

Project Brief and Description

tie's involvement with CURACAO commenced during pre contract negotiations in 2005. The project seeks to promote and support the fairer and more efficient pricing of road use in urban areas throughout Europe. tie's role is to disseminate experience and information from the Edinburgh congestion charging scheme and is a follow on from involvement in a previous PROGRESS European project. The project is funded by the European Commission within the sixth Framework programme. The eighteen month project commenced in April 2006 however due to contractual issues it was decided that SESTRAN as a public body would replace tie as a project partner and that tie would operate as a sub contractor through a project agreement. The contract amendment was finally approved by the commission in April 2007 and we began providing input to the project through SESTRAN at that stage. Completion of all the work streams and production of the final deliverables is due in April 2009.

Roles and Responsibilities

There are a number of key individuals and entities:

European Commission	-	Funder and overall client
Transport and Travel Research Ltd	-	Project Co-ordinator
SESTRAN	-	Consortium Member
tie Limited	-	Sub Contractor to SESTRAN

Project Governance

The principal client contact in SESTRAN is Alex Macaulay but the overall project management and co-ordination is carried out by TTR. There are twice yearly consortium meetings at which business matters are discussed and decisions made. The deliverables are subject to review and acceptance by the European Commission representative.

Progress on tie's involvement in the project is monitored by tie's Executive Board and periodically by the tie Board.

Review of 2007/2008

The corporate target for this project is to assist SESTRAN with the delivery of the study on time and on budget.

Key Activities / Deliverables	Original Completion Date	Projected Completion Date	Status
Amendment of contract	April 2006	April 2007	Completed
Completion of project	April 2009	April 2009	In progress

2008/2009 and beyond

During 2008-09 it is expected that the main activity of reviewing the consultant's findings will be completed. Further advice may be provided on a possible procurement strategy and funding mechanism to take the project forward to implementation although this will be dependant on further monitoring of the main cable condition and government decision on the provision of a new crossing.

Resources & Funding

With this commission we are able to utilise the expertise of staff within **tie** (and particularly those who have relevant experience) for the benefit of the client and the project.

Grade	Current Year	Budget Year
Project Manager	Yes – 10%	Yes – 10%

The **tie** costs associated with this scheme relate purely to staff time and expenses. These are fully recovered from the client through monthly invoices in arrears.



(10) tie internal resources

Funding Financial Years 2008/09

This Business Plan reflects that during 2008/09, over 99% of expenditure incurred by tie will be directly attributable to the Tram Project. The tie internal resources budget, comprising those corporate level costs which stand to be allocated between all projects, is forecast to be substantially lower in 2008/09 as reflected in the table below

	2008/09 Budget	2007/08 Forecast
Shared service staff	-	£624,106
Learning and Development	£89,250	£132,211
Recruitment	-	£62,915
Non-Executive Directors	£56,700	£54,000
Office Space	-	£200,076
Corporate Communications	£25,000	£75,884
ICT	£50,000	£272,100
Legal, Financial & Professional Advisors	£56,250	£75,000
Sundries	£205,401	£263,677
Quality and Safe-tie.	£20,000	£50,000
HR IT/IS and Leadership Development		
Bank Charges	-	£3,500
Overdraft Interest	-	-
Total	<u>£502,601</u>	<u>£1,813,469</u>

Non Executive Directors

In addition to the 4 Council representatives (who receive no remuneration from tie) there are 4 non-executive directors (including a Deputy Chairman) and an Executive Chairman sitting on the tie board. Two of the non-executive directors are paid annual fees (£12,000 each), the Deputy Chairman has an annual fee of £12,000 and pro-rata cost of £6,000 is paid to Scottish Government for the fourth non-executive director. It is proposed to review the fees in line with salary award of 5% from 1st January and fix to March 2009



(11) Summary

Resources, Expenditure & Funding

COSTS

Project Management Staff Costs

Project Management Staff Costs	TABLE A							Totals
	2002/03 Actuals	2003/04 Actual	2004/05 Actual	2005/06 Actual	2006/07 Actual	2007/08 Forecast	2008/09 Bus. Plan	
Congestion Charging - Development	146,297	200,204	198,032	1,123	0	0	0	545,656
Congestion Charging - Procurement	0	24,159	215,282	0	0	0	0	239,441
Congestion Charging - Information Programme	0	0	53,248	29,064	0	0	0	82,312
Tram Line 1-Parliamentary	106,963	126,556	115,700	145,505	0	0	0	494,724
Tram Line 2-Parliamentary	68,690	108,476	119,462	146,324	0	0	0	442,952
Tram Line 3-Parliamentary	0	114,762	118,468	10,800	0	0	0	244,030
Trams - Implementation	0	0	280,931	1,739,759	3,509,750	6,306,254	6,176,048	18,012,742
Fastlink	17,995	46,887	41,080	50,108	33,722	7,886	0	197,678
Ingliston Park and Ride - Phase I	0	0	24,208	33,285	0	0	0	57,493
Ingliston Park and Ride - Phase II	0	0	0	0	15,937	91,341	168,314	275,592
FETA	0	0	23,968	31,312	51,185	23,679	40,066	170,210
One-Ticket	0	10,959	21,231	30,722	31,655	29,108	32,134	155,809
Cross Forth Ferry	0	0	0	18,904	22,923	51,694	40,065	133,586
Stirling Waste Management	0	0	0	34,045	55,680	8,336	0	98,061
EARL	0	219,303	218,948	528,679	810,387	1,011,364	0	2,788,681
SAK	0	0	134,876	184,842	194,621	128,396	0	642,735
Business Development	0	0	0	0	23,075	0	0	23,075
Total Expenditure	339,945	851,306	1,565,434	2,984,472	4,748,935	7,658,058	6,456,627	24,604,777

Project Management Staff Costs	TABLE A (1) - BUSINESS PLAN December 2006							Totals
	2002/03 Actuals	2003/04 Actual	2004/05 Actual	2005/06 Actual	2006/07 Forecast	2007/08 Bus. Plan	2008/09 Bus. Plan	
Congestion Charging - Development	146,297	200,204	198,032	1,123	0	0	0	545,656
Congestion Charging - Procurement	0	24,159	215,282	0	0	0	0	239,441
Congestion Charging - Information Programme	0	0	53,248	29,064	0	0	0	82,312
Tram Line 1-Parliamentary	106,963	126,556	115,700	145,505	0	0	0	494,724
Tram Line 2-Parliamentary	68,690	108,476	119,462	146,324	0	0	0	442,952
Tram Line 3-Parliamentary	0	114,762	118,468	10,800	0	0	0	244,030
Trams - Implementation	0	0	280,931	1,739,759	3,537,033	5,530,307	0	11,088,030
Fastlink	17,995	46,887	41,080	50,108	19,225	29,167	0	204,462
Ingliston Park and Ride - Phase I	0	0	24,208	33,285	0	0	0	57,493
Ingliston Park and Ride - Phase II	0	0	0	0	12,274	134,223	0	146,497
FETA	0	0	23,968	31,312	48,380	22,512	0	126,172
One-Ticket	0	10,959	21,231	30,722	36,000	103,645	0	202,557
Cross Forth Ferry	0	0	0	18,904	21,880	52,528	0	93,312
Stirling Waste Management	0	0	0	34,045	55,000	25,253	0	114,298
EARL	0	219,303	218,948	528,679	888,812	1,638,390	0	3,494,132
SAK	0	0	134,876	184,842	161,284	109,849	0	590,851
Business Development	0	0	0	0	26,107	0	0	26,107
Total Expenditure	339,945	851,306	1,565,434	2,984,472	4,805,995	7,645,874	0	18,193,026

Project Management Staff Costs	TABLE A (2) - VARIANCE A - A(1)							Totals
	2002/03 Variance	2003/04 Variance	2004/05 Variance	2005/06 Variance	2006/07 Variance	2007/08 Variance	2008/09 Variance	
Congestion Charging - Development	0	0	0	0	0	0	0	0
Congestion Charging - Procurement	0	0	0	0	0	0	0	0
Congestion Charging - Information Programme	0	0	0	0	0	0	0	0
Tram Line 1-Parliamentary	0	0	0	0	0	0	0	0
Tram Line 2-Parliamentary	0	0	0	0	0	0	0	0
Tram Line 3-Parliamentary	0	0	0	0	0	0	0	0
Trams - Implementation	0	0	0	0	-27,283	775,947	6,176,048	6,924,712
Fastlink	0	0	0	0	14,497	-21,281	0	-6,784
Ingliston Park and Ride - Phase I	0	0	0	0	0	0	0	0
Ingliston Park and Ride - Phase II	0	0	0	0	3,663	-42,882	168,314	129,095
FETA	0	0	0	0	2,805	1,167	40,066	44,038
One-Ticket	0	0	0	0	-4,345	-74,537	32,134	-46,748
Cross Forth Ferry	0	0	0	0	1,043	-834	40,065	40,274
Stirling Waste Management	0	0	0	0	680	-16,917	0	-16,237
EARL	0	0	0	0	-78,425	-627,026	0	-705,451
SAK	0	0	0	0	33,337	18,547	0	51,884
Business Development	0	0	0	0	-3,032	0	0	-3,032
Total Expenditure	0	0	0	0	-57,060	12,184	6,456,627	6,411,751

Staff costs include costs for staff in post as well as costs for additional staff to resource the tie work programme. All staff costs are inclusive of social security and the employer's contribution to the Local Government Pension Scheme in accordance with the CEC Staff Conditions of Service.

