

Appendix E

---

**Appraisal Summary  
Tables Supporting  
Information**

## Economic Efficiency of the Transport System (TEE)

<b>Consumers</b>			
<i>User Benefits (£000)</i>	<b>All Modes</b>	<b>Road</b>	<b>Bus</b>
Personal Travel	<b>Total</b>	<b>Personal</b>	<b>Passengers</b>
Travel Time	46,734	46,734	0
Vehicle Operating Costs	-6,691	-6,691	0
User Charges	0	0	0
During Construction & Maintenance	-2,285	-2,285	0
<b>NET CONSUMER BENEFITS</b>	<b>37,758</b> (1)	<b>37,758</b>	<b>0</b>
<b>Business</b>			
User Benefits		<b>Personal</b>	<b>Freight</b>
Travel Time	95,819	50,834	44,985
Vehicle Operating Costs	-14,738	246	-14,984
User Charges	0	0	0
During Construction & Maintenance	-2,357	-1,220	-1,137
<b>Subtotal</b>	<b>78,724</b> (2)	<b>49,860</b>	<b>28,864</b>
<b>Private Sector Provider Impacts</b>			
Revenue	0	0	0
Operating Costs	0	0	0
Investment Costs	0	0	0
Grant/Subsidy	0	0	0
<b>Subtotal</b>	<b>0</b> (3)	<b>0</b>	<b>0</b>
<b>Other Business Impacts</b>			
Developer contributions	0 (4)	0	
<b>NET BUSINESS IMPACT</b>	<b>78,724</b> (5) = (2) + (3) + (4)		
<b>TOTAL (£000)</b>			
Present Value of Transport Economic Efficiency Benefits	<b>116,482</b> (6) = (1) + (5)		

## Notes:

- 1) Benefits appear as positive numbers, while costs appear as negative numbers.
- 2) All entries are present values discounted to 2002, in 2002 prices

## Public Accounts

Local Government Funding	All Modes		
	Total	Road	Bus
Revenue	0	0	0
Operating Costs	0	0	0
Investment Costs	0	0	0
Developer & Other Contributions	0	0	0
Grant/Subsidy Payments	0	0	0
<b>NET IMPACT</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Central Government Funding</b>			
Revenue	0	0	0
Operating Costs	4,863	4,863	0
Investment Costs	91,159	91,159	0
Developer & Other Contributions	0	0	0
Grant/Subsidy Payments	0	0	0
Indirect Tax Revenues	-13,769	-13,769	0
<b>NET IMPACT</b>	<b>82,253</b>	<b>82,253</b>	<b>0</b>
<b>TOTAL Present Value of Costs</b>	<b>82,253</b>	<b>82,253</b>	<b>0</b>

## Notes:

- 1) Costs appear as positive numbers, while revenues and developer contributions appear as negative numbers.
- 2) All entries are present values discounted to 2002, in 2002 prices

## Analysis of Monetised Costs &amp; Benefits

Consumer User Benefits	37,758	
Business User Benefits	78,724	
Private Sector Provider Impacts	0	
Other Business Impacts	0	
Accident Benefits	5,022	
Carbon Benefits	-2,618	
<b>Present Value of Benefits (PVB)</b>	<b>118,886</b>	
Local Government Funding	0	
Central Government Funding	82,253	
<b>Present Value of Costs (PVC)</b>	<b>82,253</b>	
<b>OVERALL IMPACTS</b>		
Net Present Value (£000)	<b>36,633</b>	NPV=PVB-PVC
Benefit to Cost Ratio	<b>1.45</b>	BCR=PVB/PVC

## Notes:

This table includes costs and benefits which are regularly or occasionally presented in monetised form in transport appraisals, together with some where monetisation is in prospect. There may also be other significant costs and benefits, some of which can

