

Appraisal Summary Table: A14 Ellington to Fen Ditton

Preferred Route (Orange Route Option and CHUMMS Strategy) 24 October 2007		Description: Route runs off-line between Ellington and Fen Drayton crossing the A1, River Great Ouse and East Coast Mainline, passing south of Buckden Landfill Site and Wood Green Animal Shelter but north of Hilton and Conington villages. On-line widening between Fen Drayton and Lolworth before running offline north of Bar Hill to M11 J14. On-line widening of the Cambridge Northern Bypass between J14 and Fen Ditton. Junctions located at Ellington, the A1, Fen Drayton and M11 J14. Parallel Local Access Road between Fen Drayton and M11 Junction 14 with junctions at Trinity Foot and Bar Hill. Existing A14 through Huntingdon de-trunked. Existing A14 Huntingdon viaduct removed and replaced by new connections to the local road network.	Problems: Poor geometry and at-grade junctions with poor accident record, severe congestion and delays due to heavy traffic flows on strategic route.	Present Value of Costs to Public Accounts £245m (60 yr appraisal)
OBJECTIVE	SUB-OBJECTIVE	QUALITATIVE IMPACTS	QUANTITATIVE ASSESSMENT	ASSESSMENT
ENVIRONMENT	Noise	Approximately 1,980 people would experience an increase in noise levels over 3dB, and 16,997 people would experience a decrease over 3dB, with most increases near the new route and most decreases near the existing A14. In addition, traffic flow changes on roads not physically altered by this option would cause 2 people to experience an increase and 403 to experience a decrease. 420 fewer people would be exposed to in excess of 70dB.	Population Annoyed Do Minimum: 8,117 Population Annoyed Do Something: 7,610	Estimated Population Annoyed Do Something minus Do Minimum:-507
	Local Air Quality	Improvements in air quality in AQMAs at Huntingdon & Fenstanton. There will be an overall increase in PM ₁₀ and NO ₂ concentrations at properties near the A14, but a large decrease is predicted in the wider network in both PM ₁₀ and NO ₂ concentrations. Do-Minimum may incur exceedances of the NO ₂ 2014 annual mean limit value but the scheme would not.	Improved NO ₂ 13,692 properties Worsened 5,839 properties PM ₁₀ 13,913properties 5,618 properties	Overall NO ₂ score: -381 Overall PM ₁₀ score: -42
	Greenhouse Gases	3% increase in carbon dioxide emissions from the local network with the scheme compared to the do minimum 2014 due to an increase in vehicle kilometres travelled.	Baseline (Present): 1,043,884 tonnes/yr Do Minimum 2014: 1,086,148 tonnes/yr Do Something 2014: 1,120,078 tonnes/yr	+33,930 tonnes.
	Landscape	Open, large scale arable landscape of poor/ordinary quality, although quality is much higher within the Ouse valley. Large adverse impact in the Ouse valley due to higher landscape quality, tree loss, viaduct's visual impact, & reduced tranquillity; medium adverse impact for rest of route. Landform affected by cutting through Offord Hill, overbridge & junction embankments and noise mitigation. Highway lighting would adversely affect night time rural character. Adverse impact on Buckden Marina.	Quantitative data on visual impact not available at this stage.	Large adverse
	Townscape	Townscape improvements in Huntingdon (by third parties) through removal of Huntingdon viaduct. It will reduce the likelihood of congestion traffic diverting through towns/ villages, benefiting town/ village character, access and human interaction (particularly Fenstanton). Adverse impact to settings of Brampton, Offord Cluny (Conservation Area) & Buckden Marina. Greatest route impact on settings of Offord Cluny and Hilton.	Quantitative data on visual impact not available at this stage.	Neutral
	Heritage of Historic Resources	43 known archaeological sites lie within 500m of the route. Few have been archaeologically evaluated and their importance cannot yet be assessed although at least 8 will be adversely affected. The route runs through Fen Ditton Conservation Area; the settings of other Conservation Areas may experience adverse impact. The settings of 11 listed buildings outside Conservation Areas may be adversely affected; 2 (milestones) will experience adverse physical impact. The new junction to replace Huntingdon Viaduct adverse impacts on a Scheduled Monument and the historic landscape.	N/A	Moderate adverse
