
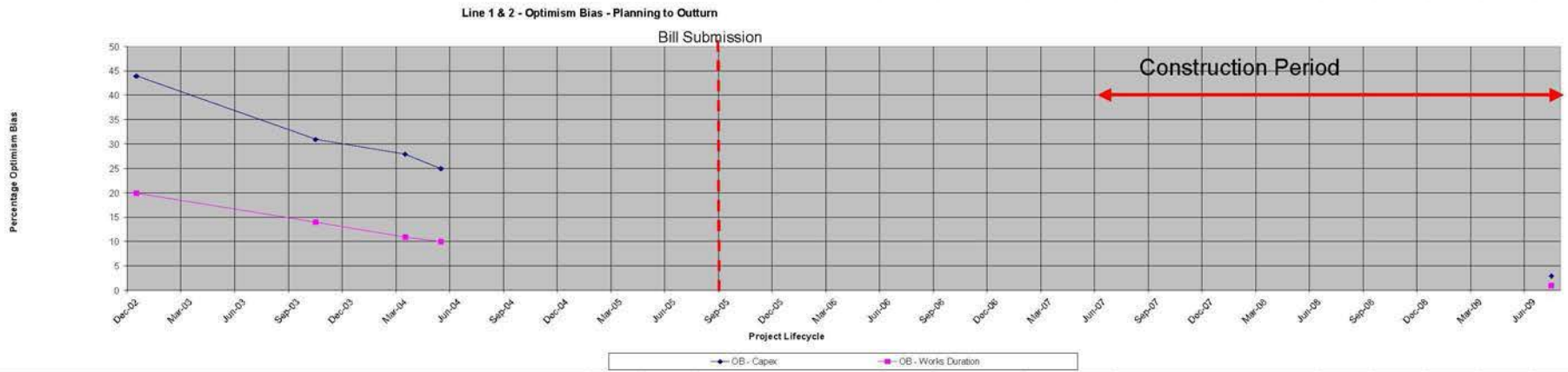


	A	B	C	D	E	F	G	H	I
1	Transport Initiatives Edinburgh								
2	Line 1 and 2 Tram Schemes								
3	Project Risk Register								
4									
5									
6									
7									
8									
9	Revision	Date	Prepared By						Comments
10									
11	21	25-Mar-04	Mark Bourke						Risks re-referenced according to significance
12									Optimism Bias re-calculated for scheme at March 2004 with comparison against October 2003
13									Calculation included in STAG and PFCs
14									New worksheet added to indicate profile of Optimism Bias
15									
16	22	08-Jun-04	Mark Bourke						Risk mitigations expanded for those risks increased or decreased by proposed InfraCo procurement strategy.
17									New risks Ref. 160 to 172, as identified by tie as a result of emerging InfraCo procurement strategy
18									Risk mitigation updated with tie (PAE) & tie (TRO) comments from D&W for risks Ref. 4,5,6,34,130 and 155
19									New risks Ref. 173 to 175, as identified by D&W as a result of objection analysis, management and preparation of evidence
20									FM comments on proposed mitigation (Ref. 4, 5, 6, 25 and 148), mitigation factors Ref. 7,11,13,27,29,34,35,36,37,39,59,62,81,83,90,100,109,111,113,125,148 and 153) and responsibility for leading and supporting mitigation amended (Ref.25,27,31,35,36,60,81 and 127)
21									DLA comments on extent of mitigation and closure of DPOF risks added (Ref.1,6,7,13,23,42,43,46,54,55,57,92,93,94,95,96,133,141 and 147)
22									MM comments on mitigation factor and mitigations for Ref. 6,15,25 and 73
23									Due dates for mitigations reviewed and revised for risks due for completion by May 2004
24									OB Calculation Worksheet for May 2004 Added for Line 1 and 2. OB Profile Chart updated
25									Register re-ordered in priority of significance and Charts updated
26									
27	Optimism Bias Refresh in May 2004 calculation - 25% on capital estimates and 10% on programme estimates								

Transport Initiatives Edinburgh
Line 1 and 2 Tram Schemes
Project Risk Register
Profile of Optimism Bias



A summary chart of the progress of reducing Optimism Bias is shown below that indicates a measure of progress in risk management.