External Project Costs including project management & technical advisors

Included within this category are the external technical, environmental, financial, legal and communications advisors costs required for all projects. Cost information is taken from the funding applications and current contract projections excluding the internal project management costs which are included in the staff costs category above. The spend profiles are taken from an amalgamation of the projected spend from the various consulting studies that have been commissioned. Total external project costs analysed by project are as follows:

External Project Costs	TABLE B							
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	Totals
	Actuals	Actual	Actual	Actual	Actual	Forecast	Bus. Plan	
Congestion Charging - Development	783,449	1,390,213	795,532	6,188	0	0	0	2,975,382
Congestion Charging - Procurement	0	670,000	1,539,113	8,437	0	0	0	2,217,550
Congestion Charging - Information Programme	0	0	386,604	0	0	0	0	386,604
Tram Line 1-Parliamentary	1,133,859	3,320,629	1,300,233	2,057,469	0	0	0	7,812,190
Tram Line 2-Parliamentary	499,408	2,096,967	983,107	1,388,595	0	0	0	4,968,077
Tram Line 3-Parliamentary	0	603,471	1,320,675	93,852	0	0	0	2,017,998
Trams - Implementation	0	534,000	2,068,170	7,961,442	26,277,340	86,712,969	160,673,424	284,227,345
Fastlink	316,261	1,756,809	8,013,668	191,580	-3,681	93,254	93,272	10,461,163
Ingliston Park and Ride - Phase I	0	106,417	1,403,464	1,466,454	171,388	84,363	0	3,232,086
Ingliston Park and Ride - Phase II	0	0	0	0	126,451	2,244,753	101,883	2,473,087
FETA	0	0	71	40,536	6,886	489	0	47,982
One-Ticket	20	25,386	1,155	0	958	183	0	27,702
Cross Forth Ferry	0	0	0	134	543	211	0	888
Stirling Waste Management	0	0	0	2,894	4,076	492	0	7,462
EARL	22,998	356,669	2,786,391	4,801,832	9,794,846	7,251,783	0	25,014,519
SAK	0	0	26,961	10,939	7,425	2,801	0	48,126
Business Development	0	0	0	0	48,825	16,092	0	64,917
Total Expenditure	2,755,995	10,860,561	20,625,144	18,030,352	36,435,057	96,407,390	160,868,579	345,983,078

External Project Costs	TABLE B (1) - BUSINESS PLAN December 2006							
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	Totals
	Actuals	Actual	Actual	Actual	Forecast	Bus. Plan	Bus. Plan	
Congestion Charging - Development	783,449	1,390,213	795,532	6,188	0	0	0	2,975,382
Congestion Charging - Procurement	0	670,000	1,539,113	8,437	0	0	0	2,217,550
Congestion Charging - Information Programme	0	0	386,604	0	0	0	0	386,604
Tram Line 1-Parliamentary	1,133,859	3,320,629	1,300,233	2,057,469	0	0	0	7,812,190
Tram Line 2-Parliamentary	499,408	2,096,967	983,107	1,388,595	0	0	0	4,968,077
Tram Line 3-Parliamentary	0	603,471	1,320,675	93,852	0	0	0	2,017,998
Trams - Implementation	0	534,000	2,068,170	7,961,442	38,778,608	100,410,880	0	149,753,100
Fastlink	316,261	1,756,809	8,013,668	191,580	121,384	123,922	0	10,523,624
Ingliston Park and Ride - Phase I	0	106,417	1,403,464	1,466,454	836	0	0	2,977,171
Ingliston Park and Ride - Phase II	0	0	0	0	129,750	1,573,823	0	1,703,573
FETA	0	0	71	40,536	6,805	0	0	47,412
One-Ticket	20	25,386	1,155	0	34	0	0	26,595
Cross Forth Ferry	0	0	0	134	149	0	0	283
Stirling Waste Management	0	0	0	2,894	2,633	0	0	5,527
EARL	22,998	356,669	2,786,391	4,801,832	12,055,525	26,383,027	0	46,406,442
SAK	0	0	26,961	10,939	42,000	0	0	79,900
Business Development	0	0	0	0	2,003	0	0	2,003
Total Expenditure	2,755,995	10,860,561	20,625,144	18,030,352	51,139,727	128,491,652	0	231,903,431

External Project Costs	TABLE B (2) - VARIANCE B - B(1)							
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	Totals
	Variance	Variance	Variance	Variance	Variance	Variance	Variance	
Congestion Charging - Development	0	0	0	0	0	0	0	0
Congestion Charging - Procurement	0	0	0	0	0	0	0	0
Congestion Charging - Information Programme	0	0	0	0	0	0	0	0
Tram Line 1-Parliamentary	0	0	0	0	0	0	0	0
Tram Line 2-Parliamentary	0	0	0	0	0	0	0	0
Tram Line 3-Parliamentary	0	0	0	0	0	0	0	0
Trams - Implementation	0	0	0	0	-12,501,268	-13,697,911	160,673,424	134,474,245
Fastlink	0	0	0	0	-125,065	-30,668	93,272	-62,461
Ingliston Park and Ride - Phase I	0	0	0	0	170,552	84,363	0	254,915
Ingliston Park and Ride - Phase II	0	0	0	0	-3,299	670,930	101,883	769,514
FETA	0	0	0	0	81	489	0	570
One-Ticket	0	0	0	0	924	183	0	1,107
Cross Forth Ferry	0	0	0	0	394	211	0	605
Stirling Waste Management	0	0	0	0	1,443	492	0	1,935
EARL	0	0	0	0	-2,260,679	-19,131,244	0	-21,391,923
SAK	0	0	0	0	-34,575	2,801	0	-31,774
Business Development	0	0	0	0	46,822	16,092	0	62,914
Total Expenditure	0	0	0	0	-14,704,670	-32,084,262	160,868,579	114,079,647

Overheads

Total overhead costs included in the income & expenditure statement are as follows:

Overhead Costs	TABLE C							
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	Totals
	Actuals	Actual	Actual	Actual	Actual	Forecast	Bus. Plan	
Corporate Support Staff	273,152	375,472	618,610	697,028	1,126,183	624,106	0	3,714,551
Training	24,728	5,503	9,567	50,000	74,504	132,211	89,250	385,763
Recruitment	0	0	0	22,881	72,746	62,915	0	158,542
Non Executive Directors	15,000	15,000	15,000	16,000	28,604	54,000	56,700	200,304
Office Space	21,883	69,195	134,804	232,169	265,229	200,076	0	923,356
Corporate Communications	0	0	0	23,853	81,508	75,884	25,000	206,245
ICT	83,805	45,448	187,000	109,935	218,255	272,100	50,000	966,543
Legal, Financial & Prof Advisors	88,521	13,791	60,760	77,869	89,074	75,000	56,250	461,265
Sundries	29,280	37,580	74,961	178,774	282,648	263,677	205,401	1,072,321
Contingency	0	0	0	0	0	0	0	0
TQM	0	0	0	0	90,886	50,000	20,000	160,886
Bank Charges	0	0	0	16,600	6,977	3,500	0	27,077
Overdraft Interest	7,652	9,101	18,205	40,000	82,322	0	0	157,280
Total Expenditure	544,021	571,090	1,118,907	1,465,109	2,418,936	1,813,469	502,601	8,434,133

Overhead Costs	TABLE C (1) - BUSINESS PLAN December 2006							
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	Totals
	Actuals	Actual	Actual	Actual	Forecast	Bus. Plan	Bus. Plan	
Corporate Support Staff	273,152	375,472	618,610	697,028	1,083,659	1,307,127	0	4,355,048
Training	24,728	5,503	9,567	50,000	84,000	130,000	0	303,798
Recruitment	0	0	0	22,881	70,000	20,910	0	113,791
Non Executive Directors	15,000	15,000	15,000	16,000	31,333	54,000	0	146,333
Office Space	21,883	69,195	134,804	232,169	238,091	239,272	0	935,414
Corporate Communications	0	0	0	23,853	80,000	112,000	0	215,853
ICT	83,805	45,448	187,000	109,935	225,000	401,000	0	1,052,188
Legal, Financial & Prof Advisors	88,521	13,791	60,760	77,869	69,301	75,000	0	385,242
Sundries	29,280	37,580	74,961	178,774	240,000	236,800	0	797,395
Contingency	0	0	0	0	117,851	200,000	0	317,851
TQM	0	0	0	0	121,625	70,000	0	191,625
Bank Charges	0	0	0	16,600	7,470	2,400	0	26,470
Overdraft Interest	7,652	9,101	18,205	40,000	97,791	0	0	172,749
Total Expenditure	544,021	571,090	1,118,907	1,465,109	2,466,121	2,848,509	0	9,013,757

Overhead Costs	TABLE C (2) - VARIANCE C - C(1)							
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	Totals
	Variance	Variance	Variance	Variance	Variance	Variance	Variance	
Corporate Support Staff	0	0	0	0	42,524	-683,021	0	-640,497
Training	0	0	0	0	-9,496	2,211	89,250	81,965
Recruitment	0	0	0	0	2,746	42,005	0	44,751
Non Executive Directors	0	0	0	0	-2,729	0	56,700	53,971
Office Space	0	0	0	0	27,138	-39,196	0	-12,058
Corporate Communications	0	0	0	0	1,508	-36,116	25,000	-9,608
ICT	0	0	0	0	-6,745	-128,900	50,000	-85,645
Legal, Financial & Prof Advisors	0	0	0	0	19,773	0	56,250	76,023
Sundries	0	0	0	0	42,648	26,877	205,401	274,926
Contingency	0	0	0	0	-117,851	-200,000	0	-317,851
TQM	0	0	0	0	-30,739	-20,000	20,000	-30,739
Bank Charges	0	0	0	0	-493	1,100	0	607
Overdraft Interest	0	0	0	0	-15,469	0	0	-15,469
Total Expenditure	0	0	0	0	-47,185	-1,035,040	502,601	-579,624

Overhead Allocation

Total overhead costs included in the income & expenditure statement are apportioned across the projects. The percentages used, for 2007/08, are based on technical staff head count/staff costs and the analysis of Project Management Staff Costs and summarised as follows:

Overhead Costs - Allocation	TABLE D							
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	Totals
	Actuals	Actual	Actual	Actual	Actual	Forecast	Bus. Plan	
Congestion Charging - Development	212,168	119,240	109,653	0	0	0	0	441,061
Congestion Charging - Procurement	0	0	163,248	0	0	0	0	163,248
Congestion Charging - Information Programme	0	0	0	0	0	0	0	0
Tram Line 1-Parliamentary	157,766	106,464	133,038	71,511	0	0	0	468,779
Tram Line 2-Parliamentary	81,603	85,171	133,709	70,708	0	0	0	371,191
Tram Line 3-Parliamentary	0	72,395	133,038	8,082	0	0	0	213,515
Trams - Implementation	0	0	210,019	963,138	1,690,893	1,243,968	480,760	4,588,778
Fastlink	92,484	42,586	27,973	21,257	12,064	7,891	0	204,255
Ingliston Park and Ride - Phase I	0	0	5,259	10,809	7,538	0	0	23,606
Ingliston Park and Ride - Phase II	0	0	0	0	0	36,219	13,102	49,321
FETA	0	0	0	27,992	28,180	6,070	3,119	65,361
One-Ticket	0	0	0	0	0	28,125	2,501	30,626
Cross Forth Ferry	0	0	0	0	13,253	14,164	3,119	30,536
Stirling Waste Management	0	0	0	0	31,843	8,561	0	40,404
EARL	0	145,234	202,970	211,637	506,519	436,853	0	1,503,213
SAK	0	0	0	79,975	101,702	31,618	0	213,295
Business Development	0	0	0	0	26,944	0	0	26,944
Total Expenditure	544,021	571,090	1,118,907	1,465,109	2,418,936	1,813,469	502,601	8,434,133

