

Appraisal Summary Table		Date produced:	18-Nov-13		Contact:				
Name of scheme:	A160/A180 Port of Immingham Improvement				Name	Graham Dakin			
Description of scheme:	Upgrading of the A160/A180 Brocklesby junction to a two bridge roundabout layout, improving the single carriageway section of the A160 to a dual carriageway standard, provision of a new road overbridge to provide vehicular and non-motorised user access between the two sides of South Killingholme and provision of a new gyratory system between Manby Road Roundabout, Rosper Road Junction and the Port of Immingham				Organisation	Highways Agency			
Impacts		Summary of key Impacts		Assessment					
		Quantitative		Qualitative	Monetary £million	Distributional 7-pt scale/ vulnerable grp			
Economy	Business users & transport providers	The scheme provides significant level of business user benefits. These are broken down into £96.5m travel time benefits and £1m vehicle operating cost benefits.		Value of journey time changes(£)	£96.5m	N/A	£97.5million	N/A	
			Net journey time changes (£)						
			0 to 2min	2 to 5min	> 5min				
			£24.4m	£15.4m	£56.7m				
	Reliability impact on Business users	The scheme has a journey time reliability value of less than 200,000. As stated in WebTAG Unit 3.5.6, this score is assessed as Neutral. Journey time reliability for the scheme may be underestimated because the stress based methodology excludes the effects of junctions.		N/A		Neutral	N/A	N/A	
	Regeneration	The scheme is unlikely to have any significant impact on unemployment levels in Regeneration Areas.		N/A		Neutral	N/A	N/A	
	Wider Impacts	Wider Impacts are not included within the appraisal of the Scheme.		N/A		N/A	N/A	N/A	
Environmental	Noise	Decrease in perceptible noise at a number of properties in the vicinity. One perceptible increase in noise level versus 91 perceptible decreases in noise level in year of opening. Improvements are mainly due to carriageway alignment and low noise surfacing. Social and Distributional Impacts: Benefits associated with improved noise conditions are limited to the regional income quintile 3. Therefore, quintile 3 receives a score of Large Beneficial. All other income groups experience no change in noise and are awarded a Neutral score. The impact on Children and Young People is deemed to be Neutral.		Estimated 168 people likely to be annoyed by traffic noise in the longer term without scheme and 154 people with scheme. Net change in population annoyed: 14		44 properties exposed to noise levels in excess of 68dB LA10, 18hr without scheme vs 32 properties with scheme. No properties exposed to noise levels > 80dB Laeq with or without scheme. No properties to experience night-time noise change greater than 3 dB in the long-term.	£0.7million	Income Quintile 1, 2, 4 & 5 = Neutral, 3 = Large Beneficial	
	Air Quality	Improvement in exposure to PM10 and NO2 concentrations. No increase in annual mean PM10 and NO2 concentrations 20m from the road centre of at least 1 ug/m3. No effect on air quality in AQMAs. No exceedence of the NO2 EU Limit in the DM or DS scenarios. Social and Distributional Impacts: The only income group affected by the change in air quality is quintile 3 which receives a score of Moderate Adverse. All other income groups are awarded a Neutral score. The impact on Children and Young People is deemed to be Neutral.		PM10: Improvement: 131 properties; No change: 8 properties; Deterioration: 320 properties; NO2: Improvement: 174 properties; No change: 0 properties; Deterioration: 285 properties. Local Air Quality Assessment Score: PM10: -11; NO2: -95. Regional Emissions (Opening Year): NOx: -1 tonnes/yr		There is an overall improvement of air quality with the scheme for NOx and PM10. There is a decrease in regional emissions of NOx.	PM concentration: £0.033m. NOx emissions: £0.008m. Air quality: £0.041m	Income quintile 1, 2, 4 & 5 = Neutral, 3 = Moderate Adverse	
	Greenhouse gases	Increase in CO2 emissions due to increased vehicle flows. All emissions are non-traded, and rail emissions have not been considered in this assessment.		Change in non-traded carbon over 60y (CO2e)	+ 89kT	Increase in CO2 emissions of approx. 0.4% across each 5-year carbon budget reporting period.	Disbenefit of -£4.6million	N/A	
			Change in traded carbon over 60y (CO2e)	0 kT					
		Landscape	Scheme would adversely affect the rural landscape, cause loss of vegetation and Important Hedgerows and interrupt field pattern. Planting would integrate with the landscape, replace lost vegetation and improve visual amenity.		N/A		Slight Adverse	N/A	N/A
		Townscape	Minimal effects. The new road bridge at South Killingholme would slightly improve connectivity in the townscape, improving overall layout and human interaction.		N/A		Neutral	N/A	N/A