## Economic Efficiency of the Transport System (TEE)

<b>Consumers</b>			
<i>User Benefits (£000)</i>	<b>All Modes</b>	<b>Road</b>	<b>Bus</b>
Personal Travel	<b>Total</b>	<b>Personal</b>	<b>Passengers</b>
Travel Time	46,734	46,734	0
Vehicle Operating Costs	-6,691	-6,691	0
User Charges	0	0	0
During Construction & Maintenance	-2,285	-2,285	0
<b>NET CONSUMER BENEFITS</b>	<b>37,758</b> (1)	<b>37,758</b>	<b>0</b>
<b>Business</b>			
User Benefits		<b>Personal</b>	<b>Freight</b>
Travel Time	95,819	50,834	44,985
Vehicle Operating Costs	-14,738	246	-14,984
User Charges	0	0	0
During Construction & Maintenance	-2,357	-1,220	-1,137
<b>Subtotal</b>	<b>78,724</b> (2)	<b>49,860</b>	<b>28,864</b>
<b>Private Sector Provider Impacts</b>			
Revenue	0	0	0
Operating Costs	0	0	0
Investment Costs	0	0	0
Grant/Subsidy	0	0	0
<b>Subtotal</b>	<b>0</b> (3)	<b>0</b>	<b>0</b>
<b>Other Business Impacts</b>			
Developer contributions	0 (4)	0	
<b>NET BUSINESS IMPACT</b>	<b>78,724</b> (5) = (2) + (3) + (4)		
<b>TOTAL (£000)</b>			
Present Value of Transport Economic Efficiency Benefits	<b>116,482</b> (6) = (1) + (5)		

## Notes:

- 1) Benefits appear as positive numbers, while costs appear as negative numbers.
- 2) All entries are present values discounted to 2002, in 2002 prices

## Public Accounts

Local Government Funding	All Modes		
	Total	Road	Bus
Revenue	0	0	0
Operating Costs	0	0	0
Investment Costs	0	0	0
Developer & Other Contributions	0	0	0
Grant/Subsidy Payments	0	0	0
<b>NET IMPACT</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Central Government Funding</b>			
Revenue	0	0	0
Operating Costs	4,863	4,863	0
Investment Costs	88,224	88,224	0
Developer & Other Contributions	0	0	0
Grant/Subsidy Payments	0	0	0
Indirect Tax Revenues	-13,769	-13,769	0
<b>NET IMPACT</b>	<b>79,318</b>	<b>79,318</b>	<b>0</b>
<b>TOTAL Present Value of Costs</b>	<b>79,318</b>	<b>79,318</b>	<b>0</b>

## Notes:

- 1) Costs appear as positive numbers, while revenues and developer contributions appear as negative numbers.
- 2) All entries are present values discounted to 2002, in 2002 prices

## Analysis of Monetised Costs &amp; Benefits

Consumer User Benefits	37,758	
Business User Benefits	78,724	
Private Sector Provider Impacts	0	
Other Business Impacts	0	
Accident Benefits	5,022	
Carbon Benefits	-2,618	
<b>Present Value of Benefits (PVB)</b>	<b>118,886</b>	
Local Government Funding	0	
Central Government Funding	79,318	
<b>Present Value of Costs (PVC)</b>	<b>79,318</b>	
<b>OVERALL IMPACTS</b>		
Net Present Value (£000)	<b>39,568</b>	NPV=PVB-PVC
Benefit to Cost Ratio	<b>1.50</b>	BCR=PVB/PVC

## Notes:

This table includes costs and benefits which are regularly or occasionally presented in monetised form in transport appraisals, together with some where monetisation is in prospect. There may also be other significant costs and benefits, some of which can

## Economic Efficiency of the Transport System (TEE)

<b>Consumers</b>				
<i>User Benefits (£000)</i>	<b>All Modes</b>	<b>Road</b>		<b>Bus</b>
Personal Travel	<b>Total</b>	<b>Personal</b>		<b>Passengers</b>
Travel Time	46,734	46,734		0
Vehicle Operating Costs	-6,691	-6,691		0
User Charges	0	0		0
During Construction & Maintenance	-2,285	-2,285		0
<b>NET CONSUMER BENEFITS</b>	<b>37,758</b>	<b>37,758</b>		<b>0</b>
	(1)			
<b>Business</b>				
User Benefits		<b>Personal</b>	<b>Freight</b>	<b>Passengers</b>
Travel Time	95,819	50,834	44,985	0
Vehicle Operating Costs	-14,738	246	-14,984	0
User Charges	0	0	0	0
During Construction & Maintenance	-2,357	-1,220	-1,137	0
<b>Subtotal</b>	<b>78,724</b>	<b>49,860</b>	<b>28,864</b>	<b>0</b>
	(2)			
<b>Private Sector Provider Impacts</b>				
Revenue	0	0	0	0
Operating Costs	0	0	0	0
Investment Costs	0	0	0	0
Grant/Subsidy	0	0	0	0
<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	(3)			
<b>Other Business Impacts</b>				
Developer contributions	0	0		
<b>NET BUSINESS IMPACT</b>	<b>78,724</b>	<b>0</b>		
	(4)			
	(5) = (2) + (3) + (4)			
<b>TOTAL (£000)</b>				
Present Value of Transport Economic Efficiency Benefits	<b>116,482</b>	<b>0</b>		
	(6) = (1) + (5)			