Overhead Costs - Allocation	TABLE D (1) - BUSINESS PLAN December 2006							
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	Totals
	Actuals	Actual	Bus. Plan	Actual	Forecast	Bus. Plan	Bus. Plan	
Congestion Charging - Development	212,168	119,240	109,653	0	0	0	0	441,061
Congestion Charging - Procurement	0	0	163,248	0	0	0	0	163,248
Congestion Charging - Information Programme	0	0	0	0	0	0	0	0
Tram Line 1-Parliamentary	157,766	106,464	133,038	71,511	0	0	0	468,779
Tram Line 2-Parliamentary	81,603	85,171	133,709	70,708	0	0	0	371,191
Tram Line 3-Parliamentary	0	72,395	133,038	8,082	0	0	0	213,515
Trams - Implementation	0	0	210,019	963,138	1,725,359	2,058,813	0	4,957,329
Fastlink	92,484	42,586	27,973	21,257	12,195	10,911	0	207,406
Ingliston Park and Ride - Phase I	0	0	5,259	10,809	7,575	0	0	23,643
Ingliston Park and Ride - Phase II	0	0	0	0	0	49,930	0	49,930
FETA	0	0	0	27,992	28,540	8,369	0	64,901
One-Ticket	0	0	0	0	0	38,712	0	38,712
Cross Forth Ferry	0	0	0	0	13,384	19,565	0	32,949
Stirling Waste Management	0	0	0	0	32,302	9,788	0	42,090
EARL	0	145,234	202,970	211,637	515,209	610,583	0	1,685,633
SAK	0	0	0	79,975	104,601	41,838	0	226,414
Business Development	0	0	0	0	26,956	0	0	26,956
Total Expenditure	544,021	571,090	1,118,907	1,465,109	2,466,121	2,848,509	0	9,013,757

Overhead Costs - Allocation	TABLE D (2) - VARIANCE D - D(1)							
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	Totals
	Variance	Variance	Variance	Variance	Variance	Variance	Variance	
Congestion Charging - Development	0	0	0	0	0	0	0	0
Congestion Charging - Procurement	0	0	0	0	0	0	0	0
Congestion Charging - Information Programme	0	0	0	0	0	0	0	0
Tram Line 1-Parliamentary	0	0	0	0	0	0	0	0
Tram Line 2-Parliamentary	0	0	0	0	0	0	0	0
Tram Line 3-Parliamentary	0	0	0	0	0	0	0	0
Trams - Implementation	0	0	0	0	-34,466	-814,845	480,760	-368,551
Fastlink	0	0	0	0	-131	-3,020	0	-3,151
Ingliston Park and Ride - Phase I	0	0	0	0	-37	0	0	-37
Ingliston Park and Ride - Phase II	0	0	0	0	0	-13,711	13,102	-609
FETA	0	0	0	0	-360	-2,299	3,119	460
One-Ticket	0	0	0	0	0	-10,587	2,501	-8,086
Cross Forth Ferry	0	0	0	0	-131	-5,401	3,119	-2,413
Stirling Waste Management	0	0	0	0	-459	-1,227	0	-1,686
EARL	0	0	0	0	-8,690	-173,730	0	-182,420
SAK	0	0	0	0	-2,899	-10,220	0	-13,119
Business Development	0	0	0	0	-12	0	0	-12
Total Expenditure	0	0	0	0	-47,185	-1,035,040	502,601	-579,624

Total Project Costs (including Project Management Staff Costs, External Project Costs and Allocation of Overheads)

Table E below incorporates all tie costs, by project, and is a summation of tables A, B, C, and D above. These include direct project staff costs and external technical, environmental, financial, legal and communications advisors required for all projects and the allocation of overhead by project.

Total Project Costs	TABLE E							
	2002/03 Actuals	2003/04 Actual	2004/05 Actual	2005/06 Actual	2006/07 Actual	2007/08 Forecast	2008/09 Bus. Plan	Totals
Congestion Charging - Development	1,141,914	1,709,657	1,103,217	7,311	0	0	0	3,962,099
Congestion Charging - Procurement	0	694,159	1,917,643	8,437	0	0	0	2,620,239
Congestion Charging - Information Programme	0	0	439,852	29,064	0	0	0	468,916
Tram Line 1-Parliamentary	1,398,588	3,553,649	1,548,971	2,274,485	0	0	0	8,775,693
Tram Line 2-Parliamentary	649,701	2,290,614	1,236,278	1,605,627	0	0	0	5,782,220
Tram Line 3-Parliamentary	0	790,628	1,572,181	112,734	0	0	0	2,475,543
Trams - Implementation	0	534,000	2,559,120	10,664,339	31,477,983	94,263,191	167,330,232	306,828,865
Fastlink	426,740	1,846,282	8,082,721	262,945	42,105	109,031	93,272	10,863,096
Ingliston Park and Ride - Phase I	0	106,417	1,432,931	1,510,548	178,926	84,363	0	3,313,185
Ingliston Park and Ride - Phase II	0	0	0	0	142,388	2,372,313	283,299	2,798,000
FETA	0	0	24,039	99,840	86,251	30,238	43,185	283,553
One-Ticket	20	36,345	22,386	30,722	32,613	57,416	34,635	214,137
Cross Forth Ferry	0	0	0	19,038	36,719	66,069	43,184	165,010
Stirling Waste Management	0	0	0	36,939	91,599	17,389	0	145,927
EARL	22,998	721,206	3,208,309	5,542,148	11,111,752	8,700,000	0	29,306,413
SAK	0	0	161,837	275,756	303,748	162,815	0	904,156
Business Development	0	0	0	0	98,844	16,092	0	114,936
Total Expenditure	3,639,961	12,282,957	23,309,485	22,479,933	43,602,928	105,878,917	167,827,807	379,021,988

Total Project Costs	TABLE E (1) - BUSINESS PLAN December 2006							
	2002/03 Actuals	2003/04 Actual	2004/05 Bus. Plan	2005/06 Actual	2006/07 Forecast	2007/08 Bus. Plan	2008/09 Bus. Plan	Totals
Congestion Charging - Development	1,141,914	1,709,657	1,103,217	7,311	0	0	0	3,962,099
Congestion Charging - Procurement	0	694,159	1,917,643	8,437	0	0	0	2,620,239
Congestion Charging - Information Programme	0	0	439,852	29,064	0	0	0	468,916
Tram Line 1-Parliamentary	1,398,588	3,553,649	1,548,971	2,274,485	0	0	0	8,775,693
Tram Line 2-Parliamentary	649,701	2,290,614	1,236,278	1,605,627	0	0	0	5,782,220
Tram Line 3-Parliamentary	0	790,628	1,572,181	112,734	0	0	0	2,475,543
Trams - Implementation	0	534,000	2,559,120	10,664,339	44,041,000	108,000,000	0	165,798,459
Fastlink	426,740	1,846,282	8,082,721	262,945	152,804	164,000	0	10,935,492
Ingliston Park and Ride - Phase I	0	106,417	1,432,931	1,510,548	8,411	0	0	3,058,307
Ingliston Park and Ride - Phase II	0	0	0	0	142,024	1,757,976	0	1,900,000
FETA	0	0	24,039	99,840	83,725	30,881	0	238,485
One-Ticket	20	36,345	22,386	30,722	36,034	142,357	0	267,864
Cross Forth Ferry	0	0	0	19,038	35,413	72,093	0	126,544
Stirling Waste Management	0	0	0	36,939	89,935	35,041	0	161,915
EARL	22,998	721,206	3,208,309	5,542,148	13,459,546	28,632,000	0	51,586,207
SAK	0	0	161,837	275,756	307,885	151,687	0	897,165
Business Development	0	0	0	0	55,066	0	0	55,066
Total Expenditure	3,639,961	12,282,957	23,309,485	22,479,933	58,411,843	138,986,035	0	259,110,214

Total Project Costs	TABLE E (2) - VARIANCE E - E(1)							
	2002/03 Variance	2003/04 Variance	2004/05 Variance	2005/06 Variance	2006/07 Variance	2007/08 Variance	2008/09 Variance	Totals
Congestion Charging - Development	0	0	0	0	0	0	0	0
Congestion Charging - Procurement	0	0	0	0	0	0	0	0
Congestion Charging - Information Programme	0	0	0	0	0	0	0	0
Tram Line 1-Parliamentary	0	0	0	0	0	0	0	0
Tram Line 2-Parliamentary	0	0	0	0	0	0	0	0
Tram Line 3-Parliamentary	0	0	0	0	0	0	0	0
Trams - Implementation	0	0	0	0	-12,563,017	-13,736,809	167,330,232	141,030,406
Fastlink	0	0	0	0	-110,699	-54,969	93,272	-72,396
Ingliston Park and Ride - Phase I	0	0	0	0	170,515	84,363	0	254,878
Ingliston Park and Ride - Phase II	0	0	0	0	364	614,337	283,299	898,000
FETA	0	0	0	0	2,526	-643	43,185	45,068
One-Ticket	0	0	0	0	-3,421	-84,941	34,635	-53,727
Cross Forth Ferry	0	0	0	0	1,306	-6,024	43,184	38,466
Stirling Waste Management	0	0	0	0	1,664	-17,652	0	-15,988
EARL	0	0	0	0	-2,347,794	-19,932,000	0	-22,279,794
SAK	0	0	0	0	-4,137	11,128	0	6,991
Business Development	0	0	0	0	43,778	16,092	0	59,870
Total Expenditure	0	0	0	0	-14,808,915	-33,107,118	167,827,807	119,911,774

