

15 Effects on all travellers

Executive summary

The A14 Cambridge to Huntingdon improvement scheme (the scheme) is designed to improve the safety and reliability of journeys for drivers of motorised vehicles. This chapter provides an assessment of effects on all travellers, with a particular focus on the effects upon non-motorised users (NMUs), i.e. pedestrians, cyclists and equestrians, to reflect the health and environmental benefits of protecting these forms of travel.

With the exception of the Cambridgeshire guided busway north of Swavesey and Longstanton, there is currently limited provision for travel between settlements along the A14 corridor between Cambridge and Huntingdon by transport modes other than motor vehicle. Access to bus stops on the A14, between Swavesey and Girton, is difficult and hazardous. There is a network of public rights of way throughout the study area but historic works to the A1 and A14 have truncated some routes with many public rights of way now terminating at the existing trunk roads and with no means to extend walking, cycling or equestrian journeys.

The scheme would have the following beneficial effects upon travellers:

- a new NMU facility (shared cycleway/footway) between Fenstanton and Girton, which provides new, safer opportunities to travel by modes other than the car between settlements along the A14 corridor at this location;
- the de-trunking of the existing A14 alignment between Brampton Hut and Swavesey reduces traffic volumes, making conditions safer for cyclists;
- the provision of dedicated footways and cycleways at new junctions on the A14;
- two purpose built NMU bridges (Swavesey and Bar Hill) to provide links for local communities to key employment sites;
- improved access to bus stops which would be relocated on the local access road and accessible from the new NMU facility; and
- new bridleway near Brampton to reconnect bridleways previously severed by original A1 widening, connecting Brampton to Brampton Wood and the Brampton Hut services.

The construction of the new A14 route south of Huntingdon (the Huntingdon southern bypass) would have an adverse effect on the character and amenity of public rights of way in this rural location through traffic noise and visual impact. However, routes north and south of the scheme would be reconnected by new bridges and re-routing of footpaths and bridleways.

The scheme would have a beneficial effect on driver stress by improving conditions on the A14 between Cambridge and Huntingdon. However, proposals to integrate the new A14 Huntingdon southern bypass into the landscape would restrict views from the road due to the presence of planting, bunds and cuttings.

During the construction phase there would be temporary disruption of journeys and loss of amenity for all travellers. The contractor will liaise with the Highways Agency, Cambridgeshire County Council and the police; prepare and implement a traffic management plan; and maintain information for the community in order to limit the level of inconvenience caused.

15.1 Introduction to all travellers

Scope of chapter

- 15.1.1 This chapter reports the assessment of likely significant effects from the proposed A14 Cambridge to Huntingdon improvement scheme on:
- non-motorised users, i.e. pedestrians, cyclists and equestrians, in terms of how their routes, journey patterns and amenity would be affected;
 - vehicle travellers in terms of their views from the road and driver stress; and
 - access to bus services for people close to the scheme.
- 15.1.2 The types of traveller covered by this assessment ('non-motorised users', vehicle travellers, and bus travellers) vary considerably in terms of their needs and the ways that they would be affected by the scheme. Furthermore, the methods for undertaking the assessment of effects differ according to the type of traveller considered.
- 15.1.3 For these reasons, following this introductory sub-section, the chapter has been structured to present the assessment for each type of traveller in turn. An overall conclusion at the end of the chapter is then provided.
- 15.1.4 The greatest proportion of this chapter is given over to the assessment of effects upon pedestrians and cyclists. This reflects the relative importance given to supporting travel on foot and by bicycle set out in recent national and local policy in order to support health and environmental objectives.

Legislative and policy background

- 15.1.5 The Government White Paper *Healthy Lives, Healthy People: A call to action on obesity in England* (Department of Health, 2011) identifies that it is the role of Government, local and key partners to take action to change the environment to support individuals in changing their behaviour and help people to maintain healthier lifestyles. The promotion of 'active travel' (walking and cycling) is referred to as an important way of encouraging more physical activity which "*can bring important health benefits but also contributes to objectives in relation to sustainability and congestion*".
- 15.1.6 The *Draft National Policy Statement for National Networks (NPS)* (Department for Transport, 2013) states that new road schemes should address the needs of cyclists and walkers in the design of new schemes and tackle existing problems on the national road network where the network acts as a barrier to cycling and walking.
- 15.1.7 The *National Planning Policy Framework (NPPF)* (Department for Local Government and Communities, 2012) provides advice on how the scheme can be considered in relation to sustainable development, including:
- supporting the transition to a low carbon future (*NPPF* (DCLG, 2012), paragraph 17), and consideration of whether the opportunities for sustainable transport modes have been taken up (*NPPF* (DCLG, 2012) paragraph 32); and
 - protecting and exploiting opportunities for the use of sustainable modes for the movement of goods or people (*NPPF* (DCLG, 2012), (paragraph 35), including the protection and enhancement of public rights of way and access (*NPPF* (DCLG, 2012), paragraph 75). To achieve this, people should be encouraged to make the fullest possible use of public transport, walking and cycling (*NPPF* (DCLG, 2012), paragraph 17). The scheme should consider pedestrian and cycle movements, access to high quality public transport, creation of safe crossing points and the needs of people with disabilities (*NPPF*, paragraph 35).
- 15.1.8 Cambridgeshire County Council's Rights of Way Improvement Plan - *Rights of Way: the Way Ahead* (2005) sets out eight 'statements of action' (SOA) to improve rights of way in Cambridgeshire. SOA2 is particularly pertinent to the scheme. It identifies that past trunk road development "*has left a legacy of [rights of way] network severance and dangerous crossings*" and that "*the Highways Agency needs to plan better RoW provision into what is built*" (Cambridgeshire County Council, 2005, p37).
- 15.1.9 The *Cambridgeshire Local Transport Plan 2011 - 2031 (LTP3)* (Cambridgeshire County Council, 2014a) recognises the importance of the A14 and the impact of current congestion. The *LTP3* also recognises the importance of sustainable transport and includes an action to make provisions for cyclists on road and off road.

15.1.10 The recently adopted *Transport Strategy for Cambridge and South Cambridgeshire* (Cambridgeshire County Council, 2014b); provides a detailed policy framework and programme for transport schemes for Cambridge, consistent with the vision and policies of the *LTP3*. Recognising the expected growth in employment and population within the area, the main strategic approach put forward to provide transport capacity is to promote:

“a high quality passenger transport network of bus, guided bus and rail services, fed and complemented by comprehensive pedestrian and cycle networks. Highways capacity enhancements will ensure that traffic can move efficiently in appropriate locations without interfering with passenger transport corridors.”

15.1.11 Local planning policy context relevant to this topic of assessment is set out in *Table 15.1*. The key policy themes are ensuring provision and promotion of walking and cycling, sustainable transport provision (particularly the adequate provision of alternatives to private car use) and ensuring development proposals accommodate predicted traffic volumes.

Table 15.1: Relevant local planning policy context for all travellers topic

Development plan document	Policy	Policy (or key relevant points of policy)
<i>Cambridge Local Plan</i> (Cambridge City Council, 2006)	Policy 8/4 Walking and Cycling Accessibility	Sets a policy for new development to be designed to give priority for walking and cycling over cars; ensure convenience; be accessible to those with impaired mobility; and link with the surrounding walking and cycling network.
	Policy 8/5 Pedestrian and Cycle Network	New developments will safeguard land along identified routes for the expansion of the walking and cycling network. In addition, funding for high quality physical provision of these routes will be required, both within and adjacent to the proposed development site. Any existing routes should be retained and improved wherever possible.

Development plan document	Policy	Policy (or key relevant points of policy)
<p><i>North West Cambridge Area Action Plan</i> (Cambridge City Council and South Cambridgeshire District Council, 2009)</p>	<p>Policy NW17 Cycling Provision</p>	<p>New developments will provide new and improved cycle links, giving priority to links between Huntingdon Road and Madingley Road and to the city centre. In addition, developments will provide priority to cycling within the development; whilst also linking the development with surrounding walking and cycling networks and orbital routes.</p>
	<p>Policy NW18 Walking Provision</p>	<p>Developments will provide attractive, direct and safe walking routes, giving priority to walking links between Huntingdon Road and Madingley Road, to adjacent development and to the city centre. Developments will also prioritise walking routes to key destinations from the development, whilst enhancing links to surrounding walking networks.</p>
<p><i>The Cambridge Local Plan 2014: Proposed Submission</i> (Cambridge City Council, 2013)</p>	<p>Policy 80 Supporting Sustainable Access to Development</p>	<p>New developments will be supported where they demonstrate that prioritisation of access is by walking, cycling and public transport. To achieve this, peripheral developments will be supported by public transport links to Cambridge city centre and other major employment areas, public transport, walking and cycling supported as much as possible and new road proposals accord with sustainable access.</p>
<p><i>South Cambridgeshire Development Control Policies</i> (South Cambridgeshire District Council, 2007)</p>	<p>Policy TR/1 Planning for More Sustainable Travel</p>	<p>Planning permission will only be granted to developments which aim to increase integration of travel modes and accessibility to non-motorised modes by; improving public and community transport; facilitating and encouraging use of non-motorised modes; and minimising car parking provision.</p>
	<p>Policy TR/4 Non-motorised Modes</p>	<p>The District Council will support increased use of non-motorised modes by all sectors of society, including cycling and walking, by ensuring new developments are located and designed at the outset to facilitate and encourage short distance trips between home, work, schools, other suitable destinations and for leisure.</p>

Development plan document	Policy	Policy (or key relevant points of policy)
<i>The South Cambridgeshire Local Plan 2011-2031: Proposed Submission</i> (South Cambridgeshire District Council, 2013)	Policy TI/2 Planning for Sustainable Travel	Developments must be located and designed to reduce the need to travel, particularly by car, and promote sustainable travel. In addition, developments must show sufficient accessibility by non-motorised modes, plans to minimise “ <i>significant transport implications</i> ” and mitigation provision for environmental, amenity and health impacts.
<i>Huntingdonshire Core Strategy</i> (Huntingdonshire District Council, 2009)	Policy CS1 Sustainable Development in Huntingdon	All developments will contribute to the pursuit of sustainable development. Plans are assessed against criteria which include, but are not limited to the following: making best use of land, maximising use of non-renewable energies, reducing all forms of pollution and minimising the need to travel.
<i>Huntingdon West Area Action Plan</i> (Huntingdonshire District Council, 2011)	Policy HW1 Sustainable Transport	Development proposals should seek to improve accessibility both within Huntingdon West and in the way it integrates with surrounding areas and encourages use of non-motorised modes. Changes should be made to the road network in order to promote better accessibility and enable redevelopment including the West of Town Centre Link Road and the A14.
	Policy HW2 Pedestrian and Cycle Links	Pedestrian and cycle links which will improve accessibility between Huntingdon West, the town centre and surrounding areas will be safeguarded and provided within the plan period.
<i>Saved policies from the Huntingdonshire Local Plan 1995 and the Local Plan Alteration 2002</i> (Huntingdonshire District Council, 2002)	Policy R15 Public Rights of Way	The District Council will seek to improve access to the countryside, including examining the network of public rights of way with a view to modifying, extending and improving the network.

Development plan document	Policy	Policy (or key relevant points of policy)
<i>Huntingdonshire Draft Local Plan to 2036</i> (Huntingdonshire District Council (2013))	Policy LP1 Strategy and Principle for Development	The District Council will support proposals which contribute to the delivery of new housing, economic growth and diversification, and infrastructure provision through: provision of approximately 12,450 new homes in three strategic expansion zones; approximately 7,850 homes in market towns and key service centres; and green infrastructure enhancement in rural areas.
	Policy LP17 Sustainable Travel	A proposal will be supported where it demonstrates that; sustainable travel opportunities are maximised; traffic volumes are accommodated; any adverse effects of traffic movement associated with the site are minimised; a clear network of routes is provided that provides connectivity and enables ease of access; and safe non-motorised routes are provided.