		Heritage of Historic resources	One Grade II Listed Building and one Grade I Registered Park and Garden in study area. 12 regionally important archaeological sites including Bronze Age activity, Iron Age and Roman settlements, and a medieval moated manor site. Archaeology within scheme footprint would be impacted. Potential adverse impacts on setting of Grade II Listed Building and three undesignated historic buildings.		Moderate Beneficial: 1 group historic buildings Slight Beneficial: 1 group historic buildings Moderate Adverse: 1 arch. site Slight Adverse: 13 arch. sites, 3 groups historic buildings, 1 historic landscape		Slight Adverse	N/A	N/A
	Biodiversity	Short terms impacts on various ecologically sensitive receptors including; water vole, breeding/wintering birds, badgers and ecologically important hedgerows. Mitigation measures identified to ensure no significant impacts.		Slight Adverse: 1 animal species Slight Beneficial: 12 animal species, 8 habitats, 3 designated sites Moderate Beneficial: 1 animal species		Neutral	N/A	N/A	
	Water Environment	The proposed scheme introduces treatment and attenuation in the form of attenuation ponds for stretches of carriageway that currently have no treatment for runoff.		N/A		Slight Beneficial	N/A	N/A	
Social	Commuting and Other users	The scheme provides significant level of Commuting and Other user benefits. These are split into £61.1m travel time benefits and £0.3m vehicle operating cost benefits. Social and Distributional Impacts: SDI appraisal demonstrated that all income groups receive beneficial impact. Income group 3 receives a score of Large Beneficial whereas all the other income groups receive Moderate Beneficial impact.		Value of journey time changes(£)	£61.1m	N/A	£61.4million	SDI as a proportion of £53.2m: Income quintile: 1, 2, 4 & 5 = Moderate Beneficial, 3 = Large Beneficial	
			Net journey time changes (£)						
			0 to 2min	2 to 5min	> 5min				
			£10.5m	£12.6m	£38.1m				
		Reliability impact on Commuting and Other users	The scheme has a journey time reliability value of less than 200,000. As stated in WebTAG Unit 3.5.6, this score is assessed as Neutral. Journey time reliability for the scheme may be underestimated because the stress based methodology excludes the effects of junctions.		N/A		Neutral	N/A	N/A
		Physical activity	Improved facilities for non-motorised users may encourage physical activity.		N/A		Slight Beneficial	N/A	N/A
		Journey quality	Improvement in traveller stress due to road layout, condition and segregation and improvement in NMU facilities would result in a Large Beneficial impact on journey quality.		N/A		Large Beneficial	N/A	N/A
		Accidents	The scheme achieves one of the main objectives of improving safety. However, an appropriate casualty sample size is not available to enable the proportion of vulnerable group casualties to be estimated.		Personal Injury Accident Saving: 194 Casualty Savings: Fatal 14, Serious 68, Slight 242		N/A	£26.7million	N/A
		Security	The scheme is designed to modern standards and there is no significant change to the existing situation.		N/A		Neutral	N/A	N/A
		Access to services	The scheme does not affect the provision or location of public transport facilities and hence access to services is unaffected.		N/A		Neutral	N/A	N/A
	Affordability	The scheme does not affect public transport fares, parking charges or road user charges. However, decreases in Vehicle Operating Costs result in a benefit to Commuting and Other (i.e. non-business) car trips within the SDI affected area. Regional income quintile 3 receives a score of Large Beneficial. All other income groups receive a Moderate Beneficial impact.		N/A		N/A	N/A	SDI as a proportion of £2.0m: Income quintile 1, 2, 4 & 5 = Moderate Beneficial, 3 = Large Beneficial	
	Severance	Severance will be slightly reduced as a result of provision of a new Toucan crossing over A160 in place of existing Habrough roundabout, new crossing point on the south side of the Eastfield Rd junction and improvements to the footway along Ulceby Road. However, due to the low numbers using the footpaths, the overall assessment is Neutral.		N/A		Neutral	N/A	N/A	
	Option values	Transport availability is unaffected by the scheme.		N/A		Neutral	N/A	N/A	
Public Accounts	Cost to Broad Transport Budget	The scheme will be funded through the central government funds.		Local Government Funding = £0.0m Central Government Funding: Transport = £68.4m		N/A	£68.4million	N/A	
	Indirect Tax Revenues	There would be some reduction in tax being paid to the Exchequer.		Central Government Funding: Wider Public Finances = £2.5m		N/A	£2.5million	N/A	

Note: All monetary figures are in 2010 prices, discounted to 2010.