Appendix I
ETN Final Business Case Version 2 (7th Dec 07)
Executive Summary

Executive summary

Introduction and principal recommendation

- 1.1 In December 2006, the City of Edinburgh Council (CEC) approved the Draft Final Business Case (DFBC) for the project to construct the Edinburgh Tram Network (ETN). The DFBC presented the strong case in favour of trams. It concluded that a) the proposed scheme is economically and financially viable; b) Phase 1a, the primary tram line from Edinburgh Airport to Newhaven, was affordable within current sources of funding; and c) that Phase 1b has significant benefits for the economic development in Edinburgh. It also demonstrated the operational sustainability of the future integrated tram and bus network.
- 1.2 Since approval of the DFBC, considerable progress has been made on all important aspects of the project. This Final Business Case (version 2) (FBCv2) takes full account of the progress made to date and is a key part of the documentation which supports the commitment to the principal contracts for construction of the system and supply of the tram vehicles.
- 1.3 Two main aspects of the Business Case have progressed close to a conclusion since the DFBC was approved:
- The procurement of the principal contracts has reached a stage where all material terms are agreed, including the capital, operational and maintenance costs; and
 - The principal terms of the funding available to support the delivery of the ETN have been agreed by CEC and the Scottish Government.
- This FBCv2 explains in detail the important consequences arising from the finalisation of these two critical areas.
- 1.4 After an intensive and lengthy competitive procurement process, the capital and maintenance costs of the scheme have now been finalised at a level slightly below the DFBC estimate. Based on firm rates and prices received from the bidders for system construction, vehicle supply and maintenance, the capital cost for Phase 1a, the tram line from Edinburgh Airport to Newhaven, is forecast at £498m. The capital cost to deliver Phase 1b (the tram line from Roseburn to Granton) is now forecast at £87m. The contractual arrangements permit CEC to commit to Phase 1b on fixed cost terms at any time until March 2009. However, concurrent construction of Phase 1b with Phase 1a would offer significant benefits of scale.
- 1.5 The Scottish Government and CEC have confirmed their commitment to funding contributions of up to £500m and £45m respectively. These commitments will be structured in such a way that the final aggregate funding for Phase 1a reflects equivalent pro-rata contributions, with a cap of £500m on the Government contribution.
- 1.6 The primary economic viability test is known as the Benefit Cost Ratio (BCR). Further analysis has concluded that the BCR for Phase 1a is 1.77 which indicates a return of £1.77 in economic benefit for every £1 of cost. This ratio reflects the decision not to proceed with the project known as the Edinburgh Airport Rail Link (EARL). It does not yet take into account the option of a future interchange with heavy rail at Gogar, which is an option under consideration by the Scottish Government and may have a beneficial impact on the tram BCR. The BCR for Phase 1 including both Phases 1a and 1b is 2.31, which reflects the strong economic case for Phase 1b.
- 1.7 The principal recommendation of this FBCv2 is that Phase 1a should proceed, with funding of up to £545m committed to its delivery. The FBCv2 sets out the full supporting analysis which leads to this recommendation. The FBCv2 also provides the analysis which supports the implementation of Phase 1b, but acknowledges that additional sources of funding are needed before it may proceed. This matter is under review and it is recommended that a decision on Phase 1b should be taken during 2008.
- 1.8 The phased approach was anticipated in the DFBC and now forms the basis on which the project will proceed. Most of the material that was produced at considerable effort and cost for the DFBC

remains valid and intact. However, there has been some editing to update figures and to clearly define the initial Phase 1a approach.

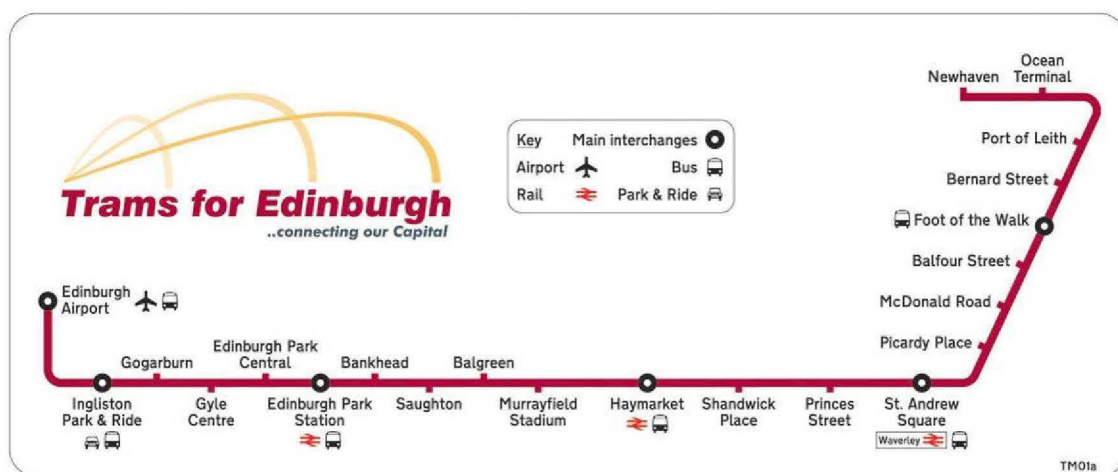
1.9 It is a fact that many tram schemes implemented in the UK and in Ireland in recent years have subsequently been extended once their successful operation has been demonstrated. Accordingly, a section has been included in this document describing the wider network options which may bear further examination in the future.

1.10 The Government has recently announced its intention to develop a new rail station at Gogar and to create an interchange with the tram project. The tram project costs in the FBCv2 do not reflect the effect of this proposed project, which will be subject to appropriate assessment in due course and which will require to be funded under separate consideration. As is normal in transport project assessment, the influence of a new project on existing transport infrastructure, benefits and costs will require to be taken into account in the assessment of the new project. The proposal that a new interchange be created is likely to have a net beneficial effect on future tram revenues, and possibly BCR. However, no detailed work has been done to date in view of the relatively recent announcement of the Gogar project.

Phase 1a

1.11 The route for Phase 1a is as depicted in Figure 1.1 below.

Figure 1.0. Tram route for Phase 1a.



Facts for Phase 1a

Trams	Route	Service
27 trams	18km	5 min intervals between trams
250 passengers	22 stops	Integrated bus and tram ticketing
100% low floor	Single depot at Gogar	Inspectors on all trams

Background

1.12 Substantial road traffic growth across the Edinburgh area, combined with forecast increases in population and employment, will lead to significant growth in road congestion and demand for transport solutions. CEC has identified an integrated tram and bus network as the preferred way to provide the backbone for a comprehensive, higher quality public transport system to support the local economy and to help to create sustainable development. The ETN (“the tram”) has been central to transport policy and planning and the wider economic development aspirations of the city for more than seven years. The scheme has had in-principle funding support from the Scottish Government (now represented by Transport Scotland (TS)) since 2003.

- 1.13 Early 2006 saw the tram scheme reaching an important milestone as it received Parliamentary approval. Both the Edinburgh Tram (Line One) Act and Edinburgh Tram (Line Two) Act came into force following Royal Assent in May and April 2006, respectively.
- 1.14 Concurrent with the parliamentary process, a careful review of cost estimates was carried out which concluded that, although Line 1 only or Line 2 only had a high degree of deliverability within the constraint of available funding, a complete network of Lines 1 and 2 was unlikely to be affordable in one phase of construction and that a phased approach to procurement and delivery would be implemented.
- 1.15 The phasing assessment produced a proposal for Phase 1 comprising two sub-phases namely 1a – Newhaven to Edinburgh Airport; and 1b – Roseburn to Granton Square. The core of the network from Newhaven to Edinburgh Airport, via Haymarket and Princes Street, will give a good balance of costs and benefits, is forecast to be financially viable and can be effectively integrated with Lothian Buses (LB) services.
- 1.16 The proposed phasing also carries the support of Transport Edinburgh Limited (TEL), which is charged by CEC with the delivery and management of an integrated tram and LB network and of Transdev, the future operator of the tram.
- 1.17 The three core tests examined to assess the continued viability of the scheme are:
- **Economic viability** – The quantified economic benefits and costs of Phase 1a of the tram, as well as the wider benefits relating to urban regeneration; environment; safety; transport and land use policy integration; and accessibility and social inclusion;
 - **Financial viability** – The way in which Phase 1a of tram will be integrated with buses under the umbrella of TEL in a manner which preserves and enhances the public transport service in the city and does so in a profitable manner. This is embodied in the TEL Business Plan; and
 - **Affordability** – The prospective deliverability of Phase 1a of the tram within the constraints of available funding.

A summary of these core tests is set out below.

Economic viability

- 1.18 The economic benefits and costs of Phase 1a of the tram have been assessed in accordance with Scottish Transport Appraisal Guidance (STAG) by Steer Davis Gleave. This built upon the previous work submitted to Parliament in 2004 but was updated, where appropriate, to reflect more recent and extensive transport modelling, again led by Steer Davis Gleave. The following are the highlights from the assessment:

Economic regeneration

- 1.19 Phase 1a of tram is integral to the regeneration of the Newhaven and Leith area. Substantial new residential, commercial, retail and other development is projected progressively between now and 2020, reflecting the growth in Edinburgh's economy and population. Without Phase 1a of the tram it is unlikely this large scale redevelopment would go ahead on the desired scale and timetable.
- 1.20 Significant new development is also envisaged in West Edinburgh with some 250,000 m² of new office space (mostly at Edinburgh Park) and over 200,000 m² of other commercial space, again predicted to be progressively developed between now and 2020. Phase 1a of the tram will facilitate and encourage this new development and, crucially, provide improved public transport between the new housing in Leith and the new job opportunities in the west of the city.
- 1.21 In employment terms, it is anticipated that at least 590 full-time permanent jobs in the city will be generated or brought forward by the development impact of Phase 1a of the tram. These jobs do not displace jobs elsewhere in Scotland. It should also be noted that a substantial proportion of the capital investment will be spent in Scotland, encompassing utility works, land purchase, civil engineering works and professional services.

- 1.22 The positive relationship between high quality transport capability, specifically light rail, and enhanced economic development is a well-known phenomenon. There is also now little debate about the reverse scenario, the retarding impact on development of poor transport connections. The Edinburgh tram scheme is based on the need for improved transport connections to vital development areas, efficient capacity provision on key corridors and is a critical driver of future economic growth in Edinburgh and Scotland as a whole.