15.1.12 In response to the above-outlined policies, journeys made by active modes of travel (particularly walking and cycling) are a key focus of the scope of this assessment. The proposed scheme design has sought not only to maintain existing connectivity for NMU and public transport but also to enhance and prioritise travel by those modes in order to comply with national and local policy.

Assumptions

15.1.13 At this preliminary design stage of the scheme, the assessment of likely construction impacts has been based upon the information provided within *Appendix 3.2*. For the purposes of this assessment, a likely worst case scenario has been taken as assuming construction would take place concurrently across the scheme starting in 2016 and ending in 2021. This is a reasonable worst case assumption for this assessment because it assumes impacts last for the whole duration of the works. The overall assessment of effects would not change if the works were undertaken within the specific envisaged periods for each section of works as described in *Appendix 3.2*.

15.1.14 The baseline year of 2016 remains relevant across the construction programme, including section 6 which would not commence until the new route was operational, because the assessed conditions are not expected to change over the duration of the programme as presented in *Appendix 3.2*.

15.2 Introduction (non-motorised users)

15.2.1 Pedestrians, cyclists and equestrians are described collectively in this assessment as non-motorised users or 'NMU' for convenience. The term 'pedestrians' is taken to include people walking and running, and people

using mobility aids such as wheelchairs or electric scooters, although it is recognised that their needs may differ from those of other pedestrians and this distinction is taken into account where relevant.

- 15.2.2 The most common form of equestrian journey in the study area is horse riding, which is the focus of this assessment on equestrians. However the term also covers horse-drawn vehicles, including, for example the occasional horse-drawn hearse associated with the Cambridge Crematorium.
- 15.2.3 NMU journeys may be for utility purposes (for example commuting to work or school) or recreational purposes.
- 15.2.4 For utility journeys, routes suitable for NMU should be as direct and convenient as possible. This is because people undertaking these journeys are likely to have time pressures upon them (such as getting to work on time) and would be less tolerant to delays, disruption or alterations to their usual routes. Where routes become inconvenient to use because they are indirect or entail multiple obstacles (such as crossing busy roads), people are likely to become discouraged from walking or cycling and opportunities for public health gains through regular physical activity may be lost.
- 15.2.5 For recreational journeys, less direct routes are likely to be more tolerated, providing the overall amenity of a route is good. This is because people walking or cycling for recreational purposes are considered likely to be more interested in enjoying time in the outdoors, rather than taking an efficient journey from 'A' to 'B'.

15.3 Method of assessment (non-motorised users)

- 15.3.1 The assessment of effects upon NMU has drawn upon guidance set out in the *Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 8, Pedestrians, Cyclists, Equestrians and Community Effects* (Highways Agency et al., 1993a).

Establishing the baseline

- 15.3.2 The understanding of the baseline conditions has been established from desk-based studies, site visits, NMU surveys and consideration of stakeholder feedback.

Desk study

- 15.3.3 The *A14 Ellington to Fen Ditton Environmental Statement* (Highways Agency, 2009) provided the starting point for the desk study. The environmental statement for the A14 Ellington to Fen Ditton scheme reported surveys undertaken in 2007 and 2008/2009 and much of the baseline conditions remain relevant for the A14 Cambridge to Huntingdon improvement scheme.
- 15.3.4 Cambridgeshire County Council's Definitive Map is available as a web-based resource and this was referred to regularly between November 2013 and August 2014 in order to check the locations of the public rights of way within the study area.

- 15.3.5 Other sources of information included the local planning policy documents identified in *Table 15.1* and cycle route maps available from Cambridgeshire County Council's website.

Site visits

- 15.3.6 The desk-based review was supported by site visits undertaken on Friday 30 May 2014. The focus of these site visits was to check the situation on the ground, rather than purely relying on secondary sources. During these visits observations were made such as how well used some routes appeared, taking account of evidence such as the presence of foot or horse-shoe prints, how overgrown the vegetation was and whether people were observed using the routes. Notes were also made of locations that were inconvenient for travellers or where people may be put off cycling or walking, because of the presence of a busy road, for example.
- 15.3.7 The site visits concentrated on routes within Huntingdon (particularly across Mill Common and Views Common), Brampton and Buckden adjacent to the existing A1, and northern parts of Cambridge in the vicinity of Histon junction and recent development at Orchard Park.

Surveys

- 15.3.8 This assessment has taken account of the results of non-motorised user count surveys identified in *Table 15.2*. Survey locations are indicated on *Figure 15.1* in the *Environmental Statement (ES) Figures*. A summary of survey results is provided in *Appendix 15.1* in the *ES Appendices*.

Table 15.2: Non-motorised user surveys

Dates	Day of week	Weather	Survey details
3 October 2007	Wednesday	Heavy rain in afternoon	23 locations were surveyed between 07:00 and 19:00 to inform the A14 Ellington to Fen Ditton scheme. The survey involved counts of pedestrians, cyclists and equestrians. The A14 Ellington to Fen Ditton Environmental Statement reported that these surveys "may not have fairly reflected the potential levels of NMU flows at those locations on bright, clement days and evenings."
6 October 2007	Saturday	Short rain shower in afternoon	
27 July 2008	Sunday	Fair	24 locations (16 in 2008 and 8 in 2009) were surveyed between 07:00 and 19:00 to inform the A14 Ellington to Fen Ditton scheme in order to address potential underrepresentation of use in the 2007 surveys due to the weather conditions and time of year. The survey involved counts of pedestrians, cyclists and equestrians.
30 July 2008	Wednesday	Fair	
5 July 2009	Sunday	Fair	
8 July 2009	Wednesday	Fair	

Dates	Day of week	Weather	Survey details
October 2008 ¹	Not specified	Not specified	Surveys of daily NMU flows at 16 locations in the area around the Huntingdon A14 viaduct were undertaken to inform the A14 Ellington to Fen Ditton scheme. The surveys counted NMU according to the following categories: pedestrians, wheelchair users and cyclists.
18 May 2014	Sunday	Dry and sunny	A series of count surveys were undertaken in May and June 2014 to inform the A14 Cambridge to Huntingdon improvement scheme. The method of count survey varied according to locations – some were undertaken manually by observers, others by video monitoring. Surveys undertaken in May focused on locations in Huntingdon, particularly rights of way and permissive paths across Views Common and Mill Common. Surveys in June covered 40 locations in and around the scheme area. The purpose of these surveys was to identify key user groups and areas where very high usage occurred in order to ensure suitable provision was included in the design proposals.
21 May 2014	Wednesday	Dry and sunny	
4 June 2014	Wednesday	Rainy, sunny intervals	
5 June 2014	Thursday	Dry and sunny	
7 June 2014	Saturday	Dry and sunny	
8 June 2014	Sunday	Dry and sunny	

15.3.9 The survey information has been used to help characterise the baseline conditions. Since the surveys were undertaken on individual days within the given survey year, the surveys represent a small sample only. In order to avoid a focus on absolute numbers (which may be skewed due to the small sample of days surveyed) when describing the baseline the use has been classified according the terms 'very high' 'high', 'moderate' or 'occasional' use. The numbers of recorded journeys to which these terms have been applied is set out in *Table 15.3*.

Table 15.3: Descriptive terms for level based on survey results

Category of use	Number of journeys recorded in a day
Very high	200+ journeys (some surveys recorded more than 1000 journeys)
High	100 - 200 journeys
Moderate	10 – 99
Occasional	Fewer than 10

¹ Precise dates of surveys are not specified in the *A14 Ellington to Fen Ditton Environmental Statement* (Highways Agency, 2009).

Stakeholder feedback

- 15.3.10 During the pre-application process for the A14 Cambridge to Huntingdon improvement scheme there has been considerable stakeholder engagement in the form of meetings with representatives of county and district councils, workshops and public exhibitions (*Chapter 5 of the ES*). Much of the feedback received has centred on concerns relating to impacts upon pedestrian and cyclist access, cycle routes and equestrian provision in the new design. Feedback has been considered and addressed either through the assessment or in the evolving scheme design.

Characterising the NMU routes

- 15.3.11 In establishing the baseline conditions, the focus has been on describing the main characteristics of the routes within the study area that are likely to be used by pedestrians, cyclists and equestrians. The following considerations were made:
- which types of NMU are most likely to be using the current route (i.e. pedestrians, cyclists or equestrians);
 - whether the route is more likely to be used for utility journeys or recreational;
 - whether the route connects settlements, services or recreational locations, and if so, are there viable alternative routes close by or are NMU likely to be particularly dependent upon this particular route;
 - whether the route currently attracts high usage, and if so, whether there may be vulnerable groups such as children or elderly, that may need particular consideration;
 - where a route does not appear to be well used, what the reasons for this may be, for example an obstacle such as a busy road to be crossed, which currently deters use;
 - the current amenity value of the route, for example whether it is compromised by the presence of busy roads; and
 - whether the route currently offers facilities suitable for pedestrians, cyclists or equestrians.
- 15.3.12 A requirement of the scheme design is to avoid severing the connectivity of public rights of way. Where new highway is constructed it may be necessary to construct new crossing facilities in order to re-connect routes and some permanent diversions would also be required. Therefore, in analysing the baseline conditions, consideration has also been made as to how sensitive a particular route may be to any temporary disruption or permanent modification as a result of the proposed scheme during construction or operation. Making this judgement allows consideration as to what additional mitigation may be required. For example, where proposed construction activities might affect a route which is heavily used by school children, it may be possible to ensure that the works are programmed to avoid term times in order to minimise disruption to the school children.

- 15.3.13 These considerations allow for a judgement upon significance to be made. The construction of a new bridge on a route may introduce an element of inconvenience to the people who use the route. Such an element of inconvenience is likely to be more significant upon a major route used by commuting pedestrians and cyclists than a route used by occasional dog-walkers. This is because adding inconvenience to a major commuting route may discourage people from active travel modes (walking and cycling) and contribute to a switch to more sedentary modes, such as driving. This would be counter to policies to protect public health and encourage healthier lifestyles. In contrast, someone who uses a route for dog walking may be less sensitive to the inconvenience so long as they have alternative routes to walk or are not pressured in terms of journey time and the overall amenity is maintained.
- 15.3.14 There is no recognised standard guidance on sensitivity criteria for this topic. Therefore the criteria set out in *Table 15.4* were developed based upon the professional judgement of a suitably qualified and experienced specialist, as listed in *Appendix 6.1*. These criteria were developed to identify how sensitive a route would be to temporary disruption or permanent modification. The basis for assigning the selected sensitivity value for each type of route is set out in the description in *Table 15.4*.

