

Appraisal Summary Table

<b>Option:</b> M6 Extension - Carlisle to Guards Mill		<b>Description:</b> Up-grade of dual carriageway to D3M Construction of All Purpose Route	<b>Problems:</b> The only missing link within the motorway network from the south coast of England to the main population centres in mid Scotland. Road traffic accident hotspot. Concerns over safety of 'at grade' junctions and private accesses.	<b>Present Value of Costs to Public Accounts</b> £3.24 m	
OBJECTIVE	SUB-OBJECTIVE	QUALITATIVE IMPACTS	QUANTITATIVE ASSESSMENT	ASSESSMENT	
ENVIRONMENT	Noise	In the direct comparison between the Scheme and do-minimum situations in year 2023, significant benefits are gained at the majority of properties in the study area by virtue of noise reductions due to the provision of noise barriers.	<p><b>Properties experiencing a 1 to 3dB(A) increase in noise levels:</b>                      Do Minimum 100                      The Scheme 8</p> <p><b>Properties benefiting from decreases in noise levels of between 1 to 10dB(A):</b>                      The Scheme 71</p>	Estimated population annoyed by noise: -14 (i.e. 14 less people annoyed with the Scheme as compared to the do-minimum)	
	Local Air Quality	No exceedences of air quality objectives are predicted. (Results aggregated from 7 settlements along route to reflect different background concentrations). No increases in NO <sub>2</sub> > 2 µg/m <sup>3</sup> at 20 m from the road centre. No increases in PM <sub>10</sub> > 1 µg/m <sup>3</sup> at 20 m from the road centre. There is a reduction in properties due to the scheme of 48 properties within 200 m.	Total no of properties where air quality is worsened within 200m of roadside for all routes affected = 0  number of properties where air quality is improved within 200m or roadside = 0	Differences in PM <sub>10</sub> concentrations x number of properties in each band in 2008 = -648 Differences in NO <sub>2</sub> x number of properties in each band in 2008 = -846	
	Greenhouse Gases	-	Present CO <sub>2</sub> levels = 43373 tonnes per year. Future CO <sub>2</sub> levels = 46133.	+2760 tonnes of CO <sub>2</sub> per year	
	Landscape	The existing trunk road has an adverse effect on the landscape. Planting would mitigate the majority of landscape and visual impacts and the residual effect of the proposed scheme would be neutral.		Neutral	
	Heritage of Historic Resources	There has been nothing unexpected found during the surveys.		N/A	Neutral
	Biodiversity	Overall the impact of the mitigated M6 extension and associated APR route has been classified as having a 'Neutral' long-term impact. No significant effects are predicted on sites of nature conservation value [including the Upper Solway Flats and Marshes SSSI, cSAC, SPA and Ramsar site, the River Eden SSSI and cSAC, Rosetrees Moss County Wildlife Site (CWS), Rockcliffe Moss CWS, Harker Moss CWS and Kingmoor Nature Reserve CWS.]		N/A	Neutral
	Water Environment	An overall assessment has been made for the surface and ground water environment based on the potential adverse effects of increased run off and reductions in flood storage volumes, balanced by the beneficial effects of a new drainage scheme.		N/A	Slight Beneficial
	Physical Fitness	The overall impact of the scheme would result in a footpath network which is equally commodious to the existing network. As a result of this the proposed scheme is unlikely to increase pedestrian demand in the area. Minor Beneficial for cyclists. Neutral for pedestrians.		N/A	Neutral
	Journey Ambience	Reduced driver stress, affecting a high number of travellers. No long term impact on driver views		-	Large Beneficial
SAFETY	Accidents	Construction to current standards, including the removal of intermediate junctions and the provision of hard shoulder, is expected to lead to reduced numbers of accidents.	Reduction in casualties Fatal 4 Slight 43 Serious 47 Accidents 122	PVB = 9.002 (£m)	
	Security	Formal surveillance is an important requirement as the area is sparsely populated with little assistance. Emergency phones every 1km to meet motorway regulations would result in a general increase in security. There are few facilities for pedestrians and cyclists at present but the provision of the APR would improve access to populated areas and therefore improve security		N/A  Moderate Beneficial	

<b>ECONOMY</b>	<b>Public Accounts</b>	The cost of construction is offset by saving the cost of the major viaduct repairs which would otherwise be required, and by changes in tax revenues.		Central Government PVC = 1.63 (£m) Local Government PVC = N/A
	<b>Transport Economic Efficiency: Business Users &amp; Transport Providers</b>	Road users make savings in travel time, but these may be partially offset by increases in vehicle operating costs as a result of higher speeds. These effects are evaluated over a 60-year period.		Users PVB = 46.342 (£m) Transport providers PVB = -0.278 (£m) Other PVB = N/A
	<b>Transport Economic Efficiency: Consumers</b>	Road users make savings in travel time, but these may be partially offset by increases in vehicle operating costs as a result of higher speeds. These effects are evaluated over a 60-year period.		Users PVB = 28.989 (£m)
	<b>Reliability</b>	Journey times will be become more reliable with the provision of D3M, both through easing of congestion as well as reduction in accidents		Beneficial
	<b>Wider Economic Impacts</b>	Improves access to Kingmoor Park, which is a Regional Strategic Employment site		Neutral
<b>ACCESSIBILITY</b>	<b>Option values</b>	Increased opportunities for non-motorised users		Slight Beneficial
	<b>Severance</b>	Four settlements no longer gain direct access on to the A74 as a result of the scheme. The provision of the APR would provide quick, safe and convenient access and would improve the severance which occurs as a result of the existing A74.		Slight Beneficial
	<b>Access to the Transport System</b>	The proposed Scheme would not affect access to the transport system		Neutral
<b>INTEGRATION</b>	<b>Transport Interchange</b>	There will no impact on any passenger or freight interchanges as a result of the scheme		Neutral
	<b>Land-Use Policy</b>	The scheme is allocated throughout the hierarchy of development plan and reflected in policies and proposals in the RPG, Structure Plan and Local Plan.	There are nine land policies facilitated by the Scheme	Beneficial
	<b>Other Government Policies</b>	The scheme would achieve benefits for both road users and the surrounding areas. The scheme would improve safety for strategic and local road user and therefore provide benefits such as sustainability, accessibility and social inclusion.	N/A	Beneficial