Environment

- 1.23 Phase 1a of the tram will make a positive contribution towards the objectives of reducing emissions and improving air quality in the city centre and in the transport corridor to the west of the city and the airport. Vehicles within the city account for up to 88% of emissions of nitrogen oxides and trams will provide a large number of journeys through the city centre, improving mobility and accessibility without adding to current levels of pollution. Trams are also a relatively quiet mode of road transport providing a higher quality environment for those living, working and travelling in the area. The tram's contribution to mode shift from private car to public transport (see below) will further progress the objectives set in the Air Quality (Scotland) Amendment Regulations 2002 and to national objectives to reduce emissions of greenhouse gases.
- 1.24 The construction and operation of Phase 1a of the tram will address potential impacts on the World Heritage Status of Edinburgh by applying the design and mitigation standards set out in the Tram Design Manual, approved by CEC planners. Details of mitigation measures to retain, protect and enhance or replace existing plantings and wildlife habitats on Phase 1a, including badger setts, are prescribed in the Environmental Management Plan and specific elements were approved during the Parliamentary process.
- 1.25 To the fullest extent reasonably deliverable, disruption during construction will be minimised. Clear and open communications will ensure that the effects of construction are anticipated and the construction planning will ensure that work is restricted to the shortest time period consistent with safe working practice. Schemes to provide financial assistance to local businesses affected by construction have been implemented.

Safety reliability and capacity

- 1.26 Personal security will improve, reflecting tram design elements (CCTV and help points at all stops and vehicles) and designed access arrangements aimed at enhancing security. The planned use of inspectors on all vehicles will also assist this objective, as experience in other cities has clearly shown.
- 1.27 Trams will improve the overall reliability of public transport as they generally benefit from greater segregation from general traffic and priority at junctions. They also present an opportunity to significantly reduce the variability of dwell time at stops compared to a bus-only public transport service. In the absence of trams, a significantly increased number of bus vehicles would be required on the main Phase 1a corridor on Princes Street and Leith Walk to cope with forecast increased demand. Despite continuing implementation of a wide range of bus priority measures, buses remain vulnerable to the effects of increasing congestion across the city.

Accessibility and social inclusion

- 1.28 In areas around Leith Walk and Saughton and Balgreen in the west socio economic status is considerably lower than surrounding areas and employment, income levels and car ownership tend to be comparatively low. Opportunities for people living in these areas will be improved by direct connection via tram to the city centre and other employment areas, including the new development in Leith and the west of the city at Edinburgh Park and the airport.
- 1.29 Trams and tram stops will be fully accessible by people with mobility impairments, those travelling with small children and the elderly. These travellers will benefit from the design specification, ride-quality and reliable accessibility of trams. Where the distance between tram stops presents a challenge to accessibility, the service integration patterns with buses have been designed to maximise the continuing and improving accessibility of LB.

Transport and land use integration

- 1.30 The tram will be particularly vital in responding to the expected growth in travel demand arising from the new development in the north of Edinburgh at Leith. Phase 1a of the tram will help ensure this new development can be delivered without exacerbating city wide congestion by ensuring that land use and transport policies are integrated. Any displacement of new development to greenfield and greenbelt sites would have planning implications and could result in a settlement pattern that would be more difficult to serve by public transport.
- 1.31 Carefully considered bus-tram service integration plans and common ticketing arrangements will enhance the opportunity to make journeys on the public transport network. Effective interchange facilities will be provided at Ocean Terminal, the Foot of Leith Walk, St Andrew Bus Station, and the Gyle Shopping Centre. The tram route will integrate with Ingliston Park and Ride, already operating successfully and planned for expansion, and with other park and ride sites under active consideration. Phase 1a of the tram also provides an opportunity to significantly improve integration with other transport modes, particularly at Haymarket and Edinburgh Park railway stations and Edinburgh Airport. These interlinking services, along with the proposed frequency of the service, means tram will afford easier access to employment, retail and leisure locations.

Patronage and transport mode shift

- 1.32 Extensive work has been undertaken to build new demand forecasting models to predict use of the tram and the impact upon the use of other forms of transport (bus, rail and car). The modelling deployed to support the Edinburgh tram scheme is recognised by the professionals involved as among the most sophisticated ever prepared in support of a large-scale transport scheme.
- 1.33 Annual demand for Phase 1a is predicted to be 11m tram passengers in 2011 and to rise to 25.5m by 2031. This growth is predicated on a forecast of substantial growth in the total travel market, as well as the additional predicted commercial and housing development as a result of the scheme. Between 2005 and 2031, demand for journeys by public transport is forecast to increase by 61% (1.8% p.a.). In the context of economic growth in Edinburgh and actual experience of patronage growth by LB, this is a conservative estimate with actual growth in bus patronage in 2006 of around 5% p.a. The tram provides the capacity to meet a large proportion of this increased demand which could otherwise be met only by cars or considerably more buses on increasingly congested roads.
- 1.34 Modal shift from car is a key objective of the Local and Regional Transport Strategies (LTS and RTS) and is fundamental to achieving the environmental, sustainability, health and traffic aspirations of the tram. Phase 1 (Phase 1a and Phase 1b) of the tram project are forecast to generate 3m additional public transport trips in 2011, increasing to over 6m additional trips in 2031. These are mostly in areas directly served by the tram where the change from car to public transport will be up to 10%. It is estimated Phase 1a will produce approximately 2.5m of these trips by 2011, rising to 4.2m by 2031.

- 1.35 In 2011, about 17% of tram patronage will be new to public transport, rising to 20% in 2031. The balance of the increase will predominantly be those who would otherwise travel by bus and other modes of public transport. Congestion is characterised by the disproportionate effect that marginal increases in car use have on the total system. Therefore, it is very important to maintain downward pressure on additional road use and the proportion of tram patronage new to the public transport market is therefore significant. It is also in keeping with results achieved on successful tram schemes elsewhere such as Croydon Tramlink, Nottingham, and Dublin.

Benefits and costs to Government

- 1.36 The benefits and costs of Phase 1a of tram calculated in accordance with STAG requirements are summarised in the Table 1.1. The FBCv2 has been prepared on the basis that will not proceed as per the advice received from the Scottish Government. The resulting BCR for Phase 1a of 1.77 represents an excellent return and reflects significant increased decongestion benefits to other road users (including cars). In the with EARL evaluation a proportion of these benefits were not accrued to the tram project due to the pre-existence of EARL already achieving some decongestion within the model.

Table 1.1. Value of the ETN benefits and costs for Phase 1a and resultant BCR (£m Present Value, 2002 prices).

£m Present Value, 2002 prices	Phase 1a	
	Without EARL	With EARL
Value of scheme benefits	592	373
Value of scheme costs	335	340
Net benefits	257	34
Benefit Cost Ratio to Government	1.77	1.10

Financial viability (the TEL Business Plan)

Background to TEL

- 1.37 TEL was established by CEC to build on the success of the current LB services through the delivery and management of an integrated tram and bus business. CEC requires TEL to achieve profitable operations, to meet its investment obligations and to continue payment of dividends broadly at the level currently received by CEC from LB.
- 1.38 Transdev are one of the world's largest tram operators and were awarded the development and operating contract in 2004. Using their wealth of experience, it will be their role to establish the tram operating system, reporting directly to TEL.
- 1.39 However TEL, like LB, will also target the delivery of a 'social dividend' by maintaining realistic and affordable fares and a more comprehensive level of service provision than would normally be the case for a private sector transport operator. TEL's objectives are also aligned to the delivery of the wider economic benefits of the tram. The measure of success for TEL will be the overall performance in commercial, social, customer and financial terms of the integrated bus and tram network. The summary presented here focuses on the drivers of the forecast financial results of TEL.
- 1.40 Section 9 provides a detailed analysis of the financial viability as it is presented in TEL's full Business Plan, a copy of which is included at Appendix I.

Financial forecast highlights

- 1.41 Table 1.2 provides a summary of the financial highlights from the forecast of TEL's profitability operating with bus and tram.

Table 1.2. TEL profitability operating with bus and Phase 1a tram.

Tram in service	Pre-tram						
	n/a	n/a	6/12	6/12	8/16	8/16	8/16
Tram service pattern (see below for explanation)							
Year	2006	2010	2011	2012	2016	2021	2031
Patronage (m Pax)							
Bus	108	117	113	115	125	133	150
Tram	-	-	11	13	19	21	25
Total TEL Patronage	108	117	124	128	144	154	175
Revenues and costs (£m)							
TEL Revenues	88	109	119	128	167	216	356
TEL operating costs			120	126	156	194	312
Pre-tax operating profit / (loss)			(1)	2	11	22	44
Tram lifecycle costs			-	-	1	2	2
Notional taxation			-	1	3	6	12
Dividend payment			-	-	3	3	5
Net TEL cash surplus / (deficit)			(1)	1	4	10	25

NB All £ figures inflated

- 1.42 The forecast represented in Table 1.2 has been developed using the patronage and revenue forecasts produced for the DFBC for both tram and bus using the transport model described above and validated by TEL, tie and Transdev. The forecast reflects that TEL is prospectively both a cash positive and profitable business. As explained above, the model is based on economic growth assumptions, which, in light of the actual experience of patronage growth to date, are considered conservative.
- 1.43 The patronage and revenue forecast for tram in 2011 to 2014 have been conservatively reduced to take account of a ramp-up period, as new services have, on occasion, taken time to be fully adopted by users. The forecast reflects that TEL's operational cash flow profile will be positive once the tram and bus patronage has stabilised after the first year of the ramp-up period in 2012.
- 1.44 For the DFBC, sensitivity testing was undertaken to assess the impact of EARL on TEL's patronage and revenue forecasts. These had confirmed the premises that EARL and tram would serve different patronage markets and that, although tram without EARL would gain some small market share, overall TEL revenues would be net neutral as the absence of EARL results in a marginally smaller overall public transport market within Edinburgh. It should be noted that the alternative option under consideration of linking heavy rail at Gogar with the tram line serving the airport will further improve the tram viability.
- 1.45 It is assumed that the policy of maintaining the current level of LB dividend to CEC will be applied prudently and that the annual dividend might be reduced or foregone for short periods in response to lower profits or short term demands on TEL's cash-flows. In such circumstances, the dividends for future periods would be adjusted upwards to ensure the shareholders receive the target dividend on a cumulative basis.
- 1.46 The projected operating costs for TEL include provisions for:
- The purchase of new buses to renew and / or expand the existing bus fleet; and

- The required expenditure on the tram infrastructure and vehicles necessary to ensure effective performance of the tram assets during their useful lives, including half-life refurbishment of the trams after 15 years (note: The TEL Business Plan does not specifically provide for the major replacement expenditure which will be required after 30 years).