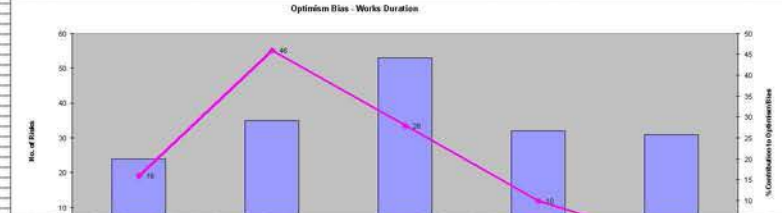
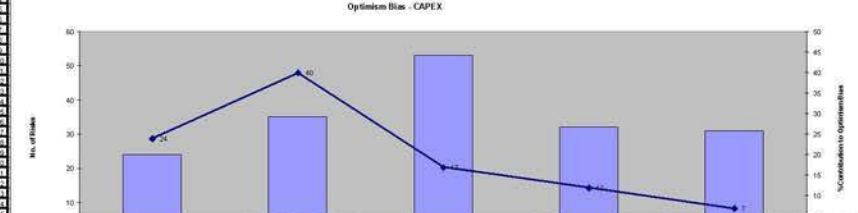
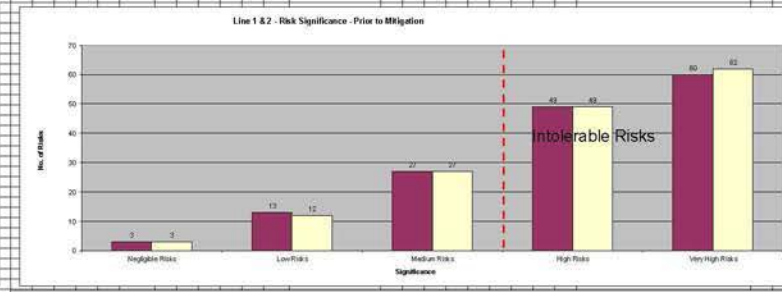
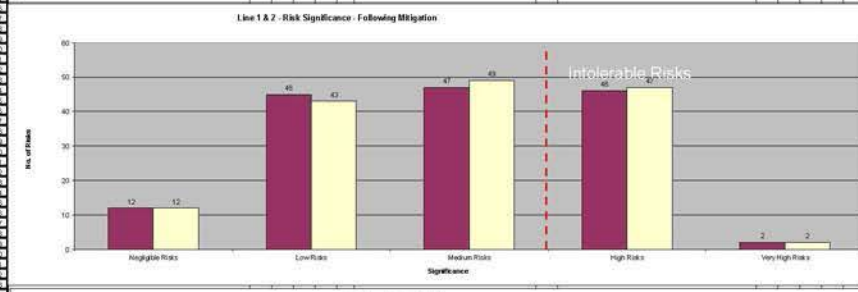
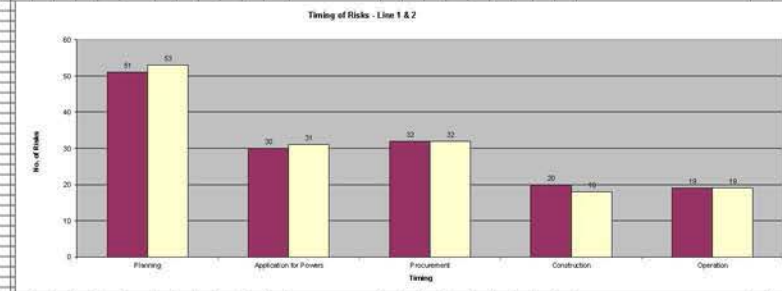
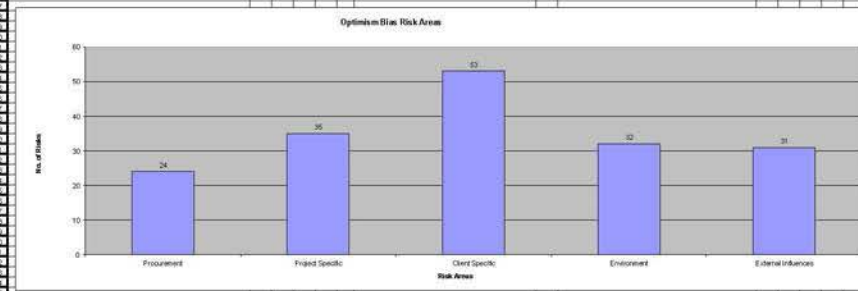
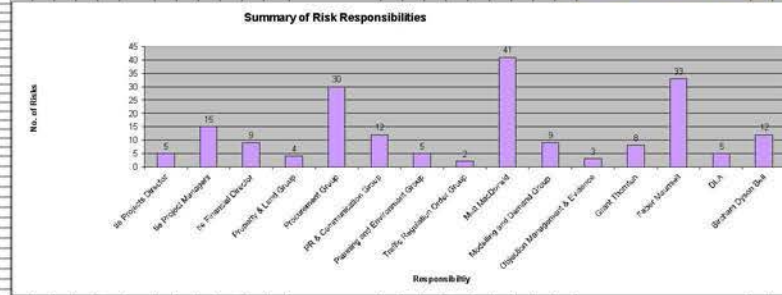
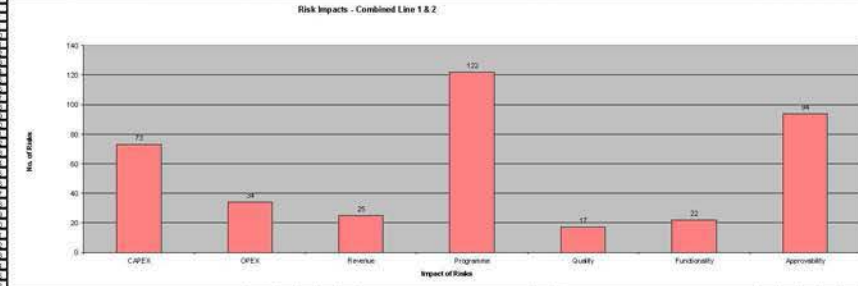


