

H D M - 4

Economic Analysis Summary

HIGHWAY DEVELOPMENT & MANAGEMENT

Study Name: **Highway_2020**

Run Date: **09-12-2020**

Currency: **US Dollar (millions)**

Discount: **12.00%**

Analysis Mode: **Analysis-by-Section**

Section: M-1 148.3 - 152.6

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	1.32	-0.29	0.00	6.61	1.80	0.00	0.00	0.00	7.37
Discounted	0.61	-0.12	0.00	1.13	0.29	0.00	0.00	0.00	0.93

Economic Internal Rate of Return (EIRR) = 24.1% (No. of solutions = 2)

Section: M-1 156.7 - 161.2

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

Undiscounted	3.69	-0.02	0.00	18.01	1.91	0.00	0.00	0.00	16.26
Discounted	2.33	-0.01	0.00	5.64	0.53	0.00	0.00	0.00	3.85

Economic Internal Rate of Return (EIRR) = 34.1% (No. of solutions = 1)

Section: M-2L 36.2 - 47.3

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	4.91	0.02	0.00	20.46	1.95	0.00	0.00	0.00	17.48
Discounted	3.24	0.01	0.00	6.32	0.44	0.00	0.00	0.00	3.52

Economic Internal Rate of Return (EIRR) = 25.8% (No. of solutions = 1)

Section: M-2R 28.9 - 37.8

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	3.69	-0.01	0.00	11.88	0.38	0.00	0.00	0.00	8.57
Discounted	1.95	-0.00	0.00	2.56	0.07	0.00	0.00	0.00	0.68

Economic Internal Rate of Return (EIRR) = 15.8% (No. of solutions = 1)

Section: M-2R 37.8 - 47.3

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	4.20	0.02	0.00	18.21	1.80	0.00	0.00	0.00	15.79
Discounted	2.72	0.00	0.00	5.55	0.42	0.00	0.00	0.00	3.24

Economic Internal Rate of Return (EIRR) = 27.7% (No. of solutions = 1)

Section: M-2 47.3 - 53.1

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	2.67	-0.00	0.00	16.96	1.62	0.00	0.00	0.00	15.92
Discounted	1.64	-0.00	0.00	5.27	0.43	0.00	0.00	0.00	4.06

Economic Internal Rate of Return (EIRR) = 42.6% (No. of solutions = 1)

Section: M-2 65.4 - 82

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	4.55	-1.10	0.00	63.96	21.64	0.00	0.00	0.00	82.15
Discounted	2.40	-0.46	0.00	12.34	3.94	0.00	0.00	0.00	14.35

Economic Internal Rate of Return (EIRR) = 37.9% (No. of solutions = 2)

Section: M-2 91.6 - 98

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	1.84	0.00	0.00	11.07	1.31	0.00	0.00	0.00	10.53
Discounted	1.69	0.00	0.00	3.69	0.41	0.00	0.00	0.00	2.41

Economic Internal Rate of Return (EIRR) = 30.4% (No. of solutions = 1)

Section: M-2 126.1 - 131.5

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	1.48	-0.36	0.00	22.72	7.20	0.00	0.00	0.00	28.81

Discounted	0.72	-0.15	0.00	4.43	1.33	0.00	0.00	0.00	5.20
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Economic Internal Rate of Return (EIRR) = 45.8% (No. of solutions = 2)

Section: M-2 131.5 - 142

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	5.06	0.00	0.00	16.88	1.84	0.00	0.00	0.00	13.65
Discounted	2.86	-0.00	0.00	5.02	0.50	0.00	0.00	0.00	2.66

Economic Internal Rate of Return (EIRR) = 26.9% (No. of solutions = 1)

Section: M-2 142 - 150.7

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	2.50	0.00	0.00	13.11	1.54	0.00	0.00	0.00	12.14
Discounted	2.40	0.00	0.00	4.41	0.50	0.00	0.00	0.00	2.51

Economic Internal Rate of Return (EIRR) = 26.4% (No. of solutions = 1)