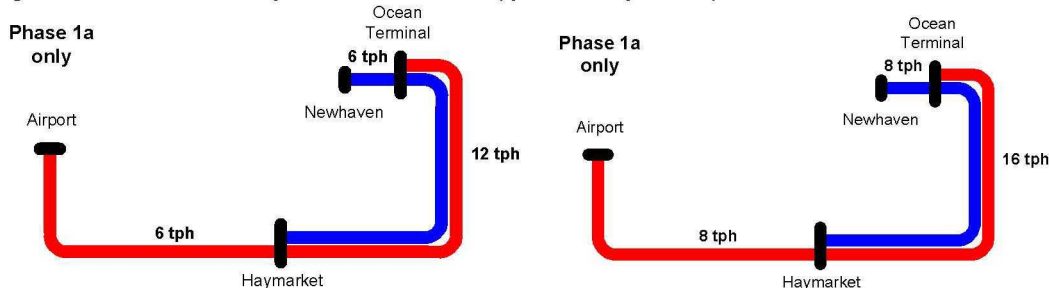
1.47 Updated information received from the bidders confirms the costs included in the DFBC for this are conservative.

1.48 Taxation is provided at the currently prevailing rate on forecast net profits, applied consistently with that of the DFBC. TEL, tie and CEC have begun to engage in the examination of tax mitigation opportunities in the same way as other commercial entities. As a result, the notional taxation applied in the table may be considered to be conservative.

Integrated service patterns

1.49 Using the geographical analysis of where forecast demand is likely to originate / terminate, TEL has developed a service integration plan reflecting planned tram services and bus services after the introduction of tram. The service patterns for tram must provide sufficient and reliable capacity to meet the demand and ensure overcrowding does not dissuade passengers from using public transport. The planned service patterns for opening of Phase 1a of the tram are depicted below (Figure 1.2).

Figure 1.2. Planned service patterns for Phase 1a (tph = trams per hour).



1.50 The forecast of demand indicates that, after the initial five years of growth, the '6 / 12' trams per hour service depicted above will require to be increased to provide sufficient capacity to serve demand on the Newhaven to Haymarket section. The TEL Business Plan assumes that from 2016, the service will be increased to an '8 / 16' trams per hour pattern. A further increase in services is likely to be required after the year 2027 to provide sufficient capacity to serve demand on the Haymarket to Edinburgh Park section of the tram network.

1.51 Where the tram runs parallel or close to an existing bus route amendments to bus service patterns are envisaged to prevent unnecessary overlap of services. The principle of any amendments will be that bus service reductions are only applied where the tram offers an acceptable alternative mode of travel. This approach will allow TEL to match the most effective mode of transport to levels of demand while the travelling public will continue to benefit from high quality public transport provision.

1.52 TEL's service integration plan aims to offer as near seamless a journey through the network as possible. The inconvenience of interchange is minimised by eliminating it where possible. The service integration plan seeks to achieve optimal alignment of service frequencies at interchanges, thus making interchanging as simple as possible and minimising the risk of loss of patronage. Key bus and tram interchange locations addressed by the service integration plan are Ocean Terminal, the Foot of Leith Walk, St Andrew Bus Station, and the Gyle Shopping Centre.

3rd party responses

1.53 Good relations with 3rd party operators are considered essential, not least due to the opportunities which enhanced integration with those operators may offer and the benefits of being part of the

wider provision of public transport within Scotland. Dialogue is underway to develop appropriate service plans with these operators, including common and through-ticketing arrangements.

Fares and ticketing strategy

- 1.54 The TEL fare structure will be a single, fully integrated, flat fare for bus and tram, regardless of the distance travelled. The only exceptions will be, as now, night services and journeys to and from the airport. It is a fundamental assumption that TEL's tram operations will participate in the national concessionary ticketing scheme in a manner equivalent to that of bus operations, in order to ensure parity across modes and sustain effective integration. Under the terms of the scheme, operators receive payment of 73.6% of the price of an adult single for each journey by concessionary travel holders and this currently applies to c20% of LB patronage. This level of recompense is assumed to continue.
- 1.55 The assumption is that the average fares yield for TEL will be increased at the rate of the Retail Price Index (RPI) +1% growth per annum. This is in line with historical increases in fares by LB, meets political and stakeholder expectations and supports TEL's aim to provide transport services at an affordable price.
- 1.56 Tram tickets are to be purchased off-board with ticket machines provided at all tram stops and a number of bus stops. The only tickets to be sold on-tram are to be adult and child single tickets, which will be priced at a premium above the price available from off-tram ticket vending machines. TEL will continue to develop LB's current strategy to encourage wider use of pre-paid and / or multi-journey types of tickets by offering discounts to the standard fare.

Revenue protection

- 1.57 Fare evasion and fraud on the existing LB bus network has been limited. Trams, with multi-door boarding, require active processes in place to limit the opportunity for fare evasion and fraud in general, as well as the particular need to enforce the premium airport fare. TEL's revenue protection regime for trams is a combination of placing inspectors on each tram and providing ticket machines at all tram stops, with a significant price incentive to buy a ticket off-tram. The presence of inspectors has also been shown to promote a sense of security for passengers and be an effective deterrent to anti-social behaviour.

Other income opportunities

- 1.58 TEL, with its combined bus / tram network, offers attractive opportunities to generate additional revenues from advertising, small-scale commercial development and marketing and tourism driven revenues. The TEL Business Plan includes a prudent assessment of the income which might be earned from these additional sources, based primarily upon the existing experience of LB.

Operating costs

- 1.59 TEL's bus operating cost projections are based on the current experience of LB for buses. Tram operating costs were validated by Transdev, and subjected to a thorough review and benchmarking process. They are based upon the planned service patterns and required number of tram vehicles. Effective control over all aspects of operating costs is essential for TEL to achieve its profit objectives. However, the public's perception of the quality of services translates directly to patronage and revenue generation. Therefore, TEL must balance opportunities for cost savings against the impact this may have on the quality of services provided.
- 1.60 Maintenance services are being procured separately. A significant proportion of the maintenance fees accruing will be based on key performance indicators (kpi's) including punctuality, availability and presentational standards.
- 1.61 TEL's success in realising the benefits expected from the integrated bus and tram business will be measured using a number of developed kpi's. These have been incorporated into the relevant

contracts and operating agreements with service providers to TEL including the operator of the trams, Transdev, and the maintenance providers for the tram system.

New development and economic growth risk to patronage and revenue forecasts

1.62 Phase 1a of the tram will encourage and facilitate the new development planned in North and West Edinburgh and stimulate economic growth in the city. However, the forecast future TEL patronage and revenues, both for bus and tram, is in turn highly sensitive to the level and timing of new development and the underlying level of economic growth. Sensitivity tests indicate that with new development delayed by five years in other areas, overall TEL revenue would be reduced by 3% in 2011 (12% in 2031).

1.63 In the event of slower than expected development or a general economic downturn, TEL would plan and implement services to match the reduced demand. On the Phase 1a corridor, where there is already a high level of demand, the opportunities to implement revised integrated service patterns for buses and tram, with commensurate savings in operating costs, would significantly mitigate the risk of failure to meet annual operating profit targets. In 2011, approximately 30% of forecast demand between Leith and Haymarket and 50% of demand between Haymarket and the airport will be directly dependent on new development.

Affordability

1.64 The summaries above demonstrate that Phase 1a on its own can deliver significant economic benefits in return for the proposed investment. Here we consider the affordability of Phase 1a of the tram in the context of visible funding and the risks being borne by the principle funders, with a particular emphasis on the risks retained by CEC. Section 10 contains the detailed analysis.

Cost estimates

1.65 Building on the detailed cost estimates prepared in November 2006, and incorporating the firm rates and prices received from bidders in 2007, the updated project cost estimates reflect the agreed scope for Phase 1a and a programme for delivery of Phase 1a by the first quarter 2011. If the option for Phase 1b was exercised within the window of opportunity to March 2009, it could commence revenue service in 2012.

	Concurrent construction	Sequential construction
Phase 1a	£498m	£498m
Phase 1b	£ 82m	£ 87m
Phase 1 in total	£580m	£585m

1.66 There is a high level of confidence in these estimates. Approximately 99.9% of the costs included are based on the rates and prices for firm bids received for the main contracts (infrastructure, tram vehicle supply, utility diversions and design), the remainder of the costs are based on known rates and prices for personnel and, in the case of land, from the Valuation Office Agency (District Valuer's) assessments. The overall level of confidence is reinforced by benchmarking against other tram schemes and the provisions for risk included in the estimate, as explained below.

1.67 It should be noted that a sum of approximately £3m has been incurred in relation of the design development for Phase 1b, and is included in the capital cost estimates for Phase 1b throughout this Business Case.

1.68 The updated estimates comprise base costs and an allowance for risk and uncertainty. A rigorous Quantitative Risk Analysis (QRA) has been applied to identify project risks to derive a risk allowance to deliver a very high level of confidence (statistically at a 90% confidence level, meaning that there is a 90% chance that costs will come in below the risk-adjusted level). The level of risk allowance so calculated and included in the updated estimate represents 15% of the

underlying base cost estimates for future Phase 1a costs at Contract Award. This prudent allowance for cost uncertainty reflects the evolution of design and the increasing level of certainty and confidence in the costs of Phase 1a as procurement has progressed through 2006 / 2007 and fixed priced bids for the infrastructure and tram vehicle supply contracts have been received.