	Biodiversity	Potential negative impacts on Buckden Gravel Pits bird species. Mitigation will include translocation and habitat creation measures. Some beneficial effects include diverting traffic south of Portholme Meadow SAC & Hemingford Grey Meadow SSSI reducing possible impacts caused by traffic emissions.	-	Slight adverse
	Water Environment	Important water features include the River Great Ouse, the River Cam, their tributaries and associated floodplains and groundwater. This route would result in a significant adverse impact to the floodplain and biodiversity. However, mitigation measures will limit the potential impact on water-regime related areas of conservation value.	Low risk of routine runoff impacts to Ellington Brook & Rivers Great Ouse & Cam. Detailed assessment is required for other receiving watercourses. <1% annual probability of a serious pollution incident.	Slight adverse
	Physical Fitness	The route would traverse the Ouse Valley Way, which runs through a popular recreational landscape. Other footpaths & bridleways, including near Beaconsfield Equestrian Centre, would be affected but the scheme offers opportunities to provide alternative, grade-separated crossings, and to provide a solution for NMUs at Girton interchange. The Local Access Road (LAR) will also provide NMU journey opportunities.	-	Neutral
	Journey Ambience	The reduction in traveller stress for high numbers of travellers will be beneficial. Potential loss of existing roadside facilities but current lay-by standards will be applied to offline section.	-	Large beneficial
SAFETY	Accidents	Significant reduction in accidents and casualties due to new high quality road link and rerouting traffic from lower quality links. Reduced accident/km in A14 corridor offset by increased traffic flow.	Accidents -119 Casualties pa (2014) Fatal -0.7 Serious -11.5 Slight -157.8	PVB: £316m
	Security	Removal of at-grade junctions and significant reduction in congestion will reduce perception of risk and personal injury.	-	Neutral
ECONOMY	Public Accounts	Appraisal period extended to 60 yrs after opening to take account of new HM Treasury Green Book, using central growth forecasts. Costs partially offset by increased indirect tax revenue from more drivers travelling increased journey lengths, and increased parking revenue.	Central Govt PVC: £246m Local Govt PVC: £ -0.9m	PVC: £245m
	Transport Economic Efficiency: Business Users & Transport Providers	Appraisal period extended to 60 years after opening, taking account of new HM Treasury Green Book, using central growth forecasts. PVB calculated using TUBA (version 1.7a).	Users PVB: £1,431m Transport Providers PVB: £29m	PVB: £1,460m
	Transport Economic Efficiency: Consumers	Appraisal period extended to 60 years after opening, taking account of new HM Treasury Green Book, using central growth forecasts. PVB calculated using TUBA (version 1.7a).	Users PVB: £874m	PVB: £874m
	Reliability	Do-minimum is characterised by unreliability due to incidents. Proposals will improve journey time reliability.	-	Moderate Beneficial
	Wider Economic Impacts	Scheme not within designated regeneration area.	Changes in jobs/ employment not quantified	Neutral
ACCESSIBILITY	Option values	Not applicable to this scheme.	-	Neutral
	Severance	Existing NMU routes are fragmented with at-grade crossings. Several Public Rights of Way will be truncated by the route. NMUs will be able to access and use the Local Access Road LAR as an improved route between settlements.	-	Moderate beneficial
	Access to the Transport System	Accessibility issues for public transport users unlikely to be altered.	No change in accessibility index	Neutral
INTEGRATION	Transport Interchange	Non-applicable to scheme as there is no impact on passenger/ freight interchanges	-	Neutral
	Land-Use Policy	Conflicts with local policies on Areas of Best Landscape. No impact on PPG 25 (flood risk). Supports local, regional and national policies which refer to improvements to the A14 and the facilitation of accessibility in development, eg Northstowe.	-	Beneficial
	Other Government Policies	Supports DETR A New Deal For Transport & DEFRA Rural Development Programme. Other policies not supported (eg DETR's Air Quality Strategy) would be considered in scheme development. Assists some other Government policies through contributing to economic prosperity in an environmentally conscious manner.	-	Neutral