Section: M-2 174.1 - 187.3

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	7.26	-0.88	0.00	43.96	13.83	0.00	0.00	0.00	51.41
Discounted	2.57	-0.37	0.00	8.47	2.58	0.00	0.00	0.00	8.84

Economic Internal Rate of Return (EIRR) = 35.5% (No. of solutions = 2)

Section: M-2 187.3 - 196

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	3.29	-0.01	0.00	8.61	0.41	0.00	0.00	0.00	5.75
Discounted	1.91	-0.00	0.00	2.03	0.08	0.00	0.00	0.00	0.21

Economic Internal Rate of Return (EIRR) = 13.5% (No. of solutions = 1)

Section: M-2 202.2 - 213.4

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in	Savings in MT Travel Time	Savings in	Reduction	Net	Net
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	MT VOC			Travel Time Costs	NMT Travel & Operating Costs	in Accident Costs	Social / Exogenous Benefits	Economic Benefits (NPV)
	Capital	Recurrent	Special					
Undiscounted	6.16	-0.75	0.00	51.95	17.42	0.00	0.00	63.96
Discounted	2.68	-0.31	0.00	12.94	4.32	0.00	0.00	14.89

Economic Internal Rate of Return (EIRR) = 52.7% (No. of solutions = 1)

Section: M-2 213.4 - 227.9

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	3.97	-0.96	0.00	44.51	15.27	0.00	0.00	0.00	56.77
Discounted	1.87	-0.41	0.00	8.52	2.76	0.00	0.00	0.00	9.81

Economic Internal Rate of Return (EIRR) = 40.2% (No. of solutions = 2)

Section: M-2 227.9 - 246.7

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	9.06	0.00	0.00	30.59	3.25	0.00	0.00	0.00	24.78
Discounted	5.62	0.00	0.00	9.45	0.87	0.00	0.00	0.00	4.69

Economic Internal Rate of Return (EIRR) = 23.9% (No. of solutions = 1)

Section: M-2 246.7 - 254

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	2.76	-0.01	0.00	6.73	0.30	0.00	0.00	0.00	4.28
Discounted	1.40	-0.00	0.00	1.44	0.05	0.00	0.00	0.00	0.10

Economic Internal Rate of Return (EIRR) = 13.0% (No. of solutions = 1)

Section: M-2 277 - 284.4

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	3.57	0.00	0.00	11.91	1.23	0.00	0.00	0.00	9.56
Discounted	2.22	-0.00	0.00	3.75	0.35	0.00	0.00	0.00	1.89

Economic Internal Rate of Return (EIRR) = 25.2% (No. of solutions = 1)

Section: M-2 289.1 - 299

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

Undiscounted	4.86	0.01	0.00	25.02	2.87	0.00	0.00	0.00	23.02
Discounted	4.50	0.00	0.00	8.25	0.93	0.00	0.00	0.00	4.67

Economic Internal Rate of Return (EIRR) = 26.0% (No. of solutions = 1)

Section: M-2 337 - 348.6

**Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted**

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	6.54	0.01	0.00	15.13	1.72	0.00	0.00	0.00	10.30
Discounted	3.72	0.00	0.00	5.30	0.61	0.00	0.00	0.00	2.19

Economic Internal Rate of Return (EIRR) = 22.6% (No. of solutions = 2)

Section: M-2 348.6 - 364

**Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted**

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	8.47	-1.03	0.00	66.30	20.85	0.00	0.00	0.00	79.71
Discounted	4.38	-0.43	0.00	17.23	5.38	0.00	0.00	0.00	18.66

Economic Internal Rate of Return (EIRR) = 50.7% (No. of solutions = 1)

Section: M-3 10.5 - 17.9

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	3.19	-0.01	0.00	14.08	1.41	0.00	0.00	0.00	12.32
Discounted	2.03	-0.00	0.00	4.53	0.33	0.00	0.00	0.00	2.84

Economic Internal Rate of Return (EIRR) = 29.1% (No. of solutions = 1)