Table 15.4: Sensitivity of NMU routes to temporary disruption or permanent change

Sensitivity	Description
Very high	<p>Key routes used by pedestrians, cyclists and other NMU for utility journeys such as commuting. These routes record very high numbers of NMU journeys and/or connect communities with employment land uses and other services with a direct and convenient NMU route. These routes are important since they offer opportunities to meet sustainable transport and public health objectives through active travel modes rather than private car use. Any interruption of these would inconvenience many people and could cause people to switch from active modes to private car use.</p> <p>Routes regularly used by vulnerable travellers such as the elderly, school children and people with disabilities, who may be disproportionately affected by small changes in the baseline due to potentially different needs.</p>
High	<p>National or regional trails and routes likely to be used for recreation that record high use. The sensitivity of these routes is judged to be high because of the number of people affected and effects upon regional leisure.</p> <p>Crossing points on busy roads for NMU (roads with more than 8,000 vehicles per day) which may not currently record high use but for which limited alternatives are available. These points are sensitive because disruption to these may affect the convenience or safety of journeys for NMU.</p>

Sensitivity	Description
Medium	Public rights of way and other routes close to communities which are used mainly for recreational purposes (for example dog walking) but for which alternative routes can be taken. These routes are likely to link to a wider network of routes to provide options for longer, recreational journeys. It is likely that direct and efficient journeys are not the priority for the majority of people using these routes so they would be more tolerant of disruptions and diversions. However people are likely to be sensitive to changes to the amenity and character of the overall route.
Low	Routes which have fallen into disuse such as through past severance or which are scarcely used because they do not currently offer a meaningful route for either utility or recreational purposes. Whilst these routes would not be sensitive in terms of disruption from the scheme, they may present opportunities for enhancement if existing barriers or poor amenity can be overcome through the scheme proposals.

Assessment criteria for NMU

- 15.3.15 For the assessment of effects upon NMU the main aim has been to predict the difference between the journeys that people would make on foot, by bicycle or on horseback, using either the highway network or the public rights of way network, with and without the proposed scheme in place. The assessment has considered changes in journey length and times, connectivity between routes and changes in the amenity value of journeys.
- 15.3.16 Consideration has also been given to whether changes in traffic flows could lead to noticeably more or less intimidating conditions for NMU. The thresholds for that judgement is based upon the criteria for community severance derived from the *DMRB Volume 11, Section 3, Part 8*, (The Highways Agency, 1993) (refer to *Chapter 16* where these criteria are presented). Using those criteria as a guide, fear and intimidation from traffic is considered only likely to become significant where annual average daily traffic (AADT) flows are over a threshold of 8,000 vehicles per day. Furthermore changes in traffic conditions would only be considered noticeable where the change is over 30%.
- 15.3.17 The sensitivity of the route has been taken into account for the assessment of construction impacts in order to determine the likely significance of any disruption during the construction phase. However, for the assessment of operational effects it should be noted that there is not a direct function between sensitivity of a route and the scale of impacts upon it when determining significance. This is because a route may be currently valued as having low sensitivity because it is not useful to NMU, yet a small modification, such as the provision of a new crossing point, may have a large significant effect because the route is transformed from one which is currently not very usable for NMU, to one which is highly useful.
- 15.3.18 The significance criteria for the assessment of effects upon pedestrians, cyclists and equestrians are set out in *Table 15.5*. For the purposes of this assessment, effects are considered to be significant where the effect is assessed as moderate or large.

Table 15.5: Assessment criteria for effects on NMU

Significance	Description
Large adverse	Direct impact on, or severance of, a route used by pedestrians, cyclists or equestrians, resulting in a substantial and permanent loss of amenity and use. Increases of 30% or more in traffic flows along route to increase volumes to over 16,000 vehicles per day such that would be likely to deter use by most NMU, particularly road cyclists.
Moderate adverse	Introduction of new need to cross a highway for a previously uninterrupted route, or the introduction of new highway in close proximity to a route which was previously tranquil in character. The changes would not cause a significant extension of journey (<500m) but would cause loss of amenity/convenience or substantially alter the character of the route. Increases of 30% or more in traffic flows along route to increase volumes to over 8,000 vehicles per day such that would be likely to deter use by some NMU, particularly road cyclists, or cause noticeably more intimidating conditions.
Minor adverse	No direct permanent impact but some loss of amenity. Temporary disruption to routes or short term loss of amenity.
No change	No significant change to route used by pedestrians, cyclists and/or equestrians.
Minor beneficial	An improved at-grade crossing facility or other provision on an existing route that improves the amenity or convenience for NMU, for example the introduction of a traffic island or pelican crossing.
Moderate beneficial	Introduction of a new crossing or other facility on an existing NMU route that is likely to encourage more use due to improved amenity/convenience or perception of safety, for example a new cycle lane, grade separated crossing or replacement of grass verge with pavement. Reductions in traffic to below 8,000 vehicles per day or by more than 30% such that conditions for NMU such as road cyclists are less intimidating.
Large beneficial	Provision of a permanent new route useful for NMU where previously there was no route or access was very hazardous or perceived to be hazardous such that NMU did not regularly use the route. Reductions in traffic to below the threshold of 8000 vehicles per day or by more than 60% such that NMU are more encouraged to take the route, particularly road cyclists.

Limitations

- 15.3.19 The NMU surveys undertaken can only provide an indication of use and are not a reliable measurement of actual use of a route throughout a year since they are undertaken over the course of individual days and may be skewed by specific events, weather conditions or by seasonal considerations. Furthermore, the surveys do not capture information about journeys not made, for example because people are discouraged by existing conditions (busy traffic, perception of danger or lack of facilities). The assessment therefore does not quote actual numbers of recorded journeys in the baseline description, but uses qualitative descriptions such as whether routes appeared to be regularly used by high numbers of people or not.

- 15.3.20 The criteria for community severance as set out in the *DMRB* are applied specifically for pedestrians. However, in the absence of other criteria, it has been used as indicative of how intimidating conditions on a road may be for cyclists travelling along a road (amongst the traffic) as well as for pedestrians crossing the road.

15.4 Baseline conditions for pedestrians, cyclists and equestrians

The A14 and A1 trunk road

- 15.4.1 Although NMU are not prohibited from using the A14, the current A14 within the scheme area is not suitable for journeys on foot, or by bicycle or horse due to the traffic speed, high traffic levels, high proportions of heavy goods vehicles (HGVs) and the frequency of slip road merge and diverge tapers. Very few cycle journeys were recorded on the A14 during surveys in 2014. Therefore, although there are several locations along the A14 where local roads, bridleways or footpaths join the A14, these connections are not widely used because of the inhospitable conditions on the A14 for modes other than motor vehicle. It is likely that the A14 trunk road is seen as a barrier to NMU journeys in most locations.
- 15.4.2 As with the A14, the A1 within most of the scheme area is unsuitable for journeys on foot or by bicycle or horse. The exception is south Buckden junction where a cycleway is provided from the B1514 slip road alongside the southbound A1 into Buckden. There are some public rights of way which meet the A1 but from which journeys on foot or by bicycle are unlikely to be continued due to the inhospitable conditions of the dual carriageway trunk road.
- 15.4.3 The existing A14 within the scheme area has a range of crossing points, either as road bridges, most of which are part of the existing junctions, or as public rights of way that pass over or under the route. These all provide valuable points of access across the trunk road, which would otherwise present a barrier to pedestrian, cyclist and equestrian movement. However, many of the road bridges are too busy for many cyclists and horse riders to consider using and many do not have footways.
- 15.4.4 The main potential crossing points for the A1 are the Grafham Road bridge (*Figure 15.1* in *ES Figures*), approximately 900m south-west of Brampton, the Brampton Hut interchange and the Buckden Road underpass. The Grafham Road bridge has a footway for pedestrians. The Brampton Hut interchange is light controlled, which allows some opportunity for pedestrians to cross but which is nevertheless inconvenient due to the number of slip roads to be crossed to get from one side of the A1 corridor to the other. Although there is no footway provision along Buckden Road itself (pedestrians would have to walk on the road or the grassed verge), there is a footway through the underpass.

Public rights of way

- 15.4.5 There is a network of public rights of way within the study area (*Figure 15.1* in the *ES Figures*). This includes designated footpaths, bridleways and byways, many of which cross or meet the footprint of the proposed scheme and existing A14.

- 15.4.6 As identified above, the connectivity between many public rights of way is compromised by the existing A14. Where footpaths and bridleways meet the A14 and no crossing facility is provided, it is unlikely that these would be used due to the hazards associated with crossing a dual carriageway such as the A14. The severance effect of the existing A14 and A1 therefore reduces the value of many public rights of way in terms of their current usefulness as routes for walkers and other NMU.
- 15.4.7 The public rights of way which have been identified within the study area as being potentially affected by the proposed scheme are described in *Table 15.6*. The level of sensitivity ascribed to each of the routes has been determined based upon indications of use from the NMU surveys, the current connectivity of the routes to services and a wider network of routes suitable for NMU and observations of level of use made during site visits in May 2014.

Cycle routes

- 15.4.8 Cycle routes include those which form part of the National Cycle Network (NCN) as well as local or regional cycle routes identified on the Cambridgeshire County Council's cycle network maps.
- 15.4.9 NCN routes 11, 12 and 51 coincide with the scheme area and are described where relevant in *Table 15.6* below. There are also local cycle routes within Huntingdon and Cambridge that coincide with the scheme area (*Figure 15.1* in the *ES Figures*).

Distance walking trails

- 15.4.10 The Ouse Valley Way is a long distance walking trail which follows the river Great Ouse from its source near Syresham in Northamptonshire to the tidal river at Kings Lynn, linking many towns and villages. The Ouse Valley Way crosses the existing A14 via an underpass near Godmanchester. The Pathfinder long distance walk is located east of the Ouse Valley. This long distance walk is a heritage trail in memory of the RAF Pathfinder Force and links up four airfields (Wyton, Graveley, Oakington and Warboys). In the vicinity of the proposed Huntingdon southern bypass the route comes off a public footpath, following Debden Top Farm access track before joining Silver Street into Godmanchester. It then crosses the A14 via the Cambridge Road (B1044) underpass north of Godmanchester before continuing northwards.

Table 15.6: Baseline description of routes available for pedestrians, cyclists and equestrians

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
Section 1	A1 Alconbury to Brampton Hut (Figure 15.1 in the ES Figures - sheet 1)	
B1043 and Alconbury junction with the A1	The B1043 is the minor road linking Alconbury with the A1. There is no special provision for NMU to enable them to cross the A1 at this grade separated junction. However, Rusts Lane which is approximately 850m north of the Alconbury junction (and outside of the study area) provides a crossing point under the A1 and therefore offers an alternative route. On the basis that the B1043 at Alconbury is currently inconvenient for NMU and that they are likely to use the alternative route, the sensitivity of the road to disruption is judged to be low.	Low
Woolley Road	Woolley Road is a minor road off the A1 northbound which provides access to the Huntingdon Life Sciences Research Centre and the hamlets of Woolley and Barham. Due to the A1, this route does not offer significant connectivity to other routes suitable for non-motorised modes of travel and therefore it is considered to have low sensitivity to disruption for NMU since they are unlikely to use the route currently.	Low
Bridleway The Stukeleys 6 (230/6)	Bridleway 230/6 meets a side road off the main A1 southbound approximately 1km north of Brampton Hut junction. The side road is used by lorry drivers as a place to rest and there is also a burger van. A small bridge crosses Alconbury Brook. The bridleway heads eastwards towards Huntingdon linking to other footpaths outside the main study area (230/7 and 230/8). On the basis that there is no crossing point for NMU where this bridleway meets the A1, the overall sensitivity of the route to temporary disruption or modification is judged as low.	Low
Section 2	A1/A14 Brampton Hut to East Coast main line (Figure 15.1 in the ES Figures - sheet 2)	
Footpath Ellington 23 (71/23)	Footpath 71/23 runs approximately 318m from Low Harthay Farm northwards terminating at the A14. It does not link to other public rights of way although journeys could continue along private farm tracks (subject to landowner permission) or the verge of existing A14. On the basis that this footpath is isolated from other public rights of way, it is unlikely that NMU would be inconvenienced by any disruption or modification. Therefore the sensitivity is judged to be low.	Low