## Notes:

- 1) Benefits appear as positive numbers, while costs appear as negative numbers.
- 2) All entries are present values discounted to 2002, in 2002 prices

## Public Accounts

Local Government Funding	All Modes		
	Total	Road	Bus
Revenue	0	0	0
Operating Costs	0	0	0
Investment Costs	0	0	0
Developer & Other Contributions	0	0	0
Grant/Subsidy Payments	0	0	0
<b>NET IMPACT</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Central Government Funding</b>			
Revenue	0	0	0
Operating Costs	4,863	4,863	0
Investment Costs	89,084	89,084	0
Developer & Other Contributions	0	0	0
Grant/Subsidy Payments	0	0	0
Indirect Tax Revenues	-13,769	-13,769	0
<b>NET IMPACT</b>	<b>80,178</b>	<b>80,178</b>	<b>0</b>
<b>TOTAL Present Value of Costs</b>	<b>80,178</b>	<b>80,178</b>	<b>0</b>

## Notes:

- 1) Costs appear as positive numbers, while revenues and developer contributions appear as negative numbers.
- 2) All entries are present values discounted to 2002, in 2002 prices

## Analysis of Monetised Costs &amp; Benefits

Consumer User Benefits	37,758	
Business User Benefits	78,724	
Private Sector Provider Impacts	0	
Other Business Impacts	0	
Accident Benefits	5,022	
Carbon Benefits	-2,618	
<b>Present Value of Benefits (PVB)</b>	<b>118,886</b>	
Local Government Funding	0	
Central Government Funding	80,178	
<b>Present Value of Costs (PVC)</b>	<b>80,178</b>	
<b>OVERALL IMPACTS</b>		
Net Present Value (£000)	<b>38,708</b>	NPV=PVB-PVC
Benefit to Cost Ratio	<b>1.48</b>	BCR=PVB/PVC

## Notes:

This table includes costs and benefits which are regularly or occasionally presented in monetised form in transport appraisals, together with some where monetisation is in prospect. There may also be other significant costs and benefits, some of which can

## Economic Efficiency of the Transport System (TEE)

<b>Consumers</b>			
<i>User Benefits (£000)</i>	<b>All Modes</b>	<b>Road</b>	<b>Bus</b>
Personal Travel	<b>Total</b>	<b>Personal</b>	<b>Passengers</b>
Travel Time	42,698	42,698	0
Vehicle Operating Costs	-8,100	-8,100	0
User Charges	0	0	0
During Construction & Maintenance	-2,285	-2,285	0
<b>NET CONSUMER BENEFITS</b>	<b>32,313</b> (1)	<b>32,313</b>	<b>0</b>
<b>Business</b>			
User Benefits		<b>Personal</b>	<b>Freight</b>
Travel Time	83,243	45,021	38,222
Vehicle Operating Costs	-16,887	-243	-16,644
User Charges	0	0	0
During Construction & Maintenance	-2,357	-1,220	-1,137
<b>Subtotal</b>	<b>63,999</b> (2)	<b>43,558</b>	<b>20,441</b>
<b>Private Sector Provider Impacts</b>			
Revenue	0	0	0
Operating Costs	0	0	0
Investment Costs	0	0	0
Grant/Subsidy	0	0	0
<b>Subtotal</b>	<b>0</b> (3)	<b>0</b>	<b>0</b>
<b>Other Business Impacts</b>			
Developer contributions	0 (4)	0	
<b>NET BUSINESS IMPACT</b>	<b>63,999</b> (5) = (2) + (3) + (4)		
<b>TOTAL (£000)</b>			
Present Value of Transport Economic Efficiency Benefits	<b>96,312</b> (6) = (1) + (5)		

## Notes:

- 1) Benefits appear as positive numbers, while costs appear as negative numbers.
- 2) All entries are present values discounted to 2002, in 2002 prices