Section: M-3 21.5 - 33.8

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	3.38	-0.01	0.00	16.61	0.75	0.00	0.00	0.00	14.00
Discounted	3.13	-0.00	0.00	5.17	0.18	0.00	0.00	0.00	2.22

Economic Internal Rate of Return (EIRR) = 20.3% (No. of solutions = 1)

Section: M-3 33.8 - 45.3

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	3.16	-0.02	0.00	18.75	0.89	0.00	0.00	0.00	16.50
Discounted	2.62	-0.01	0.00	5.47	0.20	0.00	0.00	0.00	3.06

Economic Internal Rate of Return (EIRR) = 25.2% (No. of solutions = 1)

Section: M-3 75.5 - 94.2

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	5.83	-1.25	0.00	103.00	31.94	0.00	0.00	0.00	130.35
Discounted	2.61	-0.53	0.00	20.05	5.97	0.00	0.00	0.00	23.94

Economic Internal Rate of Return (EIRR) = 48.0% (No. of solutions = 2)

Section: M-3 105.0 - 112.9

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	2.46	-0.53	0.00	37.05	11.59	0.00	0.00	0.00	46.71

Discounted	1.23	-0.22	0.00	6.91	2.02	0.00	0.00	0.00	7.92
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Economic Internal Rate of Return (EIRR) = 37.4% (No. of solutions = 2)

Section: M-3 116.9 - 127.9

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	3.02	-0.02	0.00	19.02	1.10	0.00	0.00	0.00	17.12
Discounted	2.88	-0.00	0.00	6.02	0.27	0.00	0.00	0.00	3.42

Economic Internal Rate of Return (EIRR) = 24.8% (No. of solutions = 1)

Section: M-4L 10.3 - 27.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	4.38	0.03	0.00	36.63	1.93	0.00	0.00	0.00	34.15
Discounted	3.27	0.01	0.00	10.55	0.41	0.00	0.00	0.00	7.69

Economic Internal Rate of Return (EIRR) = 38.6% (No. of solutions = 1)

Section: M-4L 35.5 - 48.0

Alternative: Programme Alternative vs Base Alternative
 No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	7.49	-0.83	0.00	54.38	18.48	0.00	0.00	0.00	66.20
Discounted	2.55	-0.35	0.00	9.87	3.22	0.00	0.00	0.00	10.88

Economic Internal Rate of Return (EIRR) = 35.8% (No. of solutions = 2)

Section: M-4L 48.0 - 61.0

Alternative: Programme Alternative vs Base Alternative
 No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	3.88	-0.86	0.00	48.00	16.13	0.00	0.00	0.00	61.11
Discounted	1.78	-0.36	0.00	9.52	3.03	0.00	0.00	0.00	11.14

Economic Internal Rate of Return (EIRR) = 43.7% (No. of solutions = 2)

Section: M-4L 61.0 - 73.3

Alternative: Programme Alternative vs Base Alternative
 No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in	Savings in MT Travel Time	Savings in	Reduction	Net	Net
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	MT VOC			Travel Time Costs	NMT Travel & Operating Costs	in Accident Costs	Social / Exogenous Benefits	Economic Benefits (NPV)
	Capital	Recurrent	Special					
Undiscounted	3.67	-0.82	0.00	35.92	11.55	0.00	0.00	44.61
Discounted	1.68	-0.34	0.00	6.74	2.06	0.00	0.00	7.46

Economic Internal Rate of Return (EIRR) = 36.5% (No. of solutions = 2)

Section: M-4R 12.7 - 26.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	5.43	-0.02	0.00	25.98	1.00	0.00	0.00	0.00	21.57
Discounted	2.85	-0.01	0.00	5.60	0.19	0.00	0.00	0.00	2.95

Economic Internal Rate of Return (EIRR) = 21.3% (No. of solutions = 1)

Section: M-4R 32.6 - 45.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	3.67	-0.82	0.00	62.72	20.70	0.00	0.00	0.00	80.58
Discounted	1.64	-0.35	0.00	11.67	3.66	0.00	0.00	0.00	14.03

