

Appraisal Summary Table

Option	Description	Problems	Present Value of Costs to Public Accounts £m
A18-A180 Link Road	New link road between the B1210 and the A180 at Stallingborough Interchange	HGVs for the port passing through Immingham causing safety and environmental nuisance	£7.718 m

OBJECTIVE	SUB-OBJECTIVE	QUALITATIVE IMPACTS	QUANTITATIVE ASSESSMENT	ASSESSMENT
ENVIRONMENT	Noise	It is considered that improvements in the noise environment are due to the re-routing of road traffic as a result of the New Link Road. Montessori School, Stallingborough is within the 600m band of Station Road. The assessment results indicate that any increases in noise levels are unlikely to be significant here. It is not known whether there are other potential noise sensitive non-residential receptors both nearer and further than the 600m band from the affected roads. However, if this is the case, the assessment results indicate that any increases in noise levels are unlikely to be significant.	Population annoyed without the scheme is 596. Population annoyed with the scheme is 564.	The net difference in population likely to be annoyed with scheme in the 15th year is -32 people. The likely net Present Value of Benefits for transport-related residential noise of the proposal (60 year period) is £1,1million
	Local Air Quality	Benefits are due to improved traffic flow and movement of through traffic away from areas with high numbers of relevant receptors. Improvement expected at the AQMA on Kings Road / Pelham Road junction	Air Quality Improvements at 2529 properties for NO ₂ and 2,529 for PM10. No worsening of Air Quality at any properties.	A significant overall improvement in air quality NO ₂ = -946.5 PM10 = -197.
	Greenhouse Gases	Benefits are due to improved traffic flows and journey times and reduction in total fuel consumption.	Total change in tonnes of carbon emitted between 'with scheme' and 'without scheme' for the whole appraisal period is -1,947 and for the opening year is -3.	The net present value of the total change in carbon emissions over the whole appraisal period is: £55,926.
	Landscape	Introduction of a new road in a rural area. Mitigation measures will reduce the visual impact on the landscape		Slight Adverse
	Townscape	Small scale improvement works on Pelham Road, improving pedestrian accessibility and reducing severance and improving social interactions		Slight Beneficial
	Heritage of Historic Resources	No scheduled monuments or listed buildings are located within the vicinity of link road		Neutral
	Biodiversity	The scheme has the potential to provide biodiversity enhancement, and providing that existing mature trees are retained		Slight Beneficial
	Water Environment	Scheme will be designed to ensure minimal impact on the water environment and the risk of flooding.		Neutral
	Physical Fitness	The scheme does not promote or discourage walking or cycling		Neutral
	Journey Ambience	The main impact will be the reduction in the fear of accidents		Moderate Beneficial
SAFETY	Accidents	Introduction of the new road is forecast to lead to a re-assignment of traffic away from roads with poor accidents records, such as the residential roads in Immingham.	A reduction of 508 accidents over the appraisal period.	PVB £22.011m

	Security	No impact on security		Neutral
ECONOMY	Public Accounts		Central Govt PVC = £7.020m Local Govt PVC = £0.698m	PVC £7.718m
	Transport Economic Efficiency: Business Users & Transport Providers		Users PVB = £34.088m Transport Providers PVB = £0 Other PVB = £0	PVB £34.088m
	Transport Economic Efficiency: Consumers		Users PVB = £18.873m	PVB £18.873m
	Reliability	No significant impact on 'stress'. Introduction of new roundabout on B1210 results in delays which vary by a few seconds	Do-minimum Stress = 41.9% Do- something Stress = 56.3%	Slight Adverse
	Wider Economic Impacts	Not assessed as scheme not in a regeneration area		Not assessed
ACCESSIBILITY	Option values	Scheme does not involve the introduction or withdrawal of a transport services		PVB £0
	Severance	15-25% reduction in traffic on Pelham Road an area of high pedestrian activity		Slight Beneficial
	Access to the Transport System	Scheme does not impact on the public transport system		Neutral
INTEGRATION	Transport Interchange	Scheme does not impact on either passenger or freight interchange		Neutral
	Land-Use Policy	Scheme contributes significantly to a number of local, regional and national land use and transport policies		Beneficial
	Other Government Policies	Scheme will comply with PPS 25 Development and Flood Risk		Neutral