## Public Accounts

Local Government Funding	All Modes		
	Total	Road	Bus
Revenue	0	0	0
Operating Costs	0	0	0
Investment Costs	0	0	0
Developer & Other Contributions	0	0	0
Grant/Subsidy Payments	0	0	0
<b>NET IMPACT</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Central Government Funding</b>			
Revenue	0	0	0
Operating Costs	4,905	4,905	0
Investment Costs	84,694	84,694	0
Developer & Other Contributions	0	0	0
Grant/Subsidy Payments	0	0	0
Indirect Tax Revenues	-14,269	-14,269	0
<b>NET IMPACT</b>	<b>75,330</b>	<b>75,330</b>	<b>0</b>
<b>TOTAL Present Value of Costs</b>	<b>75,330</b>	<b>75,330</b>	<b>0</b>

## Notes:

- 1) Costs appear as positive numbers, while revenues and developer contributions appear as negative numbers.
- 2) All entries are present values discounted to 2002, in 2002 prices

## Analysis of Monetised Costs &amp; Benefits

Consumer User Benefits	32,313	
Business User Benefits	63,999	
Private Sector Provider Impacts	0	
Other Business Impacts	0	
Accident Benefits	2,836	
Carbon Benefits	-2,708	
<b>Present Value of Benefits (PVB)</b>	<b>96,440</b>	
Local Government Funding	0	
Central Government Funding	75,330	
<b>Present Value of Costs (PVC)</b>	<b>75,330</b>	
<b>OVERALL IMPACTS</b>		
Net Present Value (£000)	<b>21,110</b>	NPV=PVB-PVC
Benefit to Cost Ratio	<b>1.28</b>	BCR=PVB/PVC

## Notes:

This table includes costs and benefits which are regularly or occasionally presented in monetised form in transport appraisals, together with some where monetisation is in prospect. There may also be other significant costs and benefits, some of which can

## Economic Efficiency of the Transport System (TEE)

<b>Consumers</b>			
<i>User Benefits (£000)</i>	<b>All Modes</b>	<b>Road</b>	<b>Bus</b>
Personal Travel	<b>Total</b>	<b>Personal</b>	<b>Passengers</b>
Travel Time	44,607	44,607	0
Vehicle Operating Costs	-8,664	-8,664	0
User Charges	0	0	0
During Construction & Maintenance	-2,285	-2,285	0
<b>NET CONSUMER BENEFITS</b>	<b>33,658</b> (1)	<b>33,658</b>	<b>0</b>
<b>Business</b>			
User Benefits		<b>Personal</b>	<b>Freight</b>
Travel Time	85,025	45,591	39,434
Vehicle Operating Costs	-18,248	-520	-17,728
User Charges	0	0	0
During Construction & Maintenance	-2,357	-1,220	-1,137
<b>Subtotal</b>	<b>64,420</b> (2)	<b>43,851</b>	<b>20,569</b>
<b>Private Sector Provider Impacts</b>			
Revenue	0	0	0
Operating Costs	0	0	0
Investment Costs	0	0	0
Grant/Subsidy	0	0	0
<b>Subtotal</b>	<b>0</b> (3)	<b>0</b>	<b>0</b>
<b>Other Business Impacts</b>			
Developer contributions	0 (4)	0	
<b>NET BUSINESS IMPACT</b>	<b>64,420</b> (5) = (2) + (3) + (4)		
<b>TOTAL (£000)</b>			
Present Value of Transport Economic Efficiency Benefits	<b>98,078</b> (6) = (1) + (5)		

## Notes:

- 1) Benefits appear as positive numbers, while costs appear as negative numbers.
- 2) All entries are present values discounted to 2002, in 2002 prices

## Public Accounts

Local Government Funding	All Modes		
	Total	Road	Bus
Revenue	0	0	0
Operating Costs	0	0	0
Investment Costs	0	0	0
Developer & Other Contributions	0	0	0
Grant/Subsidy Payments	0	0	0
<b>NET IMPACT</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Central Government Funding</b>			
Revenue	0	0	0
Operating Costs	5,011	5,011	0
Investment Costs	83,498	83,498	0
Developer & Other Contributions	0	0	0
Grant/Subsidy Payments	0	0	0
Indirect Tax Revenues	-14,982	-14,982	0
<b>NET IMPACT</b>	<b>73,527</b>	<b>73,527</b>	<b>0</b>
<b>TOTAL Present Value of Costs</b>	<b>73,527</b>	<b>73,527</b>	<b>0</b>

## Notes:

- 1) Costs appear as positive numbers, while revenues and developer contributions appear as negative numbers.
- 2) All entries are present values discounted to 2002, in 2002 prices