- 1.69 **tie** and CEC will continue to analyse, quantify and mitigate risks during the period through to final negotiation and award of the tram vehicles (Tramco) and infrastructure (Infraco) contracts and during construction with the objective of reducing or eliminating the impact of individual quantified risks and thereby the element of the allowance for risk which crystallises into actual costs.
- 1.70 The principal elements of the base cost estimates are:
- **Utility diversions** – The Multi Utility Diversion Framework Agreement (MUDFA) was awarded in October 2006 and rates, prices and allowances in the contract have been reflected in the updated estimate;
 - **Tram vehicles** – Tenders were received for Tramco in October 2006 and the updated estimate reflects those of the anticipated Preferred Bidder;
 - **Infrastructure** – Tenders were issued for Infraco in October 2006 and the updated estimate reflects those of the recommended Preferred Bidder. The cost estimates have been benchmarked against other comparable tram schemes;
 - **Land compensation costs** – Estimates have been provided by the District Valuer (DV) and are subject to regular review. Reviews performed in spring 2007 confirmed the adequacy of the estimates; and
 - **Internal costs** – Comprises mainly the firm price SDS design costs, as contracted, plus the costs of project management team and overhead, legal costs related to procurement and support of approval processes and the support of the operator. All of these costs have been estimated using a detailed resourcing plan to which staff costs and rates agreed with service providers have been applied.
- 1.71 The Infraco and Tramco contract cost and the MUDFA contract rates are fixed at outturn price levels. The base estimate costs for remaining items, principally internal costs, are based on fully inflated cost estimates supplied by service providers and on industry standards for salary cost inflation.
- 1.72 In summary, the cost estimate reflects substantial external validation from the procurement process for the major contracts and contains a sensible level of risk contingency.

Measuring affordability

- 1.73 On 27th June the Scottish Government confirmed support for up to £500m funding for the Edinburgh Tram scheme. In January 2006, CEC made an in-principle commitment to make a contribution of £45m towards the capital cost of Phase 1, to be deployed initially on Phase 1a. Therefore, the benchmark total funding package is currently £545m. The updated cost estimates above reflect that Phase 1a, at a cost of £498m, is affordable within this level of funding, with 14% headroom over and above the 15% risk allowance provided for in the cost estimate.

Application of available funding

- 1.74 Payment for capital costs will be made by **tie**, in accordance with principles of the contractual payment mechanisms for each contract. A detailed table showing the profile of planned expenditure is included in Section 10. Funding from the Scottish Government and CEC is for capital expenditure only. All operating and lifecycle costs in relation to the tram will be borne by TEL. This means that CEC, in its capacity as sole shareholder of TEL, is explicitly bearing the risks in relation to revenues, operating costs and the long-term maintenance of the tram insofar as these risks are not wholly, or partly, passed contractually to the private sector.
- 1.75 CEC must balance its desire to support the project with its fiduciary responsibility and limited resources. Therefore, CEC's contribution, comprises only such amounts as could reasonably be expected to be funded from future tram-related development income and receipts, rather than from general funds or from Council Tax. The anticipated sources of such receipts include land contributions by CEC, anticipated development gains accruing to the Council on Council-owned sites, Section 75 planning agreements already negotiated and anticipated future agreements, third party developments around the tram route and anticipated capital receipts from tram related Council owned sites.
- 1.76 Transport Scotland and CEC have agreed to work together to regularly review and revise (as necessary) the contribution schedule, as required by the Grant process.

Procurement strategy and risk allocation

- 1.77 The Procurement Strategy followed by **tie** responds to feedback from the National Audit Office (NAO) in 2004 on the effectiveness of light rail schemes. The objectives of the Procurement Strategy are summarised as follows:
- Transfer the design, construction and maintenance performance risks to the private sector;
 - Minimise the risk premium (and / or exclusions of liability) that bidders for a design, construct and maintain contract normally include. Usually at tender stage bidders would not have a design with key consents proven to meet the contract performance obligations and, hence, they would usually add risk premiums for this;
 - Mitigation of utilities diversion risk (i.e. potential impact of delays to utilities diversion programme on Infraco works); and
 - Gain the early involvement of the operator to mitigate the risk relating to the future operation of the tram.
- 1.78 To date, **tie** has entered into four key contracts:
- **Development Partnering and Operating Franchise Agreement (DPOFA)**
Awarded to Transdev in 2004;
 - **System Design Services (SDS)**
Awarded to Parsons Brinkerhoff in September 2005;
 - **Joint Revenue Committee (JRC)**
Awarded to Steer Davis Gleave in September 2005; and
 - **Multi Utilities Diversion Framework Agreement (MUDFA)**
Awarded to Alfred McAlpine in October 2006.
- 1.79 This leaves the two main contracts to be placed, namely:
- **Infrastructure provider and maintenance (Infraco)** – The tender process is close to conclusion with the contract to be awarded in January 2008 on conclusion of final negotiations and completion of design due diligence. BBS, a consortium comprising Bilfinger Berger and Siemens Group, has now been recommended by **tie** as the preferred bidder for this contract.
 - **Vehicle Supply and maintenance (Tramco)** – The tender process is close to conclusion with the contract to be awarded in January 2008 on conclusion of final negotiations and completion of design due diligence. Spanish firm CAF has now been recommended by **tie** as the preferred bidder for this contract.

1.80 The Infraco will act as a “holding contract”, with the intention that the design and vehicle provision (including maintenance contract) will be novated to the Infraco at the point of award. The entire strategy has been developed to help facilitate the speedy implementation and completion of the construction phase of the project and to remove uncertainty and, therefore, cost from bidders’ proposals i.e. to deliver value for money.

1.81 In summary, the key attributes of the strategy are:

- The separation of system delivery and operations – To focus organisations on their strengths and to minimise mark-ups and risk premiums;
- Early introduction of the operator – To ensure effectiveness of design, construction and commissioning ready for operation;
- Early commencement of design by the SDS contractor – To reduce scope and pricing risk in Infraco and Tramco bids and to reduce the overall project programme;
- Separate procurement of the tram vehicles – To enable the selection of the optimum combination of tram vehicle and infrastructure suppliers;
- Re-aggregation of the supply chain at the point of award – By novation of the SDS and Tramco contracts to Infraco, thereby creating single point responsibility for design, construction, commissioning and subsequent maintenance of the tram system, with consequential transfer of performance risk to the private sector;
- Maintenance of the tram vehicles and infrastructure for up to 15 years post commencement of operations by Tramco and Infraco – To incentivise selection of components with ‘whole-life’ costs in mind and to incentivise Infraco to mitigate the risk of latent defects arising during the operational phase;
- Separate procurement of utilities works under MUDFA – To enable completion of the utilities diversions before commencement of infrastructure works, thus reducing risk during the construction phase and avoiding the risk premiums that would otherwise be included if this work was included with the Infraco package;
- Validation of the SDS designs by a Technical Support Services (TSS) consultant – To provide comfort that the designs produced will deliver the required performance;
- Incentivise delivery in accordance with programme – By adopting a milestone payment mechanism in the SDS, Tramco and Infraco contracts, with a significant element of the price withheld pending completion of system reliability tests; and
- Bonds and Warranties in the SDS, Tramco and Infraco contracts – To provide recourse in the event of failure.

1.82 These arrangements provide early involvement of the tram system operator, risk transfer to the private sector at an affordable level, a shorter overall programme and a single point of responsibility for the delivery of the operating tram system and subsequent maintenance.

1.83 Section 7 provides a detailed analysis of the Procurement Strategy and Section 11 describes the approach to risk management in all aspects of the project.

Risks retained by the public sector

1.84 The Procurement Strategy, when fully implemented, will be effective in transferring a very significant number of risks to the private sector. However, as explained above, the strategy is also predicated on delivering value for money, and certain risks are retained in the public sector where they can be effectively managed. **tie** maintains a comprehensive register of all identified risks in relation to the project and has an active management and mitigation plan for each risk. Where these risks can be quantified they have be assessed and included in the risk allowance in the capital cost estimates.

1.85 As the project moves towards physical construction, the following are the most significant risks which could impact on the delivery of the project on time and within the capital cost estimates (including risk allowances):

- **Utility diversions** – **tie** will manage the interface between utility diversions and the follow-on works by Infraco. A significant delay in the hand over of worksites to the Infraco could result in

significant financial penalties to the extent these are not met by the MUDFA contractor's liability limits. For this reason, a prompt start to these works was made in 2007, including advance works at the Gogar depot site. This allowed some of the delay, caused by the review of the project following the May election, to be absorbed. The current programme is fully aligned with the preferred Infraco bidder's programme of works and progress to date has been excellent with no major issues encountered so far;

- **Changes to scope or specification** – A great deal of care has been taken in defining the scope and specification of the tram project throughout the Parliamentary process and during design development, with input from TEL and Transdev and extensive consultation with CEC and TS. However, significant unforeseen changes to scope and specification could have a very significant impact on the deliverability of the project. Similarly, any changes introduced by stakeholders that are over and above the approved scope will increase the project estimate. Effective management of the consideration of changes through the Governance processes implemented for the project will be vital to mitigate this risk; and
- **Obtaining consents and approvals** – Responsibility for the preparation and application for most necessary consents and approvals has been passed to the SDS provider and this risk will pass to the Infraco at the point of novation. However, **tie** and the other stakeholders must continue to ensure there are clear strategies and effective processes to deliver all consents and approvals including planning approvals and Traffic Regulation Orders (TROs).

Implementation

- 1.86 **tie** has developed a number of key strategies and management plans to ensure the successful implementation of the construction phase of the project. They cover land acquisition, obtaining the required approvals and consents, compliance with statutory requirements and side agreements with 3rd parties, as well as traffic management plans and a people strategy. These are based on the policies developed through either public consultation or testing and consideration during the parliamentary process. They set out **tie**'s approach to mitigate the likely impacts of both the construction and operation of the tram.
- 1.87 Extensive work has been undertaken to establish the impact of tram on the wider traffic flows in Edinburgh and the finalisation of traffic modelling will include any necessary changes to the traffic arrangements that are indicated to be beneficial to the public.
- 1.88 In conjunction with development of the TEL Business Plan, the tram operating and maintenance contracts have been developed with a coordinated performance regime, safety management organisations and implementation plans. The contracts are aligned to achieve the integrated mobilisation, testing and commissioning of the tram and delivery of service.
- 1.89 A staged approach has been developed to allow passenger services to commence at a lower level of intensity, building with patronage growth and experience of revised road traffic flows through the city. Review and optimisation of traffic signal phasing will be performed in conjunction with CEC both before and after service commencement, to achieve effective traffic management.

Programme

- 1.90 The table below (Table 1.3) summarises, in chronological order, the key milestones achieved since the approval of the DFBC in December 2006 and the next stages of the project up to commencement of revenue service of Phase 1a. The detailed programme from which these dates have been extracted is described in Section 12 and has been prepared on the basis that contracts for Infraco and Tramco will be awarded in January 2008, with construction commencing in February 2008. The immediate start of construction is predicated on some limited mobilisation in late 2007.