Economic Internal Rate of Return (EIRR) = 44.8% (No. of solutions = 2)

Section: M-4R 45.0 - 59.4

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	4.26	-0.97	0.00	51.89	16.80	0.00	0.00	0.00	65.40
Discounted	1.90	-0.41	0.00	9.17	2.81	0.00	0.00	0.00	10.48

Economic Internal Rate of Return (EIRR) = 37.0% (No. of solutions = 2)

Section: M-4R 59.4 - 73.3

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	4.11	-0.92	0.00	37.64	12.04	0.00	0.00	0.00	46.49
Discounted	1.88	-0.39	0.00	6.69	2.05	0.00	0.00	0.00	7.25

Economic Internal Rate of Return (EIRR) = 33.2% (No. of solutions = 2)

Section: M-4 73.3 - 83.2

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

Undiscounted	3.70	-0.81	0.00	42.35	12.04	0.00	0.00	0.00	51.50
Discounted	1.74	-0.34	0.00	8.08	2.20	0.00	0.00	0.00	8.88

Economic Internal Rate of Return (EIRR) = 38.9% (No. of solutions = 2)

Section: M-4 108.5 - 118

**Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted**

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	2.91	-0.64	0.00	30.42	8.73	0.00	0.00	0.00	36.88
Discounted	1.37	-0.27	0.00	5.81	1.59	0.00	0.00	0.00	6.30

Economic Internal Rate of Return (EIRR) = 37.8% (No. of solutions = 2)

Section: M-4 118.0 - 128.0

**Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted**

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	3.06	-0.67	0.00	32.18	9.14	0.00	0.00	0.00	38.93
Discounted	1.44	-0.28	0.00	6.14	1.66	0.00	0.00	0.00	6.64

Economic Internal Rate of Return (EIRR) = 37.7% (No. of solutions = 2)

Section: M-4 134.0 - 144.1

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	3.09	-0.68	0.00	32.48	8.88	0.00	0.00	0.00	38.95
Discounted	1.45	-0.28	0.00	6.08	1.60	0.00	0.00	0.00	6.52

Economic Internal Rate of Return (EIRR) = 36.6% (No. of solutions = 2)

Section: M-4 144.1 - 148.2

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	1.84	0.00	0.00	6.10	0.65	0.00	0.00	0.00	4.91
Discounted	1.27	0.00	0.00	1.92	0.19	0.00	0.00	0.00	0.84

Economic Internal Rate of Return (EIRR) = 21.7% (No. of solutions = 1)

Section: M-5L 44.1 - 52.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	2.25	-0.52	0.00	16.28	4.89	0.00	0.00	0.00	19.43
Discounted	1.01	-0.22	0.00	2.91	0.83	0.00	0.00	0.00	2.96

Economic Internal Rate of Return (EIRR) = 30.6% (No. of solutions = 2)

Section: M-5R 44.1 - 52.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	2.31	-0.52	0.00	15.14	4.59	0.00	0.00	0.00	17.93
Discounted	1.03	-0.22	0.00	2.63	0.76	0.00	0.00	0.00	2.57

Economic Internal Rate of Return (EIRR) = 28.3% (No. of solutions = 2)

Section: M-5 52.0 - 59.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	2.49	-0.42	0.00	11.24	3.28	0.00	0.00	0.00	12.45

Discounted	1.52	-0.15	0.00	2.74	0.75	0.00	0.00	0.00	2.13
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Economic Internal Rate of Return (EIRR) = 25.4% (No. of solutions = 1)

Section: M-5 59.0 - 63.1

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	1.57	-0.25	0.00	7.13	2.15	0.00	0.00	0.00	7.95
Discounted	1.20	-0.09	0.00	2.18	0.63	0.00	0.00	0.00	1.70

Economic Internal Rate of Return (EIRR) = 26.9% (No. of solutions = 1)

Section: M-6 0.0 - 20.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	5.97	-1.34	0.00	22.49	6.53	0.00	0.00	0.00	24.40
Discounted	2.73	-0.56	0.00	3.69	1.00	0.00	0.00	0.00	2.53