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
Footpath Brampton 15 (28/15)	Footpath 28/15 starts among the residential area within Brampton (Belle Isle Crescent) and runs in a north-west direction where it terminates at the existing A1. NMU surveys in 2007 recorded small numbers of walkers, and equestrians using this path although none were recorded in 2008. A site visit on 30 May 2014 identified that this path appeared to be well used, particularly by dog walkers, who were observed walking a circular route around the field boundaries (which are not identified as public rights of way on the Definitive Map). This was also reflected in the 2014 survey which recorded moderate numbers of journeys by walkers, many of whom had dogs. On the basis that this footpath appears to be well used by the local community for recreational journeys, it is judged to be of medium sensitivity..	Medium
Bridleway Brampton 19 (28/19)	Bridleway 28/19 runs westwards from the A1, running around the northern boundary of Brampton Wood to link with the network of footpaths and bridleways south of Ellington and around Grafham. Bridleway 28/19 provides a link from Grafham Water and Brampton Wood to Brampton via Grafham Road Bridge. The route via Grafham Road Bridge is a result of a previous permanent diversion which was implemented during original widening of the A1. Surveys in 2007 and 2008 recorded moderate numbers of journeys by pedestrians, cyclists and equestrians using this route. Of all the bridleways surveyed between 2007 and 2009, this recorded the highest equestrian use with a maximum of seven equestrian journeys in a day (Wednesday 3 October). The 2014 NMU survey, which was undertaken on a weekday, revealed only three journeys on foot into/out of bridleway 28/19 and no equestrian activity. The 2014 survey location was at the bridleway entrance off Brampton Road. On the basis that this route provides a useful link to the recreational attractions of Brampton Wood and Grafham Water this route is judged to be of medium sensitivity to disruption or modification.	Medium
Footpath Brampton 2 (28/2)	Footpath 28/2 starts at Brampton Road east of the A1 and runs south-west, past Lenton Lakes coarse fishing ponds, where it stops at the A1. There is no crossing facility of the A1 dual carriageway for this footpath and the route does not connect to any other paths. However people were observed following the field boundaries in this area and so this route may form part of a locally popular route for short walks and dog walkers. On this basis the route is judged to have medium sensitivity to disruption or modification.	Medium

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
Park Road (local road) and NCN Route 12 (combines route 51)	Park Road crosses the A1 using the existing Grafham Road Bridge and links Brampton to Grafham, approximately 3.5km to the west of the A1. NCN 12/51 follows this road across the A1, continuing up through Brampton and into Huntingdon and then northwards along Ermine Street towards St Neots and Peterborough. Within Huntingdon the route NCN 51, continues to Godmanchester and then eastwards into Cambridge. Surveys in 2007 and 2008 showed moderate cycle activity. The 2014 survey (taken on a Wednesday) showed 15 cycle journeys and six pedestrian journeys were recorded over Grafham Road Bridge.	High
Byway Brampton 1 and Buckden 11 (28/1 and byway 32/11)	Byway 32/11 commences off Buckden near the A1 underpass and continues in a north-west direction, becoming byway 28/1 after approximately 630m where it then continues for a further 300m (approximately) as byway 28/1 before coming out at Brampton Road. This location was surveyed in 2014 which recorded only one pedestrian journey and no cycle or equestrian journeys. On the basis that this route links to a means of crossing the A1, this route is judged to be of medium sensitivity to disruption since there are limited alternative routes that could be used to provide a recreational circuit for NMU.	Medium
Buckden Road B1514 (local road)	Buckden Road (B1514) provides a link for traffic between Brampton and the A1. Moderate numbers of pedestrians and cyclists were recorded using this route in 2007 and 2008 (51 cyclists in a day being the highest count). In 2014, moderate numbers of cycle journeys were recorded and occasional pedestrian journeys. The survey was on a weekday. A cycleway is provided alongside the A1 south of Buckden junction and therefore this route provides a link between settlements such as Brampton and Buckden for cyclists, pedestrians and potentially, equestrians. On the basis that this road provides a key link for NMU it is considered to have high sensitivity to disruption or modification.	High

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
Footpaths Brampton 3 and 4 (28/3 and 28/4)	Footpath 28/3 is accessed off Buckden Road via a stile and follows the southern and western perimeter of the RAF Brampton site. It then becomes footpath 28/4 which continues northwards into Brampton, coming out on Layton Crescent. Together, these two paths cover a distance of approximately 1.6km. On the basis that these footpaths are located close to the Brampton community, and RAF Brampton which is identified for redevelopment, these footpaths are considered to have medium sensitivity.	Medium
Footpaths Brampton 7 and Buckden 13 (28/7 and 32/13) and Ouse Valley Way long distance walk	These two paths form part of the Ouse Valley Way long distance walk following the course of the River Great Ouse on the western bank. Surveys undertaken in 2007 and 2008 indicated frequent use by walkers and some cycle use during the days surveyed (the weekend days recording higher use).	High
Section 3	East Coast main line to Swavesey (Figure 15.1 in the ES Figures, sheets 2 - 4)	
B1043 Offord Road (local road)	This road links villages such as Offord Cluny and Offord D'Arcy with Huntingdon. Surveys in 2007 and 2008 showed moderate cyclist activity (maximum count was 41 on a Sunday, 2007) while surveys in 2014 recorded activity from Offord Road onto and off a track at grid reference TL 2221 6777 and did not record any NMU journeys. However activity along Offord Road itself was not surveyed. On the basis that previous surveys have recorded moderate use and that alternative routes for cyclists in the Offords wanting to commute by bicycle to Huntingdon (approximately 5km if using Offord Road) would be double the distance, this route is valued as having high sensitivity to disruption.	High

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
Silver Street (local road) and Pathfinder long distance walk and bridleway Godmanchester 1 (102/1)	Silver Street extends north to south from Godmanchester. Bridleway 102/1 continues southwards from Silver Street near Debden Top Farm. The Pathfinder long distance walk follows this route. This long distance walk is a heritage trail in memory of the RAF Pathfinder Force and links up four airfields (Wyton, Graveley, Oakington and Warboys). In the vicinity of the proposed Huntingdon southern bypass the route comes off a public footpath, following Debden Top Farm access track before joining Silver Street into Godmanchester. It then crosses the A14 via the Cambridge Road (B1044) underpass north of Godmanchester before continuing northwards. Surveys in both 2007 and 2008 recorded moderate use of Silver Street by walkers and occasional journeys by cyclists (both on the weekdays surveyed and the weekend days). Two equestrian journeys were recorded in the 2007 survey. Surveys in 2014, which were undertaken on a weekday, recorded moderate use by walkers and occasional journeys by cyclists. As a regional recreational trail used frequently, particularly by walkers, this route is considered to be of high sensitivity to disruption.	High
A1198 Ermine Street	The A1198 has a junction with the existing A14 at Godmanchester. The road runs southwards to Royston. The Wood Green Animal Shelter is located off the A1198. Occasional pedestrian and cycle use was recorded on this route in 2007. It was not surveyed in 2008 and the 2014 surveys revealed moderate cycle use on the weekday surveyed. For any cyclists wanting to commute to and from Huntingdon and Papworth Everard and surrounding villages, this would be the main route (approximately 9km) and any alternative routes would be substantially longer. Therefore the route is valued as having high sensitivity to disruption.	High

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
Bridleways Godmanchester 2 and 7 (102/2, 102/7) and Hemingford Abbots 10 (121/10).	These bridleways form part of a wider network of bridleways between Offord Cluny and Hilton. Bridleways 102/2 and 102/7 run parallel to each other and are located on the western side of Ermine Street, heading east to west joining bridleway 102/1 on the Pathfinder long distance walk. Bridleway 121/10 commences on the eastern side of Ermine Street (opposite 102/2) and follows a route north-east and then east along field boundaries, coming out on Mere Way where it joins bridleways 122/13 and 121/9 (see below). The point at which bridleways 121/10, 122/13 and 121/9 meet was surveyed in 2009. The survey showed moderate use by walkers and cyclists and occasional equestrian activity. Notes which accompanied the 2009 survey identify that the site was used by dog walkers from nearby houses. There are at least two equestrian centres in the wider area (one at Beaconsfield near the Wood Green Animal Centre, and another in Offord Cluny) so it is reasonable to assume there would be at least occasional equestrian use of all these bridleways. These bridleways are judged to be of medium sensitivity due to the level of apparent use.	Medium
Bridleways Hemingford Grey 13 (122/13) and Hemingford Abbots 9 (121/9) and Mere Way	Mere Way is a track which has a junction with the existing A14 at Gore Tree Farm. Bridleways 122/13 and 121/9 follow Mere Way, a track, as far as the point where they meet bridleway 121/10. Mere Way, north of the point where it meets 121/10 is an unclassified road. Surveys of Mere Way undertaken in 2008 recorded moderate use by walkers and cyclists and occasional use by equestrians. On the basis that these routes offer a network of public rights of way and recreational opportunities, they are considered likely to be of medium sensitivity to disruption or modification.	Medium
Footpath Hemingford Grey 10 (122/10)	Footpath 122/10 is approximately 1.7km in length and is accessed via a gate off the B1040 where it first heads west, then north along field boundaries before turning west again, terminating at Mere Way.	Medium

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
Footpaths Fenstanton 6, 14 and Conington 1 (87/6; 87/14 and 53/1) and unnamed road south of existing A14.	Footpath 87/6 is accessed from Conington Road close to the underpass where it follows the field boundary to the north of Model Farm initially eastwards but then deviating southwards, crossing an unnamed road south of the A14 (see below) and continuing across a field in a south-south-east direction and terminating at some field boundaries. Footpath 87/14 meets 87/6 at Link Road and continues south-east, meeting footpath 53/1 which heads southwards to Conington. On the basis that these routes provide a link for walkers and horse riders between Conington and Fenstanton, these routes are valued as having medium sensitivity to disruption or modification.	Medium
Link Road south of existing A14 (near Fenstanton junction)	Link Road connects Hilton Road and Conington Road with Fenstanton junction. Surveys in 2014 recorded moderate cycle activity and occasional pedestrian and equestrian activity on the Sunday surveyed and occasional use by pedestrians and cyclists on the Wednesday surveyed. On the basis that this road appears to be part of popular recreational route, particularly for cyclists, the route is valued as having medium sensitivity for NMU.	Medium
Section 4	A14 Swavesey to Girton (Figure 15.1 in the ES Figures - sheets 4 - 5)	
Bridleway Swavesey 14 (225/14) (Scotland Drove)	Bridleway 225/14 (Scotland Drove) terminates at the A14 close to a lay-by used as a lorry park. From the A14 it follows a straight track north-north-east between two field boundaries as far as the Rose and Crown Lane near Swavesey (approximately 1.4km). There is limited verge-side access alongside the A14 from the bridleway which may be of use to lorry drivers who have parked up at the nearby lay-by seeking a break. However, it is somewhat isolated from other public rights of way and therefore is considered likely to have low sensitivity to disruption in terms of its current recreational or commuting value. This route has not been surveyed.	Low