Event	Date	OB - capex	OB - works	
Appointment of Advisors	Dec-02	44	20	Upper Bound Starting Values (HM Treasury)
Calculation of OB for STAG & PFCs	Oct-03	31	14	
OB Refresh	Mar-04	28	11	
OB Refresh	May-04	25	10	
Application for Funds				
Commencement of Construction	Jul-06			
Completion of Construction	Jul-09	3	1	Minimum Values (HM Treasury)

Transport Initiatives Edinburgh
Line 1 and 2 Tram Schemes
Project Risk Register



SUMMARY CHARTS





Item No.	Description	Unit	Quantity	Rate	Amount	Item No.	Description	Unit	Quantity	Rate	Amount
1	General Contracting					1	General Contracting				
2	Excavation	cubic yard	100	10.00	1000.00	2	Excavation	cubic yard	100	10.00	1000.00
3	Backfill	cubic yard	100	10.00	1000.00	3	Backfill	cubic yard	100	10.00	1000.00
4	Concrete	cubic yard	100	10.00	1000.00	4	Concrete	cubic yard	100	10.00	1000.00
5	Rebar	linear foot	100	10.00	1000.00	5	Rebar	linear foot	100	10.00	1000.00
6	Formwork	square foot	100	10.00	1000.00	6	Formwork	square foot	100	10.00	1000.00
7	Paint	gallon	100	10.00	1000.00	7	Paint	gallon	100	10.00	1000.00
8	Electrical	hour	100	10.00	1000.00	8	Electrical	hour	100	10.00	1000.00
9	Plumbing	hour	100	10.00	1000.00	9	Plumbing	hour	100	10.00	1000.00
10	Mechanical	hour	100	10.00	1000.00	10	Mechanical	hour	100	10.00	1000.00
11	Roofing	square foot	100	10.00	1000.00	11	Roofing	square foot	100	10.00	1000.00
12	Insulation	square foot	100	10.00	1000.00	12	Insulation	square foot	100	10.00	1000.00
13	Drywall	square foot	100	10.00	1000.00	13	Drywall	square foot	100	10.00	1000.00
14	Paint	gallon	100	10.00	1000.00	14	Paint	gallon	100	10.00	1000.00
15	Flooring	square foot	100	10.00	1000.00	15	Flooring	square foot	100	10.00	1000.00
16	Lighting	hour	100	10.00	1000.00	16	Lighting	hour	100	10.00	1000.00
17	HVAC	hour	100	10.00	1000.00	17	HVAC	hour	100	10.00	1000.00
18	Plumbing	hour	100	10.00	1000.00	18	Plumbing	hour	100	10.00	1000.00
19	Electrical	hour	100	10.00	1000.00	19	Electrical	hour	100	10.00	1000.00
20	General Contracting					20	General Contracting				

The image shows a small, partially visible spreadsheet or data table. It features a grid structure with multiple rows and columns. The top row contains a header with the letters 'A' through 'Z'. The table is mostly empty, but there are several colored cells: a blue cell in the second row, a cyan cell in the third row, and a row of cells in the fourth row colored orange, yellow, and pink. A small green icon is visible in the top right corner of the table area.

Activity	Start	End	Duration	Resources	Notes
Project Planning	2023-01-01	2023-01-15	14	Project Manager	Initial project setup and planning.
Requirements Gathering	2023-01-15	2023-02-15	31	Business Analysts	Collecting requirements from stakeholders.
System Design	2023-02-15	2023-03-15	30	System Architects	Designing the system architecture.
Development	2023-03-15	2023-05-15	61	Developers	Writing code for the system.
Testing	2023-05-15	2023-06-15	31	QA Engineers	Conducting unit and integration tests.
Deployment	2023-06-15	2023-06-30	15	Operations	Deploying the system to production.
Post-Deployment	2023-06-30	2023-07-31	32	Support	Monitoring system performance and user feedback.

