MOTT MACDONALD

Appraisal Summary Table

Outline Business Case - Appendix N

17 January 2020

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Contact:	
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Organisation	Mott MacDonald
Role	Advisor

Name of scheme:	Cambourne to Cambridge Better Public Transport Scheme
Description of scheme:	The Greater Cambridge Partnership (GCP) is promoting a transport scheme to improve connectivity between the town of Cambourne and Cambridge City Centre along the A428/A1303, creating a vital link to ease congestion, offer sustainable travel choices, connect communities and support growth.

Impacts		Summary of key impacts	Assessment			
			Quantitative	Qualitative	Monetary £(NPV)	Distributional 7-pt scale/ vulnerable grp
Economy	Business users & transport providers	The MEC approach (Tag unit 5.4) has been used to calculate congestion benefits with benefits split by trip purpose using May TAG databook A1.3.4 all week average split for cars. The total net business impact is estimated to be £7.599m	Value of journey time changes(£) Net journey time changes (£) 0 to 2min / 2 to 5min / > 5min		£7,599,000	
	Reliability impact on Business users	Bus passengers who currently experience unreliable journeys along the A428 and who transfer to bus services along the off-road scheme will see an increase in reliability. The monetary value for the increase in reliability for business users is £0.065m			£65,000	
	Regeneration	There are currently no constraints to the accessibility of regeneration areas and this scheme is not expected to lead to a substantial change to any regeneration areas.	-	Neutral	-	
	Wider Impacts	The main source of benefit is from positive labour supply market changes and agglomeration of the job sectors which is estimated to be £8.822m. There are also postive benefits associated to the changes in imperfectly competitive markets which is estimated to be £0.760m.	In addition to the Level 2 benefits, there are positive impacts on Land Value Uplift and impacts at a regional Greater Cambridge level: • LVU - £287.8m over 3 years • 975 direct jobs • £102.8m direct GVA per annum • £676.1m in total GVA over 30 years		9,582,000	
Environmental	Noise	The monetary value for the noise assessment is a benefit of £0.887m. However the qualitative assessment of the scheme noise impacts is minor adverse. The number of vehicles using the route will be relatively low so noise will be intermittent and short duration at any point along the route. The Scotland Farm Park & Ride site is near to the A428 and the area is already subject to traffic noise impacts. However, along the route the public transport vehicles will present be a new noise source in many places, and so there will be some impact from noise on nearby receptors.	n/a	Minor adverse	£887,000	
	Air Quality	The monetary value for the noise assessment is a benefit of £0.164m. The qualitative assessment of the scheme air quality impacts is neutral. The changes in air quality from any of the scheme options was judged to be small at affected receptors. It was considered that increases in public transport numbers along the route would be offset by a reduction in car numbers on the A428 and other local roads due to the expected modal shift towards public transport.	n/a	Neutral	£164,000	
	Greenhouse gases	The monetary value for the greenhouse gases assessment is a benefit of £1.159m. The qualitative assessment of the scheme air quality impacts is neutral to minor adverse. The initial qualitative assessment concluded that the proposed route alignments would not be expected to cause substantial changes to traffic flows on the surrounding road network. Overall, the changes in traffic from any of the scheme options was judged to be small and therefore differences in greenhouse gases between schemes would not be significant.	Change in non-traded carbon over 60y (CO2e) Change in traded carbon over 60y (CO2e)	Neutral to minor adverse	£1,159,000	
	Landscape	The overall impact on landscape for the scheme is moderate adverse.	n/a	Moderate adverse		
	Townscape	Not assessed as there are no proposed changes to townscape along the route.	n/a	n/a		
	Historic Environment	The overall impact on historic environment for the scheme is moderate adverse.	n/a	Moderate adverse		
	Biodiversity	Without the mitigation opportunities described above the overall assessment of the impact on biodiversity is moderate adverse for the scheme due to the loss in habitat and potential disturbance impacts on protected and important flora and fauna species.	n/a	Moderate adverse		
	Water Environment	Not assessed. WebTAG Unit A3 stipulates as part of the standard assessment methodology that the first activity is to scope out the potential significant effects on the environmental attributes. In doing this scoping exercise water resources were identified as not being significantly affected by any of the options, as no main rivers or minor watercourses are crossed, and there are no groundwater receptors likely to be affected by a scheme.	n/a	n/a		
Social	Commuting and Other users	The MEC approach (Tag unit 5.4) has been used to calculate congestion benefits with benefits split by trip purpose using May TAG databook A1.3.4 all week average split for cars. The main source of benefit are from journey time savings. The net user benefits for commuting is estimated to be £16.061m and for other users £39.354m. The total net consuer benefit is estimated to be £55.415m.	Value of journey time changes(£) Net journey time changes (£) 0 to 2min / 2 to 5min / > 5min		£55,415,000	
	Reliability impact on Commuting and Other users	Bus passengers who currently experience unreliable journeys along the A428 and who transfer to bus services along the off-road scheme will see an increase in reliability.			£471,000	
	Physical activity	An Active Modes Appraisal Tool (AMAT, TAG Unit A5-1) assessment has been carried out on the scheme which shows monetised benefits of £11.726m for the reduced risk of premature death and almost £1m of benefits from reduction in absenteeism. This assumes an uplift of 154% in cycle trips based on the results of the guided busway delivered in a different location in Cambridge in 2011 providing off-road tracks suitable for cycling and walking alongside a guided bus way. This produced positive results in terms of increasing the usage of both modes.		Moderate beneficial	£11,726,000	
	Journey quality	Traveller care impacts are expected to be beneficial due to the new facilities and services. Frustration due to congestion and parking is likely to be improved with the scheme. A conservative slight beneficial assessment has been made in the absence of demand data.		Slight beneficial		
	Accidents	At this stage accident impacts have been qualitatively assessed as slight beneficial due to the potential for the reduction of traffic along the route and the segregation of cyclists and pedestrians from the highway.		Slight beneficial	£7,803,000	
	Security	The scheme is expected to provide more secure facilities compared to general city centre parking and improvements in facilities for pedestrians and cyclists should improve people's perception of security, however there could be concerns surrounding personal security on more remote cycle and pathways into the centre.		Neutral		
	Access to services	Residents along the route will benefit from wider public transport provision with better private car and public transport access to Cambridge where many services and activities are based. Difficulties would still exist for more remote residents not close to the route who do not have access to a private car.		Slight beneficial		
	Affordability	The scheme is likely to have some affordability impacts in terms of reduced parking charges and potential reduced car fuel costs but being off-set by bus fare charges.		Neutral		
	Severance	It is expected that the proposed new busway will provide unhindered pedestrian pathways however changes to road alignment could cause minor changes to the pedestrian crossing provision along the route.		Slight beneficial		
	Option and non-use values	The estimated number of households in this identified area that could benefit from the option of using the transport schemes is in excess the threshold of 1,000 households that signifies large impacts.		Large beneficial		
Public Account	Cost to Broad Transport Budget	The impact on public accounts is estimated to be £195.141m of which all is a cost to local government			£195,141,000	
	Indirect Tax Revenues				-£3,407,000	

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