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
Bucking Way Road and minor road to Boxworth (High Street)	Bucking Way Road is accessed via Trinity Foot junction and goes northwards whilst there is also a minor road to Boxworth on the southern exit at Trinity Foot junction off the A14. Cambridge Services is located at this junction on the west-bound side whilst there is a business park off the junction on the east-bound side. Occasional journeys by pedestrians and cyclists were recorded on Bucking Way Road in 2007. A weekday survey in 2014 on the junction bridge itself recorded moderate use by pedestrians and cyclists, with the higher numbers being recorded between midday and 13:00 indicating that the bridge itself is likely to be used by workers in the Buckingham Business Park travelling to and from Cambridge Services, on the opposite side of the A14, for lunch. A new cycle route was provided from Swavesey over this bridge in spring 2014 to improve access. On the basis that the bridge provides a link between the business park and Cambridge Services, and that Buckingham Road links a number of villages and public rights of way north and south of the existing A14, this road is valued as high sensitivity to any disruption or modification.	High
Bridleway Swavesey 15 (225/15) (Utton's Drove)	Bridleway 225/15 (Utton's Drove) terminates at the A14 adjacent to some sewage works. It follows a straight track, approximately 2.5km in a north-north-east direction, towards Ramper Road to the west of Longstanton. The amenity of this route within the study area is likely to be compromised by the presence of the A14 and there is no access along the A14 from the route except by the main carriageway itself or a narrow grassed verge. On this basis the route is considered likely to have low sensitivity to disruption in terms of its current recreational or commuting value. This route has not been surveyed.	Low
Footpaths Lolworth 5 and 6 (150/5 and 150/6)	Footpath 150/5 links Lolworth to the existing A14 where it terminates. It follows a route south-west linking to Robin's Lane via another short footpath (150/6). The start of footpath 150/5 from the A14 was observed in 2014 to be heavily overgrown, indicating it is little used as far as the A14. The amenity of this footpath within the study area would be compromised by the presence of the A14 (busy traffic conditions and traffic noise). Surveys of the footpath close to The Grange in 2007 recorded occasional pedestrian use on the weekday and weekend day surveyed. On the basis that footpath 150/5 terminates at the A14 and that there is an alternative footpath linking The Grange and Lolworth 200m south of The Grange (footpath 150/7), these two short footpaths within the study area are considered to be of low sensitivity in terms of disruption or modification.	Low

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
Robin's Lane	Robin's Lane is a minor road that links Lolworth to the A14. On the basis that the A14 is inhospitable to NMU at this location and there is no crossing point, this route within the study area is valued as having low sensitivity to disruption for NMU.	Low
Bridleway Bar Hill 1 (16/1)	Bridleway 16/1 follows the perimeter of Bar Hill and terminates at the A14 where there is no crossing point. The Bridleway provides a link from Bar Hill to Dry Drayton approximately 500m to the south-east via bridleway 66/1 and footpath 66/2. From Bridleway 16/1 it is also possible to reach Lolworth to the west by following footpaths 16/2 and 150/7 across fields to Cuckoo Lane, Lolworth. On the basis that this bridleway links a settlement with a wider public rights of way network, the route is valued as having medium sensitivity to disruption. This route has not been surveyed for use.	Medium
Bridleway Longstanton 10 (151/10)	Bridleway 151/10 terminates at the A14 opposite Bar Hill. From the A14 it follows a route along field boundaries towards the north-east into Longstanton. At the location where the bridleway meets the A14, the A14 itself has become three lanes in either direction and therefore it is highly unlikely that NMU would cross at this location to Bar Hill. A survey undertaken in 2007 recorded occasional use by walkers using this bridleway on a Wednesday. The site has not been surveyed since. However on the basis that there is no crossing point and there are alternative crossing points nearby, this route, as it coincides within the study area, is considered to have low sensitivity to disruption or modification.	Low

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
B1050 (Hatton's Road) and Bar Hill junction	<p>The B1050 provides a link between Longstanton and the A14. The A14 is accessed off Bar Hill junction. The current over bridge at Bar Hill junction does not offer a continuous route for NMU. Any cyclists, pedestrians or horse riders would need to be on the road or walk along the soft verges if they wanted to cross between Bar Hill and the B1050 to Longstanton, meaning access across the A14 is poor at this location. Surveys in both 2007 and 2008 recorded occasional pedestrian activity on Hatton's Road near Bar Hill junction and moderate cycle activity (a maximum of 32 cycle journeys was recorded in 2008). Surveys in 2014 recorded only occasional pedestrian journeys and no cyclists. The difference in numbers of cyclists recorded may be a result of the since opened Cambridgeshire Guided Busway which offers an alternative route for cyclists. However, there are limited alternative routes for NMU located in Bar Hill and on this basis, the B1050 as it crosses the study area, is considered to have high sensitivity to disruption or modification.</p>	High
Oakington Road and Dry Drayton Road (Pathfinder long distance walk)	<p>The Pathfinder long distance walk follows Oakington Road and Dry Drayton Road, crossing the A14 at Dry Drayton junction. Oakington Road links Dry Drayton approximately 1.5km to the south west with the A14 at Dry Drayton junction whilst Dry Drayton links Oakington, approximately 1.5km to the north-east to the A14 at Dry Drayton junction. As with Bar Hill junction, there is no special provision for NMU at the current Dry Drayton junction over bridge and so access is poor for NMU. Walkers following the Pathfinder long distance walk would have to walk along the soft verge on the road side. Use surveys in 2007 and 2008 on Dry Drayton road near the junction revealed moderate cycle activity (a maximum of 58 cycle journeys recorded in 2008) along this route and occasional pedestrian activity (three journeys was the maximum in 2008). As a crossing point of the A14 (albeit without good pedestrian provision) and part of the Pathfinder long distance walk, this route is valued as having high sensitivity to disruption or modification.</p>	High

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
Bridleway Dry Drayton 12 (66/12)	Bridleway 66/12 follows a route northwards meeting the A14 between Hackers Fruit Farm and Cambridge Crematorium, which has a direct access onto the A14 but no crossing point of the A14. The bridleway provides a link to Madingley via further bridleways to the south (99/9 and 154/1). No use was recorded on this bridleway in 2007 and it has not been surveyed since. Although no use was recorded of this bridleway, this route provides the only access to the crematorium other than via the A14 itself. On this basis the route is valued as having potentially high sensitivity to disruption for the few people that may depend upon it, albeit on rare occasions.	High
The Avenue (Madingley)	The Avenue links Madingley to the A14. There is no crossing of the A14 at this point and the A14 in this location is extremely busy. It is considered that this route would have low sensitivity to NMU to disruption or modification.	Low
Footpaths Girton 7 and 8 (99/7 and 99/8)	Footpath 99/7 terminates at the A14 westbound carriageway near the Girton interchange. There is no crossing point for NMU here where the roads are extremely busy and the M11 and A14 eastbound carriageway would subsequently need to be crossed to get south to north. Footpath 99/7 meets The Avenue from which point footpath 99/8 continues on the opposite side of the road eventually meeting footpath 66/13 providing a link westwards to Dry Drayton. No use was recorded on this route crossing the Avenue in 2007. On the basis that these routes do not provide a meaningful route within the study area, and the amenity is compromised by the presence of the Girton interchange, these paths, within the study area are considered to have low sensitivity to disruption or modification.	Low
Washpit Road	Washpit Road is an unclassified road which provides a link between the village of Girton and the A14 eastbound carriageway. There is a bus stop on the A14 where the road comes out and a footway leads from this location east-bound to an uncontrolled at-grade crossing where pedestrians and cyclists could then cross to Huntingdon Road – a key route into Cambridge. On the basis that there is an alternative, more direct route between Girton and Huntingdon Road, this route is considered to be of medium sensitivity to disruption or modification.	Medium

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
Bridleways Madingley 2 and Girton 6 (154/2 and 99/6)	Bridleway 99/6 links with bridleway 154/2 via an existing bridge and southwards to Madingley. NMUs have difficulties crossing the A14 in this area at the Girton interchange. There is an underpass under the M11 but there are no existing crossings of the A1307 (Huntingdon Road), the A14 or its slip roads. Furthermore from the point where bridleway 99/6 meets the A14 east-bound, there is no continuous footway provision towards Huntingdon Road. Surveys in 2014 recorded occasional pedestrian use of bridleway 99/6 on a weekday and moderate use by pedestrians and cyclists at the weekend. On the basis of survey data indicating it is a popular recreational route, these bridleways are considered to be of medium sensitivity to disruption or modification.	Medium
Footpaths Madingley 3 and Girton 5 and 4 (154/3, 99/5 and 99/4)	Footpath 154/3 links with footpath 99/5 via an existing underpass under the M11 approximately 200m south-west of the Girton interchange. Northwards this joins with footpath 99/4 via an at-grade crossing of A1307 Huntingdon Road (there is no specific crossing facility provided here) and crossing of Girton Grange footbridge into Girton village. Surveys in 2008 recorded moderate cycle and pedestrian use of the crossing between footpaths 99/5 and 99/4 (which follow tarmacked routes either side of the A1307). In 2014 a survey of Girton Grange footbridge (footpath 99/4) recorded moderate pedestrian use on both the weekday and Sunday surveyed (many of whom were dog-walkers), and occasional cycle use. On the basis that these footpaths combined provide one of the few routes across the Girton interchange area, this route is considered to have high sensitivity to disruption or modification.	High
Section 5	Cambridge Northern Bypass to Histon and Milton (Figure 15.1 in the ES Figures - sheets 5-6)	
Girton Road and Sustrans local route 24	Girton Road links, by an over bridge, the southern and northern parts of Girton, separated by the A14. Girton Road is a Sustrans local cycle route (no. 24) which runs from Huntingdon to join the cycle network in Cambridge. Surveys in 2007 and 2008 indicated very high use of this bridge by both cyclists (up to 764 recorded journeys on a Wednesday in 2008) and pedestrians (up to 419 journeys recorded on a Wednesday in 2008) demonstrating its importance as a regular route between communities. One equestrian journey was also recorded in 2008. On the basis that this appears to be a highly used route by NMU on both weekdays and the weekend, this route is considered to have very high sensitivity to any disruption or modification.	Very high

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
B1049 at Histon junction	<p>The B1049 links Impington and Histon with Cambridge. It crosses the A14 Cambridge Northern Bypass at Histon junction, which is a grade separated junction. Crossing points for pedestrians and cyclists have recently been provided across this junction where pelican crossing facilities are provided. Surveys undertaken in 2007 and 2008 recorded moderate numbers of pedestrians and high numbers of cyclists negotiating this junction. There has been considerable recent mixed-use development at Orchard Park, which is located abutting the south-east corner of the junction which may lead to an increased activity at this junction. A survey in 2014 of the crossing point on the B1049 itself 150m south of Histon junction recorded high numbers of cyclists and moderate numbers of pedestrians. Although the Cambridgeshire Guided Busway route crosses the A14 approximately 1km to the west of Histon junction which offers a less interrupted route for cyclists in particular, this is some distance for any pedestrians wishing to cross between the Orchard Park area and Impington. On this basis Histon junction itself and the B1049 approaching Histon junction is considered to have very high sensitivity to disruption or modification.</p>	Very high
Bridleways Impington 6, Orchard Park 1 and Milton 6 and 7 (135/6, 284/1, 162/6 and 162/7) – the Cambridgeshire Guided Busway and NCN route 51	<p>These bridleways follow the Cambridgeshire Guided Busway route which links Cambridge with Histon and Impington. It crosses the A14 via an underbridge and is well used by cyclists and pedestrians. The busway is now part of NCN route 51 and provides a key route between villages north of the existing A14 and Cambridge city centre for cyclists. On this basis, and for the reason that it provides one of the few crossing points of the A14 Cambridge Northern Bypass, the route is considered to have very high sensitivity to disruption or modification.</p>	Very high
Byways Milton 3 and Impington 3 (162/3 and 135/3) (Mere Way)	<p>Byway 162/3 links with 135/3, crossing the A14 Cambridge Northern Bypass via an underbridge at Kings Hedges, near to the Cambridge Science Park. Mere Way (Byway 135/3) is closed to vehicles with the exception of pedal cycles. Mere Way extends from Kings Hedges in a north-east direction to Landbeach (3km from the A14) and Waterbeach (approximately 5km from the A14). Several cyclists were observed coming from the Mere Way underpass and onto NCN route 51 during a brief site visit in May 2014. On the basis that this route is one of the few crossing points of the Cambridge Northern Bypass and provides a key link for NMU to the Cambridge Science Park, and other key employment areas around northern Cambridge, this route is considered to have very high sensitivity to disruption or modification.</p>	Very high