Table 1.3. Milestone programme – Key dates

Milestones	Date
Approval of DFBC by CEC.	21 Dec 06*
Approval by Government of continuing funding including utility diversions based on the DFBC.	16 Mar 07*
TRO process commences.	28 May 07*
Tramco – Complete initial evaluation / negotiation.	07 Mar 07*
MUDFA – Completion of pre-construction period of MUDFA contract.	30 Mar 07*
MUDFA – Commencement of utility diversions.	09 July 07*
Infraco – Return of stage 2 bids.	08 May 07*
Tramco – Recommendation of Preferred Bidder.	19 Sep 07*
Infraco – Completion of evaluation / negotiation of bid.	09 Oct 07*
Infraco – Recommendation of Preferred Bidder.	15 Oct 07*
Tramco / Infraco – Final facilitation of novation negotiation complete.	16 Nov 07*
Tramco / Infraco – Final negotiation and appointment.	12 Dec 07
Infraco – Negotiation of Phase 1b complete.	12 Dec 07
Approval of FBC by CEC approval and funding for Infraco / Tramco and all related works to completion of project.	20 Dec 07
Tramco / Infraco – Award following CEC / TS approval and cooling off period.	28 Jan 08
Construction commences Phase 1a.	01 Feb 08
TRO process complete.	17 Nov 09
Commencement of test running Phase 1a.	27 Aug 10
Operations commence Phase 1a.	Q1 2011

*completed

The Business Case for Phase 1b

- 1.91 Phase 1 b (Roseburn to Granton Square) has a strong economic Business Case, but in the context of the £500m capped funding from the Scottish Government, the project funding position and risk appetite at this time, a Phase 1a only approach is recommended. It will be possible to progress with Phase 1b, with a limited financial penalty for this staggered approach, as long as commitment is made by 31 March 2009, following which, there could be substantial additional cost.

Economic viability

- 1.92 The strong incremental economic benefit of augmenting the network with the Roseburn to Granton tram line is a striking factor. There is a close relationship between this assessment and the scope and timing of new development at Granton, which carries both risk and opportunity. The economic benefits, alignment to planning objectives and financial implications that are specific to Phase 1b are summarised below.
- 1.93 The tram is integral to the regeneration of the brownfield area in the north of Edinburgh at Granton Waterfront. Some 7,800 new residential units and nearly 244,000 m² of new office, retail and other commercial development is projected to be built in Granton, progressively between now and 2020, reflecting the growth in Edinburgh's economy and population. The absence of Phase 1b of the tram is likely to have a substantial adverse effect on the scale and timetable for this redevelopment.
- 1.94 The forecasts reflect that by 2015 more than 4,500 residential units and 64,500 m² of employment related development in Granton will be not be built in the absence of Phase 1b of the tram. Beyond 2015, the predicted level of new development in Granton in the absence of tram recovers, but ultimately it is predicted that 3,800 residential units and 43,800 m² of new commercial development may not be built without Phase 1b of the tram.

- 1.95 In employment terms, it is anticipated that more than 930 full-time permanent jobs in the city will be generated, of which circa 340 can be attributed to Phase 1b. These jobs do not displace jobs elsewhere in Scotland.
- 1.96 On Phase 1b, Granton and Pilton to the north are areas where socio-economic status is considerably less affluent than surrounding areas and where employment, income levels and car ownership tend to be comparatively low. Opportunities for people living in these areas will be improved by direct connection via tram to the city centre and other development areas.

Benefits and costs to Government of a composite Phase 1a and 1b

- 1.97 The benefits and costs of Phase 1 of tram calculated in accordance with STAG requirements are summarised in the table below. The appraisal assumes that EARL, as discussed previously, will not proceed. Table 1.4 assumes that construction of Phase 1b would be commissioned prior to the end of March 2009, if not there will be a substantial penalty cost.

Table 1.4. Value of the ETN Benefits and costs for Phase 1, Phase 1a and incremental Phase 1b (£m Present Value, 2002 prices).

£m Present Value, 2002 prices	Phase 1	Phase1 a	Incremental Phase 1b
Value of scheme benefits	980	592	388
Value of scheme costs	424	335	89
Net benefits	556	257	
Benefit Cost Ratio to Government	2.31	1.77	

Note: Phase 1b is only operationally viable as part of the wider network of Phase 1. Therefore, no separate assessment of the NPV and benefits per £1 cost is performed.

Financial highlights – Phase 1b included

- 1.98 Table 1.5 provides a summary of the financial highlights from the forecast of TEL's profitability operating with bus and tram. This is based on a Phase 1a and Phase 1b approach and remains valid until March 2009, providing 1b is commissioned by that date.

Table 1.5. TEL profitability operating with bus and Phase 1a and Phase 1a and 1b tram.

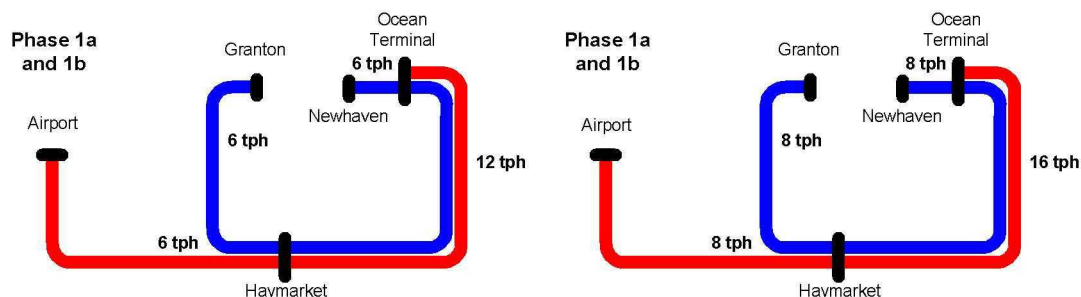
Tram in service	Pre-tram		Ph1a Only	Phase 1a plus 1b			
	n/a	n/a		6/12	6/12	8/16	8/16
Tram service pattern (see below for explanation)							
Year	2006	2010	2011	2012	2016	2021	2031
Patronage (m Pax)							
Bus	108	117	113	112	121	128	143
Tram	-	-	11	16	24	28	34
Total TEL Patronage	108	117	124	128	145	156	177
Revenues and costs (£m)							
TEL Revenues	88	109	119	128	168	216	357
TEL operating costs			120	127	157	195	312
Pre-tax operating profit / (loss)			(1)	1	11	21	45
Tram lifecycle costs			-	-	1	2	2
Notional taxation			-	-	3	6	13
Dividend payment			-	-	3	3	5
Net TEL cash surplus / (deficit)			(1)	1	4	10	25

NB All £ figures inflated

Integrated service patterns

- 1.99 TEL's strategic operational plan fully incorporates Phase 1b as an option. The planned service patterns for opening of Phase 1b, representing the completion of the combined Phase 1 (Phase 1a and Phase 1b), are shown in Figure 1.3.

Figure 1.3. Planned service patterns for Phase 1a and 1b combined (tph = trams per hour).



- 1.100 The operational assumptions and strategies that apply to an integrated bus and tram network including Phase 1b are the same as for Phase 1a alone (in terms of service integration, ticketing and operating costs). The financial highlights above show that TEL is potentially a very viable and profitable business. However, there is a higher level of uncertainty attached to the forecasts for patronage and revenue on Phase 1b. Although forecast patronage on Phase 1b in 2011 amounts to approximately 30% of total tram passengers, nearly 70% of that demand will be directly dependent on the new development at Granton waterfront. In context, this represents a relatively small proportion of TEL's total revenue.
- 1.101 Compared to Phase 1a, the opportunities to mitigate the impact on operating profits of short-term lower demand are less on Phase 1b, since a greater proportion of the patronage will be carried by the tram on 1a. However, opportunities will exist to reduce the planned level of tram services to mitigate any negative impact.

Affordability

- 1.102 There is no doubt that pursuing Phase 1b in tandem with Phase 1a, with either concurrent or staggered construction, further enhances the Business Case. However, it is recognised that, within current funding constraints alternative sources of funding will be required. Nevertheless, there is a reasonable period, during which the opportunities for funding can be investigated. This will also give time for risks currently pertinent on Phase 1a to crystallise / disappear during this period and this may give impetus to the possibility of undertaking and completing Phase 1b in an overlapped timeframe with 1a.

Funding requirements

- 1.103 To date, TS and CEC have approved funding which should be sufficient to meet forecast expenditure commitments up to Financial Close, scheduled for January 2008. This includes funding for compensation under a General Vesting Declaration (GVD) process to secure land required for the construction of Phase 1a and for the design, development and commencement of utility diversions.
- 1.104 Upon approval of this FBC, **tie** will require approval and immediate release of the remaining funding committed to the project, as per the milestone drawdown schedule under discussion between CEC and TS.

Summary of specific approvals arising from this Business Case

- 1.105 To approve the recommendation that the Edinburgh Tram Project Phase 1a proceeds at an estimated cost of £498m.
- 1.106 To approve the selection of the chosen preferred bidder for the Infraco and Tramco contracts.
- 1.107 To approve the request to **tie** Limited, with CEC officials, to examine the means of funding Phase 1b, with a view to potential commitment in 2008.

Conclusion

- 1.108 The Edinburgh Tram Project has now been under assessment for more than seven years. During that period, the underlying rationale for the project, support to the growth of the Edinburgh economy by providing high quality transport connectivity, has been reinforced by events. The city's economy and population continue to grow and the prospects are that this will continue. The Scottish economy as a whole is strongly influenced by the success of Edinburgh.
- 1.109 The Business Case seeks to set out in an objective and clear manner the advantages and disadvantages of the proposed scheme as a means of providing the enhancement to transport provision which the city will require if its growth ambitions are to be realised. The documentation reflects the scale and complexity of the scheme and the need for rigorous, professional analysis of the proposal. In its entirety, the document should represent a "balanced scorecard" assessing all the key aspects of the proposal. The document also sets out the means by which the project may be implemented in a risk-controlled manner, should the Business Case be approved.
- 1.110 The responsibility for delivering this document was given to the Tram Project Board by CEC through TEL. It is these organisations who now have the responsibility of concluding on the way forward for the project, based on the evidence presented in this Business Case.