Analysis of Monetised Costs and Benefits

Noise		
Local Air Quality		
Greenhouse Gases		59
Journey Ambience		
Accidents		22,011
Consumer Users		18,873
Business Users and Providers		34,088
Reliability		
Option Values		
Present Value of Benefits (see notes) (PVB)		75,031
Public Accounts		7,718
Present Value of Costs (see notes) (PVC)		7,718
OVERALL IMPACTS		
Net Present Value (NPV)		67,313
Benefit to Cost Ratio (BCR)		9.72
		<i>NPV=PVB-PVC</i>
		<i>BCR=PVB/PVC</i>
Notes : All values in £,000's in 2002 prices and values		
<p>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 cannot be presented in monetised form. Where this is the case, the analysis presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.</p>		

Economic Efficiency of the Transport System (TEE)

Consumers	ALL MODES	ROAD	BUS & COACH	RAIL	OTHER	
<i>User benefits</i>	TOTAL	Private Cars and LGVs	Passengers	Passengers		
Travel time	18,169	18,169				
Vehicle operating costs	704	704				
User charges	0					
During Construction & Maintenance	0					
NET CONSUMER BENEFITS	18,873 (1)	18,873	0	0	0	
Business		Goods Vehicles	Business Cars & LGVs	Passengers	Freight	Passengers
<i>User benefits</i>						
Travel time	28,637	11,027	17,610			
Vehicle operating costs	5,451	4,559	892			
User charges	0					
During Construction & Maintenance	0					
Subtotal	34,088 (2)	15,586	18,502	0	0	0
<i>Private sector provider impacts</i>				Freight	Passengers	
Revenue	0					
Operating costs	0					
Investment costs	0					
Grant/subsidy	0					
Subtotal	0 (3)			0	0	0
<i>Other business impacts</i>						
Developer contributions	0					
NET BUSINESS IMPACT	34,088 (5) = (2) + (3) + (4)					
TOTAL						
Present Value of Transport Economic Efficiency Benefits	52,961 (6) = (1) + (5)					

Notes: Benefits appear as positive numbers, while costs appear as negative numbers.
All values in £,000's in 2002 prices and values

Public Accounts

	ALL MODES	ROAD	BUS & COACH	RAIL	OTHER
Local Government Funding	TOTAL	INFRASTRUCTURE			
Revenue	0				
Operating Costs	0				
Investment Costs	698	698			
Developer and Other Contributions	0				
Grant/Subsidy Payments	0				
NET IMPACT	698 (7)	698	0	0	0
Central Government Funding					
Revenue	0				
Operating Costs	469	469			
Investment Costs	6,143	6,143			
Developer and Other Contributions	0				
Grant/Subsidy Payments	0				
Indirect Tax Revenues	408	408			
NET IMPACT	7,020 (8)	7,020	0	0	0
TOTAL Present Value of Costs (PVC)	7,718 (9) = (7) + (8)				

Notes: Costs appear as positive numbers, while revenues and 'Developer and Other Contributions' appear as negative numbers.
All values in £,000's in 2002 prices and values

Appraisal Cost Proforma Summary Sheet

Assumptions:

Price Year Base (Earliest - 1998)	2007
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Note: Promoters are requested to enter the price year base they are using into the above

Investment cost optimism bias (%)	44
Operating cost optimism bias (%)	0

QRA P(80) (total)	2,618
QRA P(50) (total)	1,953
Design Year Operating Cost (usually 15 years from opening year)	0
Operating Cost (all years total)	0

COST BREAKDOWN:

All values in £,000's (thousands)

Financial Year	Investment Cost (in price year base in cell C3, excluding risk)	Cost including real cost inflation (Base Cost)	Risk adjusted cost using QRA P (mean)	Risk adjusted cost including Optimism Bias	Risk adjusted cost including OB deflated and discounted to 2002 Market Prices
2009/10	385	438	136	826	785
2010/11	735	876	484	1,959	1,798
2011/12	3,122	3,941	140	5,877	5,214

Totals for remaining appraisal years:

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Totals:

	4,242	5,255	760	8,662	7,797
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BEFORE and AFTER IMPLEMENTATION COMPARISONS

This should be populated with estimates from the local transport model for the approval stage being bid for and any earlier approval stages.

	Before Implementation			Post - Implementation
	Programme Entry	Conditional Approval	Full Approval	
Capital Cost (£000)	7,672			
Annual Operating Cost (£000)	0			
Annual Maintenance Cost (£000)	21			
Annual Revenue (£000)	0			
Annual Passenger/Vehicle Trips (m)	23			
Annual Passenger/Vehicle Km (m)	275			
Congestion Benefits (£000)	46,805			
Mode Shift (%)	0			