## Analysis of Monetised Costs &amp; Benefits

Consumer User Benefits	33,658	
Business User Benefits	64,420	
Private Sector Provider Impacts	0	
Other Business Impacts	0	
Accident Benefits	2,815	
Carbon Benefits	-2,842	
<b>Present Value of Benefits (PVB)</b>	<b>98,051</b>	
Local Government Funding	0	
Central Government Funding	73,527	
<b>Present Value of Costs (PVC)</b>	<b>73,527</b>	
<b>OVERALL IMPACTS</b>		
Net Present Value (£000)	<b>24,524</b>	NPV=PVB-PVC
Benefit to Cost Ratio	<b>1.33</b>	BCR=PVB/PVC

## Notes:

This table includes costs and benefits which are regularly or occasionally presented in monetised form in transport appraisals, together with some where monetisation is in prospect. There may also be other significant costs and benefits, some of which can

## Economic Efficiency of the Transport System (TEE)

<b>Consumers</b>				
<i>User Benefits (£000)</i>	<b>All Modes</b>	<b>Road</b>		<b>Bus</b>
Personal Travel	<b>Total</b>	<b>Personal</b>		<b>Passengers</b>
Travel Time	46,734	46,734		0
Vehicle Operating Costs	-6,691	-6,691		0
User Charges	0	0		0
During Construction & Maintenance	-2,285	-2,285		0
<b>NET CONSUMER BENEFITS</b>	<b>37,758</b>	<b>37,758</b>		<b>0</b>
	(1)			
<b>Business</b>				
User Benefits		<b>Personal</b>	<b>Freight</b>	<b>Passengers</b>
Travel Time	95,819	50,834	44,985	0
Vehicle Operating Costs	-14,738	246	-14,984	0
User Charges	0	0	0	0
During Construction & Maintenance	-2,357	-1,220	-1,137	0
<b>Subtotal</b>	<b>78,724</b>	<b>49,860</b>	<b>28,864</b>	<b>0</b>
	(2)			
<b>Private Sector Provider Impacts</b>				
Revenue	0	0	0	0
Operating Costs	0	0	0	0
Investment Costs	0	0	0	0
Grant/Subsidy	0	0	0	0
<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	(3)			
<b>Other Business Impacts</b>				
Developer contributions	0	0		
<b>NET BUSINESS IMPACT</b>	<b>78,724</b>	<b>0</b>		
	(4)			
	(5) = (2) + (3) + (4)			
<b>TOTAL (£000)</b>				
Present Value of Transport Economic Efficiency Benefits	<b>116,482</b>			
	(6) = (1) + (5)			

## Notes:

- Benefits appear as positive numbers, while costs appear as negative numbers.
- All entries are present values discounted to 2002, in 2002 prices

## Public Accounts

Local Government Funding	All Modes		
	Total	Road	Bus
Revenue	0	0	0
Operating Costs	0	0	0
Investment Costs	0	0	0
Developer & Other Contributions	0	0	0
Grant/Subsidy Payments	0	0	0
<b>NET IMPACT</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Central Government Funding</b>			
Revenue	0	0	0
Operating Costs	4,863	4,863	0
Investment Costs	87,483	87,483	0
Developer & Other Contributions	0	0	0
Grant/Subsidy Payments	0	0	0
Indirect Tax Revenues	-13,769	-13,769	0
<b>NET IMPACT</b>	<b>78,577</b>	<b>78,577</b>	<b>0</b>
<b>TOTAL Present Value of Costs</b>	<b>78,577</b>	<b>78,577</b>	<b>0</b>

## Notes:

- 1) Costs appear as positive numbers, while revenues and developer contributions appear as negative numbers.
- 2) All entries are present values discounted to 2002, in 2002 prices

## Analysis of Monetised Costs &amp; Benefits

Consumer User Benefits	37,758	
Business User Benefits	78,724	
Private Sector Provider Impacts	0	
Other Business Impacts	0	
Accident Benefits	5,022	
Carbon Benefits	-2,618	
<b>Present Value of Benefits (PVB)</b>	<b>118,886</b>	
Local Government Funding	0	
Central Government Funding	78,577	
<b>Present Value of Costs (PVC)</b>	<b>78,577</b>	
<b>OVERALL IMPACTS</b>		
Net Present Value (£000)	<b>40,309</b>	NPV=PVB-PVC
Benefit to Cost Ratio	<b>1.51</b>	BCR=PVB/PVC

## Notes:

This table includes costs and benefits which are regularly or occasionally presented in monetised form in transport appraisals, together with some where monetisation is in prospect. There may also be other significant costs and benefits, some of which can