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
A1309 Milton Road at Milton junction	Access from the A14 and Cambridge to the A10 is possible from Milton junction. The A10 is the main route between Cambridge and Ely and it also links settlements and new development at Landbeach and Waterbeach. There are pavements around the junction, which is light controlled and therefore would provide some opportunity for NMU to cross. Moderate numbers of NMU were recorded using this junction during the 2007 and 2008 surveys. However the Jane Coston bridge offers a dedicated pedestrian/cycle bridge across the A14 just 300m east of Milton junction and is therefore likely to be preferred by most commuting NMU and on this basis Milton junction is considered to have medium sensitivity to disruption or modification.	Medium
Jane Coston Bridge, Milton and NCN Route 11	The Jane Coston Bridge is a cycle and footbridge over the A14 which links the village of Milton with the north of Cambridge. The bridge accommodates NCN Route 11 and also provides a link towards Milton Park. High numbers of pedestrians (up to 846 journeys) and cyclists (up to 1034 cycle journeys) were recorded crossing this bridge in the 2008 surveys. Surveys in 2014 (taken just where the share cycle/pedestrian route from the bridge reaches Cowley Road) again recorded high numbers of pedestrian and cycle journeys. On the basis that this is a key NMU route recording very high numbers of users, this route is considered to have very high sensitivity to disruption or modification.	Very high

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
Section 6	Huntingdon A14 viaduct area and existing A14 (proposed to be de-trunked under the scheme) (Figure 15.1 in the ES Figures – sheet 3, 4 and 7)	
Footpaths Huntingdon 10, 9 and 11 (133/10, 133/9 and 133/11)	<p>Footpath 133/11 crosses under the A14 via an underpass approximately 500m north-west of the A14 viaduct. The footpath provides a link between Huntingdon town centre, Views Commons, Hinchingsbrooke Country Park and recent development (business and residential) in Hinchingsbrooke near the Spittals interchange. From footpath 133/11 it is possible to access a shared cycleway/footpath (permissive path) which provides a traffic free route along the edge of the grounds of the Cambridgeshire Constabulary HQ between Hinchingsbrooke Hospital and the Cambridgeshire Constabulary HQ to Hinchingsbrooke School. Moderate to high numbers of cyclists and pedestrians were recorded using this route in the 2008 surveys. In the 2014 surveys very high numbers of pedestrian journeys were recorded and high numbers of cycle journeys were also recorded.</p> <p>Footpath 133/10 provides a link between Brampton Road and Huntingdon rail station and footpath 133/11. The NMU survey in 2014 recorded very high numbers of pedestrian movements where footpaths 133/10 and 133/11 meet. High numbers of cycle journeys were also recorded. Footpath 133/9 is now altered by the new Huntingdon West of town centre link road. There is a pavement alongside this new road. These routes are all considered to be of very high sensitivity to disruption because of their importance as routes by school children, commuters and people moving around the Huntingdon community generally.</p>	Very high

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
<p>B1514 Brampton Road in Huntingdon, Hinchingsbrooke Park Road, Huntingdon West of town centre link road and NCN routes 12 and 51.</p>	<p>The B1514 Brampton Road provides a route into and out of Huntingdon, providing a bridge over the East Coast main line but passing under the A14 road viaduct. It links Brampton and the A14 with Huntingdon town centre. The NCN routes 12 and 51 (combined) also follow Brampton Road before route 12 turns north up St John's Street whilst route 51 continues eastwards towards Cambridge. Brampton Road provides a key route crossing the A14 and high numbers of pedestrians and cyclists were recorded at all survey locations 2008. The presence of Hinchingsbrooke School 500m west of the A14 road viaduct means that high numbers of school children use this route. The 2014 survey showed very high numbers of pedestrian journeys along Brampton Road under the viaduct and on Hinchingsbrooke Road in the vicinity of the school. Very high numbers of cycle journeys were recorded using Brampton Road and Hinchingsbrooke Road. Other key facilities likely to generate journeys by NMU in the viaduct area are the Hinchingsbrooke Country Park (1km west of the viaduct), residential areas off Scholars Avenue (180m west) and Huntingdon rail station under the viaduct. A new link road (Edison Way) was opened in April 2014 which provides a link between Brampton Road approximately 100m east of the viaduct and Ermine Street, relieving congestion on the Huntingdon town centre ring road.</p> <p>All these routes are considered to be of very high sensitivity to disruption or modification because of their importance as routes by school children, cyclists and people moving around the Huntingdon community generally.</p>	<p>Very high</p>
<p>Huntingdon – footpaths Huntingdon 6 and 4 (133/6, 133/4) and cycle route and permissive path from Mill Common/Castle Moat Road junction to Huntingdon railway station.</p>	<p>Footpaths 133/4 and 133/6 are short routes along The Walks at Mill Common in Huntingdon. There is also a cycle route across Mill Common which provides a link between the Mill Common road (just off the Huntingdon ring road) and Huntingdon railway station. Moderate to high use of the cycleway by cyclists and pedestrians was recorded during surveys in 2014. As a key NMU route to the railway station this is considered to be of very high sensitivity to disruption or modification.</p>	<p>Very high</p>

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
Huntingdon (south of existing A14): footpaths Huntingdon 1,2, 35 and Brampton 12, 13 and 14 (133/1, 133/2, 28/12, 28/13, 28/14 and 133/35)	A network of footpaths south of the A14 crossing Portholme, including the Ouse Valley Way, (footpaths 133/2, 133/3, 133/35, 28/12, 28/13 and 28/14) link to Huntingdon at Mill Common via footpath 133/1. There is an underpass under the A14 at Mill Common and high numbers of pedestrians and occasional cyclists were recorded using this route in 2008. Surveys in 2014 recorded high pedestrian use and moderate cycle use. As a route offering providing key access to the countryside for residents in Huntingdon and a crossing point of the A14 (for which there is only one other practical alternative route across, near the railway station 600m to the west), this route is considered to have high sensitivity to disruption or modification.	High
B1044 (The Avenue) and NCN route 51	The B1044 (The Avenue) provides the main route suitable for NMU over the river Great Ouse in Huntingdon. A footbridge is provided alongside the historic Huntingdon Bridge, approximately 135m downstream of the Huntingdon A14 Viaduct, which provides a route for pedestrians and dismounted cyclists to cross the river. NCN route 51 follows the road over the bridge at this location too. From the river, the B1044 passes under the A14 and on towards Godmanchester. A shared cycleway/footway is provided alongside the B1044 to support pedestrians and the NCN route 51. On the basis that this route provides the only direct route for NMU between Godmanchester and Huntingdon, this route is considered to be of very high sensitivity to disruption or modification.	Very high
Ouse Valley Way, footpaths 102/4 and 102/15	The Ouse Valley Way crosses the A14 approximately 660m west of Godmanchester junction on the A14. Here the Ouse Valley Way follows footpath 102/4 in a north-east to south-west alignment, passing around the western banks of a flooded former gravel pit. Footpath 102/15 provides a short diversion around the eastern perimeter of a gravel pit before meeting 102/4 on the north side of the gravel pit. As a regional trail, this route is considered to have high sensitivity to disruption or modification.	High
B1044 (Cambridge Road), NCN route 51 and the Pathfinder long distance walk	East of Godmanchester, the B1044 passes under the A14 approximately 150m west of the Godmanchester junction. There is a footway along this road. The NCN route 51 continues along this route (on road), as does the Pathfinder long distance walk. As a distance trail and national cycle route, this route is considered to have high sensitivity to disruption or modification.	High

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
Rideaway and Moat's Way minor roads at Hemingford Abbots junction	Rideaway is a road that links Hemingford Abbots junction with Hemingford Abbots approximately 1.3km north of the A14. Moat's Way, south of the A14 provides a route from Hemingford Abbots junction to some farms south of the A14. There is no specific provision for NMU at Hemingford Abbots junction. These routes provide limited connectivity between settlements and do not link to a network of public rights of way. They do, however, provide the only route across the A14 for residents in farms south of the A14 wishing to access settlements to the north and on this basis the junction is considered to have high sensitivity to disruption or modification.	High
Bridleway 122/16 and Gore Tree Farm overbridge	There is a short bridleway (122/16) which is located on Mere Lane at the overbridge by Gore Tree Farm. This was surveyed in 2014. The survey, which was on a Wednesday, recorded three pedestrian journeys. On the basis that this route provides one of the few crossing points of the existing A14 suitable for NMU, this route is valued as high.	High
Galley Hill junction	Galley Hill junction provides a route across the A14 between the B1040 south of the junction and the A1096 north of the junction. The B1040 minor road links the village of Hilton with the A14 and the A1096 to St Ives. There is no specific continuous provision for NMU wishing to cross the A14 at the Galley Hill junction and the roads are busy. Surveys in 2014 of the B1040 at the point which meets bridleway 87/7 recorded no NMU journeys. Hilton Road provides an alternative route between Hilton and settlements such as Fenstanton (see below). On the basis that no activity was recorded and there is an alternative route for NMU which has more provision to cross the A14, this route is valued as low in terms of potential temporary disruption or permanent modification.	Low
Footpaths Fenstanton 7 and 10 (87/7 and 87/10) and West End Road	Footpath 87/7 is accessed off the B1040 and follows a route approximately 970m eastwards close to some flooded former gravel pits to West End road, a local track. West End Road is an unclassified road which follows the west bank of West Brook and provides access for West End Farm. West End Road meets the A14 highway boundary but has no junction with the A14. A short footpath of 250m (footpath 87/10) links West End Road with Hilton Road south of the A14. These routes were not surveyed but are assumed to be of medium sensitivity to disruption due to the proximity and convenience to nearby housing (Pear Tree Close and The Gables in Fenstanton) and the limited number of other public rights of way close by.	Medium

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
Hilton Road and underpass	<p>Hilton Road is a minor road that links Hilton with Fenstanton. Hilton Road also links the southern parts of Fenstanton with the remainder of Fenstanton north of the existing A14. Surveys at Hilton Road in 2014 (grid reference TL 3018 6714, approximately 500m north-east of Hilton) recorded moderate cycle activity on the weekday and high cycle activity (196 cycle journeys) on a Sunday. Occasional pedestrian activity was recorded on the weekday surveyed.</p> <p>Vehicular traffic would follow Hilton Road round to the east and then north to the junction with the A14 at Fenstanton. However there is also an underpass which takes NMU under the A14 between The Gables and the rest of Fenstanton. This underpass is located at the northern extent of Hilton Road. On the basis that this route is one of the few dedicated NMU crossing points for the existing A14 within the study area, and it links two parts of a settlement otherwise severed by the A14, this route is valued as very high in terms of sensitivity to disruption or modification.</p>	Very high
Conington Road and underpass and bridleways Fenstanton 18 and 19 (87/18 and 87/19)	<p>Conington Road is a minor road which serves Model Farm just south of the A14 boundary. At Model Farm the road terminates but there is a bridleway (87/18 – 87/19) which passes under the A14 via an underpass, to Fenstanton. This underpass is considered to have high sensitivity to disruption or modification.</p>	High
Footpaths Conington 2 and Fen Drayton 3 (53/2 and 86/3)	<p>Footpath 53/2 is accessed off New Barns Road, Conington. The footpath follows a route along a field boundary towards Fenstanton. The footpath terminates at the A14. In order to reach Fenstanton it is necessary to cross the A14 but there is no pedestrian crossing provided so footpaths 53/2 and 86/3 are effectively severed by the existing A14. Footpath 86/3 continues from the opposite side of the A14 approximately 100m east and continues in a north-east direction to Fen Drayton. Surveys in 2009 showed some use of footpath 86/3 by walkers. It is likely that these would have been mainly dog walkers from Fenstanton. Only one walker was recorded using footpath 53/2 in 2009. On the basis that these footpaths provide only short routes and no continuity with other public rights of way, they are considered to have low sensitivity to disruption or modification.</p>	Low

