

Table 1: Appraisal Summary Table (AST)

Option		Description	Problems	Present Value of Costs to Public Accounts
A1 APLEYHEAD GSJ		Grade separated junction provided on the A1 at Apleyhead (A1/ A614/ A57/ B6420).	Congestion at the roundabout causes queuing and delays to the A1 traffic during peak periods. The existing junctions and approaches suffer from road traffic accidents (57 personal injury accidents recorded during 5 years Jan 2000 - Dec 2004).	Central Growth £10.5
OBJECTIVE	SUB-OBJECTIVE	QUALITATIVE IMPACTS	QUANTITATIVE MEASURE	ASSESSMENT
ENVIRONMENT	Noise	Only one property within 300m of the scheme has been identified. Up to 5 dB reductions at the northern and eastern facades of the property.	Only one property within 300m of the scheme has been identified. Up to 5 dB reductions at the northern and eastern facades of the property.	Estimated Population Annoyed by Noise would be reduced by 0.3
	Local Air Quality	Single property within range of effects	Improvement at single property	PM10 (2007): -1.2 NO2 (2007): -2.5
	Greenhouse Gases	Reduction due to shorter journey lengths on realigned A1	2007: Do Nothing: 10800 t Do Something: 10600 t	Slight Benefit
	Landscape	Avoidance of designated areas and landscapes of high quality; New landform in an otherwise flat and open landscape provides an incongruous element; Elevated lighting is difficult to mitigate and 'urbanises' a rural landscape, although this is already influenced by the existing A1 corridor; Mitigation measures provide opportunities for screening existing and proposed A1 and extending attractive woodland character.	N/A	Slight beneficial.
	Townscape	N/A	N/A	N/A
	Heritage of Historic Resources	There are no known buried archaeological remains and a very low potential for disturbing as yet unknown remains. The built heritage consisting of a Listed Building, Apleyhead Lodge, a Registered Park and Garden of Special Historic Interest, Clumber Park and an undesignated milestone, will not be physically impacted upon or intruded upon visually or by noise. The historic landscape setting will be altered with the new delineation of the road. Appropriate planting will take place in order to screen proposals and maintain the delineation of the wooded boundary.	N/A	Slight Adverse
	Biodiversity	Habitats affected by the proposed scheme are of value in a local context. Appropriate mitigation, including habitat creation works as illustrated in the environmental design, will adequately mitigate any loss of or temporary disturbance to, habitats. Impacts on protected species (badger and great crested newt (potentially)) are not predicted to be significant, and can be mitigated.	N/A	Slight Adverse
	Water Environment	Scheme passes close to Source Protection Zone II but no significant effect on groundwater quality from road drainage or accidental spillage, and no discharge to surface water courses	N/A	Neutral
	Physical Fitness	The proposed junction will provide a safer more pleasant crossing of the A1. The grade separation would cause a large reduction in traffic encountered by non-motorised users however the number of people who would benefit is likely to be small.	N/A	Neutral
Journey Ambience	In the long term all travellers would benefit from improved views. The segregation of A1 through-traffic from other traffic and the closure of a central reservation gap would reduce stress for a large number of travellers.	N/A	Large Beneficial	
SAFETY	Accidents	Reduced accidents: The number of personal injury accidents will reduce as will the number of casualties.	PIA's and casualties savings over 60 years (CG): PIAs 287.8 Slight 392.7 Serious 34.2 Fatal 3.5	PVB £12.0m CG
	Security	Less delay and queuing at the junction will reduce exposure to crime	N/A	Neutral
ECONOMY	Public Accounts	Construction and maintenance (dis)benefits have not been assessed.	Central Govt PVC £10.5m CG Local Govt PVC £0 CG	PVC £10.5m CG
	Transport Economic Efficiency: Business Users & Transport Providers	The scheme will reduce geometric and queuing delays at the Apleyhead roundabout. Reduced journey times for through traffic on A1 will be achieved	Users PVB £88.0m CG Transport Providers PVB -£0.026m CG Other PVB £0 CG	PVB £88.0m CG
	Transport Economic Efficiency: Consumers	The scheme will reduce geometric and queuing delays at Apleyhead roundabout. Reduced journey times for through traffic on A1 will be achieved.	Users PVB £46.9 CG	PVB £46.9m CG
	Reliability	More reliable journey times	N/A	Moderate Beneficial
	Wider Economic Impacts	N/A	Serves designated regeneration area – NO. Development depends on scheme - NO	N/A
ACCESSIBILITY	Option values	No change	N/A	N/A
	Severance	Improvement especially for local communities	N/A	Moderate Beneficial
	Access to the Transport System	No change	N/A	Neutral
INTEGRATION	Transport Interchange	N/A	N/A	Neutral
	Land-Use Policy	The junction improvement will not directly reduce the need to travel but will promote more sustainable transport choices. The proposed scheme provides social and economic benefits while minimising the impact on the environment and is supported by regional and local planning policy.		Beneficial
	Other Government Policies	Scheme does not adversely affect other government policies, although may not reduce car dependency	N/A	Neutral