Economic Internal Rate of Return (EIRR) = 20.3% (No. of solutions = 2)

Section: M-6 20.0 - 38.45

Alternative: Programme Alternative vs Base Alternative
 No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	5.50	-1.24	0.00	20.77	5.92	0.00	0.00	0.00	22.42
Discounted	2.52	-0.52	0.00	3.35	0.90	0.00	0.00	0.00	2.25

Economic Internal Rate of Return (EIRR) = 19.9% (No. of solutions = 2)

Section: M-7 19.0 - 30.5

Alternative: Programme Alternative vs Base Alternative
 No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	3.48	-0.77	0.00	13.52	4.21	0.00	0.00	0.00	15.01
Discounted	1.74	-0.32	0.00	2.28	0.66	0.00	0.00	0.00	1.52

Economic Internal Rate of Return (EIRR) = 19.2% (No. of solutions = 2)

Section: M-7 36.0 - 42.8

Alternative: Programme Alternative vs Base Alternative
 No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in	Savings in MT Travel Time	Savings in	Reduction	Net	Net
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	MT VOC			Travel Time Costs	NMT Travel & Operating Costs	in Accident Costs	Social / Exogenous Benefits	Economic Benefits (NPV)
	Capital	Recurrent	Special					
Undiscounted	4.13	-0.45	0.00	6.74	2.17	0.00	0.00	5.23
Discounted	1.18	-0.19	0.00	1.22	0.38	0.00	0.00	0.61

Economic Internal Rate of Return (EIRR) = 19.6% (No. of solutions = 3)

Section: M-8 10.5 - 13.2

Alternative: Programme Alternative vs Base Alternative

No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	9.11	-1.22	0.00	27.77	8.46	0.00	0.00	0.00	28.34
Discounted	5.55	-0.44	0.00	6.67	1.90	0.00	0.00	0.00	3.47

Economic Internal Rate of Return (EIRR) = 18.9% (No. of solutions = 1)

Section: M-8 13.2 - 33.5

Alternative: Programme Alternative vs Base Alternative

No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	6.03	-1.35	0.00	16.37	4.93	0.00	0.00	0.00	16.62
Discounted	2.47	-0.57	0.00	2.80	0.80	0.00	0.00	0.00	1.71

Economic Internal Rate of Return (EIRR) = 20.2% (No. of solutions = 2)

Section: M-9 3.6 - 14.6

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	5.61	-0.66	0.00	14.46	4.36	0.00	0.00	0.00	13.87
Discounted	2.88	-0.23	0.00	3.92	1.14	0.00	0.00	0.00	2.42

Economic Internal Rate of Return (EIRR) = 23.9% (No. of solutions = 1)

Section: M-9 14.6 - 25.4

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	4.14	-0.73	0.00	7.89	2.29	0.00	0.00	0.00	6.76
Discounted	1.89	-0.30	0.00	1.50	0.43	0.00	0.00	0.00	0.35

Economic Internal Rate of Return (EIRR) = 14.6% (No. of solutions = 2)

Section: M-9 25.4 - 41.4

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

Undiscounted	2.00	-0.50	0.00	31.35	8.87	0.00	0.00	0.00	38.72
Discounted	0.89	-0.21	0.00	5.74	1.53	0.00	0.00	0.00	6.59

Economic Internal Rate of Return (EIRR) = 42.6% (No. of solutions = 2)

Section: M-10 57.0 - 64.5

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	2.00	-0.50	0.00	30.95	9.28	0.00	0.00	0.00	38.73
Discounted	1.00	-0.21	0.00	5.97	1.67	0.00	0.00	0.00	6.85

Economic Internal Rate of Return (EIRR) = 39.9% (No. of solutions = 2)

Section: M-10 66.0 - 76.2

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	4.57	-0.00	0.00	10.66	1.02	0.00	0.00	0.00	7.11
Discounted	2.80	-0.00	0.00	3.34	0.31	0.00	0.00	0.00	0.85