Public rights of way and roads	Baseline summary	Sensitivity as NMU route (Table 15.4)
New Barns Road, Conington	New Barns Road is a local road which links Conington with the A14 and also provides access for New Barns Farm. There is no crossing of the A14 at the junction. Occasional pedestrian and cycle journeys were recorded here in 2008. On the basis that there is little connectivity, this route is considered to have low sensitivity to disruption for NMU.	Low
Cambridge Road (near Fen Drayton)	This local road has a junction off the A14 opposite New Barns Road and leads to Fen Drayton. There is no crossing of the A14 at the junction. On the basis that there is little connectivity, this route is considered to have low sensitivity to disruption for NMU.	Low

15.5 Potential Impacts (non-motorised users)

15.5.1 The scheme could have adverse and beneficial impacts upon pedestrians, cyclists and equestrians in the following ways:

During construction

- temporary disruption and impacts upon amenity (noise, dust and visual impact) where construction activities would coincide with existing routes; and
- temporary diversions or hindrances to NMU journeys as a result of construction activities, including construction traffic haul routes, coinciding with existing routes.

During operation

- permanent changes to the length of journeys as a result of re-routing where the scheme footprint would coincide with existing routes;
- permanent changes to amenity as a result of changes in traffic flows on or close to certain routes;
- permanent changes to amenity as a result of the presence of new highway infrastructure in areas which are currently rural or other open space; and
- provision of new facilities for pedestrians, cyclists and equestrians as part of the proposed scheme design.

Changes to the A14 that would affect NMU

15.5.2 The scheme would introduce changes to the A14 between Cambridge and Huntingdon that would affect NMU.

Traffic Regulation Orders

15.5.3 In order to contribute to improved safety, journey time reliability and capacity on the strategic highway network, the Highways Agency proposes to place restrictions on the A1 and A14 trunk road in the following locations through the use of traffic regulation orders:

- A1 where the new A14 and A1 slip roads merge/diverge approximately 1.3km south of Brampton Hut;
- Huntingdon southern bypass; and
- Swavesey junction to Girton interchange.

15.5.4 The proposed restrictions would prohibit pedestrians, cyclists, equestrians and horse drawn vehicles from using the trunk road in these locations. The proposed restrictions have been put forward where there would be suitable alternative routes for these types of road user. The alternative routes which would be available include:

- new NMU route parallel to the A1 corridor linking Brampton interchange to Park Road/Grafham Road and the existing byway (28/1 and 32/11) linking Grafham Road to Buckden Road;

- the existing A14 between Brampton Hut and Swavesey where there would be no reduction in existing provision apart from in Huntingdon where the route would change after demolition of the viaduct over the East Coast main line; and
- new local access road between Swavesey and Girton parallel to the widened A14 - the local access road would be single carriageway and would have an adjacent NMU route available.

15.5.5 On the basis that very few NMU currently use the A14 and that the Huntingdon southern bypass does not currently exist as a route for NMU, together with the availability of alternative routes more suitable for NMU (i.e. less hostile than the trunk road traffic conditions), the effect of the proposed traffic regulation orders on NMU is considered to be neutral.

De-trunking of A14

15.5.6 Where the existing A14 would be de-trunked between Huntingdon and Swavesey, it is predicted that traffic flows in the scheme's opening year would reduce by 60 – 75% compared with flows predicted in the absence of the scheme. This would improve conditions for NMU on the highway. Furthermore, the de-trunking would introduce opportunities for NMU in the future by Cambridge City Council, although any such plans for improvements for NMU or public transport are not part of the A14 Cambridge to Huntingdon improvement scheme.

15.6 Mitigation (non-motorised users)

Construction

15.6.1 The *code of construction practice (CoCP)* (Appendix 20.2 in the *ES Appendices*) sets out requirements for the contractor to liaise with relevant local authorities regarding the management of traffic, pedestrians, cyclists and other road users, when planning the works. Alternative routes and diversions for NMU will be provided when construction activities would impinge upon existing routes. Appropriate signage to inform and protect NMU will also be provided.

15.6.2 In addition, the design of the scheme means that much of the works to construct new bridges for routes affected by the Huntingdon southern bypass can be completed off-line. This would help minimise any disruption to existing routes as they could be kept open until the new crossings are available for use. Furthermore, proposed haul routes avoid existing roads and public rights of way where possible to minimise disruption from construction traffic.

15.6.3 Despite mitigation, the construction phase of the scheme is anticipated to cause some inconvenience and loss of amenity to NMU on affected routes, although this would be temporary.

Design

15.6.4 The overall design of the scheme has been developed to avoid or reduce potential impacts on NMU, such as ensuring public rights of way are diverted and crossing points are provided to allow NMU to cross new highway safely and as conveniently as possible.

New provision (enhancement)

- 15.6.5 *Box 15.1* provides a summary of the new provision for NMU that would be introduced as part of the scheme design. Reference should be made to *Figure 3.2* in the *ES Figures* which shows the outline environmental design and provision for NMU. These figures also provide more detail on where public rights of way would be stopped up and diverted.

Box 15.1: Summary of NMU provision in the scheme

Approximately 10km of new NMU facility (comprising a route suitable for pedestrians, cyclists and equestrians) would be provided linking Fenstanton, Swavesey, Bar Hill, Dry Drayton and Girton. This proposed new NMU facility is intended to link a number of existing bridleways and footpaths, and provide link between Cambridge, Girton, Bar Hill, Swavesey and Fenstanton to enable travel on foot, by bicycle or on horseback. It would also tie into proposals for an NMU route from the proposed Northstowe development.

Two new bridges, specifically to cater for NMU, would be provided: one at Swavesey junction and the other at Bar Hill. These new NMU bridges would link employment opportunities, residential areas and villages with the new NMU facility.

All bridges that would cross the proposed A14 Huntingdon southern bypass and the sections of existing A14 to be widened would include NMU facilities suitable for pedestrians, cyclists and equestrians.

Bridleways which were severed when the A1 was originally converted to dual carriageway would be re-linked using grade separated facilities near Brampton Hut junction. A new bridleway would also be provided to link Brampton with Brampton Woods and Brampton Hut services via the new intersection bridges.

Where new bridleways are provided across country, these would have a loose surface as described. The NMU bridge at Bar Hill would be suitable for equestrians.

The proposed new NMU facility alongside the local access road between Fenstanton and Girton would be provided to current best practice standards providing a clear width of 3m between Fenstanton and Dry Drayton. Between Dry Drayton and A1307 Huntingdon Road, Cambridge, the width would be 4m, as requested by Cambridgeshire County Council, to allow for potential increased use in this length. There would also be a verge between the edge of the NMU facility to provide separation from the running lane of the carriageway.

The NMU route to be added to two existing bridges (Dry Drayton and M11) would be marginally narrower than the 3m standard.

15.7 Significance of effects on NMU

Effects on NMU on existing routes and public rights of way

- 15.7.1 *Table 15.7* sets out the assessment of effects upon each of the identified existing NMU routes in the study area, assuming implementation of the mitigation measures described in the section above. The assessment has considered not only the physical and amenity changes to the routes themselves, but also the opportunities for users of those routes where links to new NMU provision would be provided.
- 15.7.2 *Figure 15.2* in the *ES Figures* indicates the key areas of impact from the proposed scheme.

Table 15.7: Assessment of effects on NMU (existing routes)

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Section 1:		A1 Alconbury to Brampton Hut (Figure 15.2 in the ES Figures - sheet 1)		
B1043 and Alconbury junction with the A1	Low	Construction: No impact is predicted during construction.	Temporary	No change
		Operation: No impact is predicted during operation.	Permanent	No change
Woolley Road	Low	Construction: There would be some disruption to access on the junction at Woolley Road during construction. However this is not likely to cause much inconvenience as the sensitivity of the location in terms of NMU presence is currently low.	Temporary	Minor adverse
		Operation: A new local access road would be provided to connect Woolley Road with the new Ellington junction and de-trunked A14. This would improve opportunities for NMU to reach Woolley Road, where access previously was only via the A1 trunk road or considerably further around country lanes.	Permanent	Moderate beneficial
Bridleway The Stukeleys 6	Low	Construction: There would be some loss of amenity due to construction activities along the A1 corridor associated with widening works.	Temporary	Minor adverse
		Operation: The bridleway would end at the realigned access track but this would have very limited impact upon the bridleway overall.	Permanent	No change

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Section 2	A1/A14 Brampton Hut to East Coast main line (Figure 15.2 in ES Figures - sheet 2)			
Footpath Ellington 23 (71/23)	Low	Construction: No physical impacts are predicted on this footpath and it is unlikely that the construction activities would be noticeable at this location over and above the baseline traffic noise from the A14.	Temporary	No change
		Operation: There would be no permanent direct impact upon this footpath and no noticeable change to amenity. Nearest works would be 300m from the path.	Permanent	No change
Footpath Brampton 15 (28/15)	Medium	Construction: Substantial construction activities, including major earthworks and the construction of significant highway structures, would take place on the existing A1 adjacent to the footpath which is likely to cause a substantial loss of amenity for an extended period of the construction phase.	Temporary	Moderate adverse
		Operation: The existing footpath would be stopped up approximately 75m short of where it currently terminates at the A1. However the proposed new bridleway would provide a safe means of crossing the A1/A14. The presence of taller, more visible highway infrastructure would cause slight additional loss of amenity although the footpath is already compromised by noise from the existing A1. However the new adjacent NMU provision would increase the recreational opportunities for users of 28/15 who would be able to continue along a longer recreational circuit or safely access Brampton Hut service area. Overall, due to enhanced opportunities, a beneficial effect on amenity is predicted.	Permanent	Moderate beneficial

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Bridleway Brampton 19 (28/19)	Medium	<p>Construction: Substantial construction activities would take place on the existing A1 corridor adjacent to the bridleway which is likely to cause a substantial loss of amenity. There would also be large borrow pits in this location with potential for dust and major disruption.</p>	Temporary	Moderate adverse
		<p>Operation: Approximately 460m would be stopped up and 1.1km of this bridleway would be diverted west of its current alignment. It would then connect to a new bridleway that would allow a circular route and new safe access over the A1/A14. Whilst the additional highway infrastructure would cause slight additional loss of amenity although the bridleway is already compromised by noise from the existing A1, the amenity of the landscape west of the A1/A14 would improve as a result of proposals to create wetlands from the borrow pits. Overall, due to enhanced opportunities and landscaping, a beneficial effect on amenity is predicted in the long term.</p>	Permanent	Large beneficial
Footpath Brampton 2 (28/2)	Medium	<p>Construction: Substantial construction activities would take place on the existing A1 corridor adjacent to the footpath which is likely to cause a substantial loss of amenity for an extended period of the construction phase..</p>	Temporary	Moderate adverse
		<p>Operation: The existing footpath currently stops at the A1. A section of the footpath adjacent to the A1 (approximately 115m) would be stopped up, however its new links to proposed new NMU provision would increase the recreational opportunities for users of 28/2 who would be able to continue along a longer recreational circuit. Overall, due to enhanced opportunities, a beneficial effect on amenity is predicted.</p>	Permanent	Moderate beneficial