The image shows a small, partially visible spreadsheet or data table. It has a grid structure with multiple rows and columns. Some cells are highlighted in different colors: blue, orange, yellow, and pink. A green '200' is visible in one of the cells. The table is mostly obscured by a large white area on the right side of the page.

	A	B	C
1	Transport Initiatives Edinburgh		
2	Line 1 and 2 Tram Schemes		
3	Project Risk Register		
4			
5	RESPONSIBILITIES		
6			
7	The responsibilities for ensuring that the actions identified to mitigate the risk exposure have been identified in the risk register, and detailed as follows.		
8			
9	Actionee	Company/Group	Person Responsible
10	tie (TRO)	Traffic Regulation Order Group	Ann Faulds (Dundas & Wilson)
11	tie (PRO)	Procurement Group	Ian Kendall
12	tie (PR)	PR & Communication Group	Lesley Clark (Weber Shandwick)
13	tie (PMs)	tie Project Managers	Kevin Murray (Line 1) & Geoff Duke (Line 2)
14	tie (PD)	tie Projects Director	Alex Macaulay
15	tie (PAL)	Property and Land Group	Matthew Edgar (Colliers CRE)
16	tie (PAE)	Planning and Environment Group	Ann Faulds (Dundas & Wilson)
17	tie (OME)	Objection Management and Evidence Group	Ann Faulds (Dundas & Wilson)
18	tie (MAD)	Modelling and Demand Group	Jeff Knight
19	tie (FD)	tie Financial Director	Graeme Bissett
20	tie (CEO/Chair)	tie Chief Executive/Chairman	Michael Howell
21	MM	Mott MacDonald	Gary Turner
22	GT	Grant Thornton	John Watt
23	FM	Faber Maunsell	Doug Blenkey
24	DLA	DLA	Andrew Fitchie
25	BDB	Bircham Dyson Bell	Ian McCulloch
26			
27	For Distribution Purposes it is noted that MM/FM request the additional distribution, as follows.		
28			
29	<i>Andrew Oldfield, MM Project Manager (line 1)</i>		
30	<i>Gavin Murray, FM Project Manager (line2)</i>		
31	<i>Michael Lax, FM Project Manager (line 3)</i>		

	A	B	C	D	E	F
1	Transport Initiatives Edinburgh					
2	Line 1 and 2 Tram Schemes					
3	Project Risk Register					
4						
5	DEFINITIONS					
6	The significance of each risk will be classified by means of a 5-point AS/NZS system for combining 'impact' and 'likelihood' aspects of each risk in order to prioritise actions.					
7						
8						
9	The following financial and programme tolerances are proposed.					
10	Level	Impact	CAPEX (£)	OPEX/ Life-cycle/ Revenue (£ per annum)	Programme	
11	1	Insignificant	Up to £25k	Up to £25k	Up to 1 week	
12	2	Minor	>£25k to £100k	>£25k to £100k	>1 week to 2 weeks	
13	3	Moderate	>£100k to £500k	>£100k to £500k	>2 weeks to 1 month	
14	4	Significant	>£500k to £1m	>£500k to £1m	>1 month to 3 months	
15	5	Major	>£1m	>£1m	>3 months	
16						
17	The following range of likelihoods are proposed					
18	Level	Likelihood				
19	1	Remote				
20	2	Unusual				
21	3	Possible				
22	4	Probable				
23	5	Expected				
24						
25	The likelihood of risks and impacts can be combined in a 2-dimensional table as follows					
26						
27	Likelihood/ Impact	Insignificant	Minor	Moderate	Significant	Major
28	Remote	1	2	3	4	5
29	Unusual	2	4	6	8	10
30	Possible	3	6	9	12	15
31	Probable	4	8	12	16	20
32	Expected	5	10	15	20	25
33						
34	The following significance of risk has been adopted.					
35						
36	Significance	Range	Colour			
37	Negligible Risk	>=0 <4	WHITE			
38	Low Risk	>=4 <8	WHITE			

	A	B	C	D	E	F
39	Medium Risk	>=8 <12	ORANGE			
40	High Risk	>=12 <16	ORANGE			
41	Very High Risk	>=16	RED			
42						
43						
44	Mitigation Factor	Description				
45						
46	0.0	Risks are not mitigated				
47	0.0 to 1.0	Partial mitigation of risks				
48	1.0	All risks are fully mitigated				
49						
50						
51						
52						
53						

- Risk Type**
- 1 Generic TIE Strategic Risk
 - 2 Generic TIE Project Risk
 - 3 Generic Tram Project Risk
 - 4 Specific Tram Project Risk