Economic Internal Rate of Return (EIRR) = 17.3% (No. of solutions = 1)

Section: M-10 76.2 - 88.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	4.62	0.00	0.00	13.58	1.45	0.00	0.00	0.00	10.41
Discounted	3.16	-0.00	0.00	4.33	0.50	0.00	0.00	0.00	1.67

Economic Internal Rate of Return (EIRR) = 20.1% (No. of solutions = 1)

Section: M-10 88.0 - 99.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	4.92	-0.00	0.00	12.24	1.28	0.00	0.00	0.00	8.60
Discounted	3.11	-0.00	0.00	3.79	0.38	0.00	0.00	0.00	1.07

Economic Internal Rate of Return (EIRR) = 17.9% (No. of solutions = 1)

Section: M-10 99.0 - 113.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	7.50	-0.93	0.00	44.93	12.96	0.00	0.00	0.00	51.33
Discounted	4.02	-0.39	0.00	11.20	3.19	0.00	0.00	0.00	10.76

Economic Internal Rate of Return (EIRR) = 34.1% (No. of solutions = 1)

Section: M-10 113.0 - 124.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	5.89	-0.73	0.00	17.05	4.78	0.00	0.00	0.00	16.68
Discounted	3.36	-0.31	0.00	4.00	1.09	0.00	0.00	0.00	2.04

Economic Internal Rate of Return (EIRR) = 18.8% (No. of solutions = 1)

Section: M-11 6.0 - 10.8

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	1.33	-0.32	0.00	11.39	3.34	0.00	0.00	0.00	13.73

Discounted	0.68	-0.14	0.00	2.02	0.56	0.00	0.00	0.00	2.04
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Economic Internal Rate of Return (EIRR) = 28.6% (No. of solutions = 2)

Section: M-11 10.8 - 21.8

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	2.68	0.03	0.00	9.67	0.45	0.00	0.00	0.00	7.41
Discounted	2.45	0.01	0.00	3.10	0.11	0.00	0.00	0.00	0.75

Economic Internal Rate of Return (EIRR) = 15.9% (No. of solutions = 1)

Section: M-11 21.8 - 33.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	2.73	0.03	0.00	9.88	0.46	0.00	0.00	0.00	7.58
Discounted	2.50	0.01	0.00	3.17	0.11	0.00	0.00	0.00	0.78

Economic Internal Rate of Return (EIRR) = 16.0% (No. of solutions = 1)

Section: M-11 33.0 - 43.6

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	5.90	-0.70	0.00	18.66	5.44	0.00	0.00	0.00	18.90
Discounted	2.13	-0.29	0.00	3.39	0.94	0.00	0.00	0.00	2.50

Economic Internal Rate of Return (EIRR) = 22.3% (No. of solutions = 1)

Section: M-11 43.6 - 56.2

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	7.02	-0.84	0.00	16.11	4.94	0.00	0.00	0.00	14.87
Discounted	2.37	-0.35	0.00	2.83	0.81	0.00	0.00	0.00	1.63

Economic Internal Rate of Return (EIRR) = 18.8% (No. of solutions = 1)

Section: M-12 0.0 - 13.6

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in	Savings in MT Travel Time	Savings in	Reduction	Net	Net
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	MT VOC			Travel Time Costs	NMT Travel & Operating Costs	in Accident Costs	Social / Exogenous Benefits	Economic Benefits (NPV)
	Capital	Recurrent	Special					
Undiscounted	5.69	-0.91	0.00	15.23	4.56	0.00	0.00	15.00
Discounted	4.29	-0.38	0.00	3.93	1.06	0.00	0.00	1.09

Economic Internal Rate of Return (EIRR) = 14.8% (No. of solutions = 1)

Section: M-12 13.6 - 28.5

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	8.30	-0.99	0.00	15.22	4.58	0.00	0.00	0.00	12.50
Discounted	4.51	-0.42	0.00	3.40	0.98	0.00	0.00	0.00	0.29

Economic Internal Rate of Return (EIRR) = 12.9% (No. of solutions = 1)

