235	9.226	18.792

12: Promoter Full Year Forecast Run Rate

Period Trend of Full Year Forecast (Current Year 08/09)	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13
Full Year Forecast	150.851	150.851	150.984	150.537	150.647	138.759	138.792						

13: Promoter AFC Run Rate

Period Trend of AFC	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13
Anticipated Final Cost	508.017	512.017	512.017	512.017	512.017	512.017	512.017						

## **Appendix 'B' Change control register**

**(Register and other information as volunteered or requested from delivery organisation / promoter – There are none to report on at this point)**



## Appendix 'C' Programme information

To be sent separately by CD:

- **Milestone Schedule Summary (progress against baseline)**
- **Full Detailed Time Schedule (progress against baseline)**
- **Critical Path**
- **12 Week Look Ahead Extract from Schedule**

## Appendix 'D' Primary risk register

Period 7 - 2008/09 Primary Risk Register

ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
916	CEC do not achieve capability to deliver	CEC are unable to honour their funding commitment	Potential showstopper to project if contribution not reached; Line 1B may depend on incremental funding from CEC	S McGarrity		Project	CEC has formed a multi discipline Tram Contributions Group to monitor identified sources of £45m contribution including critically developers contributions. tie are invited to that group. (see add info)	Complete	Complete	28-Sep-07	CEC
							CEC to deliver necessary contributions for 1a	Complete	Complete	28-Aug-07	CEC
							Tram Project Board to monitor progress towards gaining contributions	Ongoing	Ongoing	Ongoing	D Mackay
139	Utilities diversion outline specification only from plans	Uncertainty of Utilities location and consequently required diversion work/ unforeseen utility services within LoD	Increase in MUDFA costs or delays as a result of carrying out more diversions than estimated	G Barclay	High		Carry out GPR Adien survey	Complete	Complete	31-Oct-07	J Casserly
							Identify increase in services diversions. MUDFA to resource/re-programme to meet required timescales.	Complete	Complete	23-Nov-07	J McAloon
							In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities and inform designer	On Programme	On Programme	Ongoing	A Hill
164	Utilities assets uncovered during construction that were not previously accounted for; unidentified abandoned utilities assets; asbestos found in excavation for utilities diversion; unknown cellars and basements intrude into works area; other physical obstructions; other contaminated land	Unknown or abandoned assets or unforeseen/contaminated ground conditions affect scope of MUDFA work.	Re-design and delay as investigation takes place and solution implemented; Increase in Capex cost as a result of additional works.	I Clark	High		Carry out GPR Adien survey	Complete	Complete	31-Oct-07	J Casserly
							Identify increase in services diversions. MUDFA to resource/re-programme to meet required timescales.	Complete	Complete	23-Nov-07	J McAloon
							In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities and inform designer	On Programme	On Programme	Ongoing	A Hill

ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
31	Mudfa delay in diversion works due to lack of BT resources	Bankhead Drive Retaining Wall: BT and Easynet diversion work not completed till end Jan 09 - work was due to start mid-June 08	Delay and disruption to programme.	T Cotter	High - 25 00		Site visit with Infraco PMs and Mudfa to assess interface issues between services and structure	On Programme	On Programme	01-Nov-08	T Cotter
30	Mudfa delay in diversion works due to lack of BT resources	South Gyle Access Bridge: BT diversion work not completed till end Sept 08 - work was due to start mid-June 08	Delay and disruption to programme.	T Cotter	High - 25 00		Site visit with Infraco PMs and Mudfa to assess interface issues between services and structure	On Programme	On Programme	01-Nov-08	T Cotter
173	Uncertainty over extent of contaminated land on route	Tramway runs through area of previously unidentified contamination and material requires to be removed and replaced (dig and dump).	Increase in costs to remove material to special and other tip.	B Bell	High - 25 00		Issue contamination and gi report to Infraco bidders	Complete	Complete	2-Mar-07	B Dawson
							tie to obtain ground investigation and contamination reports from SDS	Complete	Complete	30-Mar-07	A McGregor
44	SDS contractor does not deliver the required prior approval consents in line with SDS v31	Late prior approval consents	Delay to programme with additional resource costs and delay to infraco. Impact upon risk balance.	D Sharp	High - 25 00		Evaluation of prior approval programme	On Programme	On Programme	31-Oct-08	D Sharp
							Hold fortnightly Roads Design Group	On Programme	On Programme	Ongoing	T Glazebrook
							Twice-weekly meetings of Approvals Task Force	On Programme	On Programme	31-Oct-08	D Sharp
							Informal consultation prior to statutory consultation	On Programme	On Programme	31-Jul-08	T Glazebrook
							Integrate CEC into tie organisation/accommodation (office move)	Complete	Complete	4-Jun-07	T Glazebrook



ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
13	Possession cancelled or tie stop being possession owner	Loss of disruptive or RotR possession	Could prevent critical work being completed, i.e. a bridge installation. For RotR possession there would be a delay in completing the works	W Biggins	High- 22 00		tie needs to identify critical possessions tied into Infraco's programme and then highlight them to NR	On Programme	On Programme	01-Nov-08	W Biggins
928	Major single safety incident (including a dangerous occurrence) during construction	Safety incident during construction	Delay (potentially critical) due to HSE investigation and rework. PR risk to tie and stakeholders.	F McFadden	High- 22 00		All Site Staff to get CSCS or equivalent	On Programme	On Programme	Ongoing	C McLauchlan
							Develop and Implement Incident Management Processes	Complete	Complete	27-Apr-07	T Condie
							HSQE Audits, site inspections and Management Safety Tours to be carried out	On Programme	On Programme	31-Dec-10	T Condie
							Safety Induction to be carried out for all site staff	On Programme	On Programme	31-Dec-10	T Condie
							Site Supervisors to be appointed by tie	Complete	Complete	28-Feb-07	S Clark
1033	Failure of Infraco to mobilise in time to commence work in line with programme.	Delay to programme. Cost overruns. Negative publicity. Criticism from stakeholders	S Bell	High- 22 00			Continued focus at Infraco progress meetings as well as programme workshops to mitigate the impacts of any delay	On Programme	On Programme	Ongoing	S Bell
							Implementation of Advanced Works programme in order to mitigate potential future issues during construction	On Programme	Complete	1-Aug-08	R Bell
							Infraco given instructions to proceed at risk	On Programme	Complete	1-Aug-08	R Bell
							Pressure from Approvals Task Force to ensure Technical and Prior Approvals are delivered	On Programme	On Programme	1-Dec-08	D Sharp

ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
66	Potential changes to planned traffic management procedures, especially in relation to Princes Street, have impact on programme	Infraco are unable to commence work or work is delayed/disrupted	Delay and disruption claims from Infraco.	F McFadden	18		The lessons from the Mound closure are being assessed and the implications of lessons learned will be fully taken into account in finalising the re-calibrated Infraco programme  Avoid implementation of diversions mid-week	On Programme	On Programme	5-Jan-09	F McFadden
48	Mudfa do not finish diversion works prior to Infraco commencing work	Infraco are unable to commence work or work is delayed/disrupted	Delay and disruption claims from Infraco.	F McFadden	18		Infraco attendance at Traffic Management meetings. Weekly meetings between tie Infraco and Mudfa PMs. 4-weekly tie Infraco/Mudfa management meetings. Identification of programme clashes between Infraco and Mudfa works tracked by tie planner.	On Programme	On Programme	1-Dec-08	F McFadden
50	Lack of effective engagement from BSC leaders towards tie and third parties (NR, BAA, Forth Ports)	Failure of 'partnership' approach between tie and BSC. Failure to maintain effective third party relationships with key third parties.	Lack of co-operation and understanding from key third parties causes delay and disruption.	F McFadden	18		Engagement between tie and BSC at different levels. Regular review of BSC management of third parties as per Employers Requirements.	On Programme	On Programme	1-Dec-08	F McFadden
51	Failure of BSC to effectively 'resource up' for project	Lack of competent resources within BSC to safely and effectively deliver Tram project	Delay to programme and additional cost	F McFadden	18		Ongoing review of BSC resources and formal review at 4-weekly meeting. Objectives to be set for BSC at monthly meetings in order to monitor progress.	On Programme	On Programme	1-Dec-08	F McFadden

## Appendix 'E' Resource information

(Updated Organisation Charts, Notifying Changes of Key Personnel –  
N/A)