Section: M-14 0.0 - 8.8

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	3.46	-0.53	0.00	12.33	3.58	0.00	0.00	0.00	12.97
Discounted	2.11	-0.19	0.00	2.99	0.81	0.00	0.00	0.00	1.89

Economic Internal Rate of Return (EIRR) = 21.4% (No. of solutions = 1)

Section: M-14 8.8 - 19.4

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	2.76	-0.71	0.00	8.58	2.63	0.00	0.00	0.00	9.15
Discounted	1.42	-0.30	0.00	1.48	0.43	0.00	0.00	0.00	0.79

Economic Internal Rate of Return (EIRR) = 17.4% (No. of solutions = 2)

Section: M-14 60.3 - 73.9

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	3.54	-0.77	0.00	4.00	0.94	0.00	0.00	0.00	2.18
Discounted	1.29	-0.26	0.00	0.61	0.13	0.00	0.00	0.00	-0.29

Economic Internal Rate of Return (EIRR) = 7.9% (No. of solutions = 2)

Section: M-14 73.9 -86.9

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

Undiscounted	4.59	-1.13	0.00	39.02	8.70	0.00	0.00	0.00	44.26
Discounted	2.10	-0.48	0.00	7.13	1.50	0.00	0.00	0.00	7.01

Economic Internal Rate of Return (EIRR) = 32.8% (No. of solutions = 2)

Section: M-16 24.1 - 28.2

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	2.77	-0.27	0.00	15.92	3.70	0.00	0.00	0.00	17.12
Discounted	1.59	-0.11	0.00	4.66	1.05	0.00	0.00	0.00	4.22

Economic Internal Rate of Return (EIRR) = 39.2% (No. of solutions = 1)

Section: M-16 28.2 - 59.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	8.26	-2.04	0.00	64.96	14.20	0.00	0.00	0.00	72.93
Discounted	3.79	-0.86	0.00	11.72	2.41	0.00	0.00	0.00	11.21

Economic Internal Rate of Return (EIRR) = 31.3% (No. of solutions = 2)

Section: M-17 0.0 -20.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	10.07	-1.33	0.00	0.98	0.35	0.00	0.00	0.00	-7.41
Discounted	6.72	-0.56	0.00	0.21	0.05	0.00	0.00	0.00	-5.90

Economic Internal Rate of Return (EIRR) = -22.2% (No. of solutions = 1)

Section: M-17 20.0 - 39.7

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	7.45	-1.33	0.00	0.64	0.24	0.00	0.00	0.00	-5.24
Discounted	4.00	-0.55	0.00	0.11	0.03	0.00	0.00	0.00	-3.30

Economic Internal Rate of Return (EIRR) = -15.7% (No. of solutions = 1)

Section: M-17 39.7 - 59.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	9.71	-1.29	0.00	0.55	0.20	0.00	0.00	0.00	-7.67
Discounted	3.84	-0.54	0.00	0.09	0.03	0.00	0.00	0.00	-3.18

No IRR solutions

Section: M-17 59.0 - 77.0

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	8.91	-1.18	0.00	0.52	0.19	0.00	0.00	0.00	-7.02
Discounted	3.52	-0.50	0.00	0.09	0.03	0.00	0.00	0.00	-2.91

No IRR solutions

Section: M-17 77.0 - 90.8

Alternative: Programme Alternative vs Base Alternative
No Sensitivity Analysis Conducted

	Increase in Road Agency Costs			Savings in MT VOC	Savings in MT Travel Time Costs	Savings in NMT Travel & Operating Costs	Reduction in Accident Costs	Net Social / Exogenous Benefits	Net Economic Benefits (NPV)
	Capital	Recurrent	Special						
Undiscounted	5.33	-0.95	0.00	0.38	0.13	0.00	0.00	0.00	-3.87

Discounted	2.72	-0.40	0.00	0.07	0.02	0.00	0.00	0.00	-2.24
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Economic Internal Rate of Return (EIRR) = -18.9% (No. of solutions = 1)