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Park Road (local road) and NCN Route 12 (combines route 51)	High	Construction: Construction activities adjacent to the road would cause a loss of amenity for approximately 1km which would be more noticeable for pedestrians than cyclists. However, since works to the new Grafham Road bridge would be off-line, only minimal disruption to NCN 12 is predicted.	Temporary	Minor adverse
		Operation: The realigned Grafham Road Bridge would result in the lengthening of journeys along this route by approximately 80m. The new shared use route would be suitable for equestrians as well as cyclists and pedestrians and would link to the proposed new bridleway resulting in a slight improvement in provision from the baseline. No noticeable change in amenity is predicted for cyclists and pedestrians.	Permanent	Minor beneficial
Byways Brampton 1 (28/1) and Buckden 11 (32/11)	Medium	Construction: Works in the vicinity of the A1 corridor may cause a slight loss of amenity due to noise on Grafham Road.	Temporary	Minor adverse
		Operation: Approximately 95m of byway 32/11 close to Buckden Road would be stopped up. It would be linked to the new shared use path along Buckden Road. Furthermore, the byways would be improved under the scheme to allow access for certain farm vehicles. However this may also be beneficial for cyclists and may encourage more use as it would allow improved connectivity between NCN 12 and Buckden.	Permanent	Minor beneficial

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Buckden Road B1514 (local road)	High	Construction: The presence of a major construction site for the Huntingdon southern bypass, including construction compounds, borrow pits and soil storage areas adjacent to Buckden Road would result in a loss of amenity as the route passes through the study area. However, access would be maintained and the amenity of the route is already compromised by traffic noise from the A1.	Temporary	Minor adverse
		Operation: Buckden Road would be diverted slightly to the north. The proposed Huntingdon southern bypass would cross Buckden Road resulting in some localised loss of amenity. Traffic along this route is not predicted to increase noticeably against the do minimum situation. A new shared use path would be provided alongside the road to a point where it meets existing provision, improving convenience for NMU.	Permanent	Moderate beneficial
Footpaths Brampton 3 and 4 (28/3 and 28/4)	Medium	Construction: There would be potential for substantial loss of amenity of the footpaths due to the close proximity of borrow pits and soil storage areas within 25m of the footpaths. However, access would be maintained.	Temporary	Moderate adverse
		Operation: No direct physical impact is predicted. There would be a slight added loss of amenity due to the presence of new A14 highway infrastructure within 800m in addition to the currently present A1 corridor within 600m.	Permanent	Minor adverse

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Footpaths Brampton 7 and Buckden 13 (28/7 and 32/13) and Ouse Valley Way long distance walk	High	Construction: Construction activities associated with the proposed Huntingdon southern bypass would cause a loss of amenity where footpath 32/13 and the long distance walk pass the Buckden gravel pits, affecting approximately 500m of the route. The potential presence of construction vehicles along Mill Road near Buckden Marina may also cause a slight loss of amenity in the localised part of the Ouse Valley Way which follows Mill Road for 70m. Access would be maintained except when there would be some short-term closures, for safety reasons, to construct the river Great Ouse viaduct, where it passes over 32/13. Any temporary closures would be subject to an application to Cambridgeshire County Council and an alternative route would need to be provided.	Temporary	Minor adverse
		Operation: There will be no change to the route of the footpaths however the new river Great Ouse viaduct would pass overhead resulting in a slight loss of amenity for a very short section of route (<100m).	Permanent	Minor adverse
Section 3:	East coast main line to Swavesey (Figure 15.2 in the ES Figures, sheets 2 - 4)			
B1043 Offord Road (local road)	High	Construction: The proposed Huntingdon southern bypass would cross the B1043 approximately 850m north of Offord Cluny so the presence of the construction site, including soil storage areas would affect amenity of the route. However the construction works would be carefully controlled to minimise effects and access would be maintained.	Temporary	Minor adverse
		Operation: A shared footway/cycleway (suitable for equestrians) would be provided on the new B1043 Offord Road bridge. Although the bridge itself would present a minor inconvenience, this is anticipated to be outweighed by the improved convenience of the shared use path along the road where currently there is no provision (only grassed verge).	Permanent	Minor beneficial

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Silver Street (unclassified road) and Pathfinder long distance walk and bridleway Godmanchester 1 (102/1)	High	Construction: The presence of the construction site of the Huntingdon southern bypass would affect amenity of approximately 300m of the bridleway and a further 300m of the Pathfinder long distance walk onto Silver Street. Access would be maintained and the effects would be relatively short term.	Temporary	Minor adverse
	High	Operation: A shared footway and cycleway (suitable for equestrians) would be provided on the new Silver Street bridge to reconnect the Pathfinder long distance walk north and south of the new A4. The need to cross the new A14 via the bridge would cause a slight inconvenience and the presence of the new road a loss of amenity in the previously rural route in the study area.	Permanent	Moderate adverse
A1198 Ermine Street	High	Construction: Substantial construction activities would take place where the new A14 Ermine Street junction would be constructed on the new A14. A loss of amenity would be likely from construction traffic and activities.	Temporary	Minor adverse
		Operation: A new A1198 Ermine Street bridge would be provided to connect the A1198 north and south of the new A14. A new shared footway/cycleway/equestrian facility would be provided on the east side of the A1198 Ermine Street Bridge which would connect to bridleway 121/10 on the south side of the new A14 and continue north crossing the bridge and extending as far as Wood Green Animal Shelter. Traffic on Ermine Street is not predicted to increase beyond its current volumes of 8,000 – 16,000 vehicles per day. The slight inconvenience of negotiating the new bridge would be offset by the new NMU provision on a route where there is currently no special provision.	Permanent	Minor beneficial

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Bridleways Godmanchester 2 and 7 (102/2 and 102/7) and Hemingford Abbots 10 (121/10)	Medium	Construction: The presence of the A14 construction site within 500m would affect the amenity of these bridleways. Approximately 570m of 121/10 would be directly affected by the construction activities as it would coincide with the scheme footprint. The bridleway would be diverted to maintain connectivity. A loss of amenity is predicted.	Temporary	Minor adverse
	Medium	Operation: Approximately 575m of the bridleway would be stopped up and the bridleway would be realigned to the south of the new A14 between Ermine Street and junction and Mere Way bridge for a distance of approximately 400m. Where the bridleway meets Mere Way, an additional 35m would be stopped up as a result of the embankment required to raise Mere Way above the bypass. A diversion for this section would be provided to the south. This would increase the length of the bridleway by approximately 95m at this location, which would not be significant. The presence of the new road would affect the amenity of the route.	Permanent	Moderate adverse
Bridleways Hemingford Grey 13 (122/13) and Hemingford Abbots 9 (121/9) and Mere Way	Medium	Construction: There would be a loss of amenity to 121/9 due to the presence of construction activities within 300m. There would be direct impacts from construction on 122/13 and Mere Way as these would coincide with the scheme footprint. Occasional temporary disruption to access along this route is likely over the construction period although access would be maintained generally.	Temporary	Large adverse
		Operation: A new bridge would be provided to re-connect Mere Way north and south of the A14. A shared footway/cycleway/equestrian route would be provided on the new Mere Lane bridge to connect 122/13 south of the A14 with Mere Lane north of the A14. The presence of the new road would affect the amenity of the route.	Permanent	Moderate adverse

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Footpath Hemingford Grey 10 (122/10)	Medium	<p>Construction: There would be a loss of amenity due to the presence of construction activities and the footpath would meet the new A14 boundary and fall within the Development Consent Order (DCO) boundary for 400m where a flood compensation area is proposed. There is therefore potential for some physical disruption depending upon the actual footprint of construction activities although this would be temporary and there are other footpaths locally that people could take so it is unlikely to cause much inconvenience.</p>	Temporary	Minor adverse
		<p>Operation: There would be a substantial change in amenity, particularly where the footpath would follow alongside the highway boundary for approximately 400m. Approximately 80m of the existing footpath would be stopped up where it would coincide with proposed embankments for the B1040 Potton Road bridge. The footpath would be re-routed across the new Potton Road bridge (which would incorporate a shared footway/cycleway/equestrian route) for approximately 480m where it would then link with the bridleway along the B1040.</p>	Permanent	Moderate adverse

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
B1040 Potton Road	Medium	Construction: There would be some loss of amenity due to the close proximity of borrow pits, as well as short term temporary disruption to this route as the new A14 and Potton Road bridge are constructed although access would be maintained generally throughout the construction period.	Temporary	Minor adverse
		Operation: Traffic flows on Potton Road are not anticipated to change more than 10% as a result of the scheme, which would not affect NMU greatly. The B1040 would be re-routed over the proposed new Potton Road bridge to the east to maintain connectivity of the road north and south of the new A14 alignment. This would result in a very slight lengthening of the route by approximately 10m which would not noticeably affect amenity. A new shared use NMU path (suitable for equestrians) would be provided across the bridge and so the inconvenience of the new bridge would be offset by the improved convenience of a new NMU facility where currently there is only the highway and grassed verge.	Permanent	Minor beneficial
Footpaths Fenstanton 6, 14 and Conington 1 (87/6, 87/14 and 53/1) and Link Road south of existing A14	Medium	Construction: The presence of the construction site within 250m would affect the amenity of the footpaths. Furthermore, the construction footprint would directly impact on 87/6 and 53/1, with potential for temporary disruption to access during construction.	Temporary	Moderate adverse
	Medium	Operation: All three footpaths would be permanently stopped up, resulting in a combined loss of 1190m of footpath. However, 87/6 would be realigned over the new Conington Road bridge which would incorporate a new shared footway/cycleway/equestrian route. This would ensure continued provision of a footpath although there would be a loss of amenity for recreational walkers due to the presence of the new road, the need to negotiate a new bridge, and the loss of rural character of the routes.	Permanent	Moderate adverse

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Link Road south of existing A14 (near Fenstanton junction)	Medium	Construction: No direct impacts are predicted from construction on this route. The road would pass works to Conington Road bridge but there are no proposals to use the route as a haul route and so no disruption to use is anticipated.	Temporary	No change
		Operation: No direct impacts are predicted from the scheme on this route. Traffic flows are anticipated to reduce by up to 20% on this route, which would not noticeably affect NMU.	Permanent	No change
Section 4:	A14 Swavesey to Girton (Figure 15.2 in the ES Figures - sheets 4 - 5)			
Bridleway Swavesey 14 (225/14) Scotland Drove	Low	Construction: Approximately 35m of the route would be within the construction footprint of the east-bound slip road for the proposed new Swavesey junction. There would be a slight loss of amenity due to the presence of construction but this is not likely to noticeably affect NMU given that the amenity of the route is currently compromised by the existing A14.	Temporary	No change
		Operation: Approximately 35m of the bridleway would be permanently stopped up where it coincides with the proposed new slip road. However, the bridleway would be connected to the proposed new local access road which would include a shared cycleway/footway. This would ensure connectivity between Scotland Drove and a wider NMU network, creating a new opportunity to use the route as part of a longer journey for people on foot, bicycle or horse.	Permanent	Large beneficial

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Bucking Way Road and minor road to Boxworth (High Street)	High	Construction: Substantial construction activities associated with constructing the proposed new Swavesey junction would cause noise, disturbance and some disruption to people crossing between Buckingway Business Park and Cambridge Services. However access would be maintained.	Temporary	Moderate adverse
		Operation: A new NMU bridge suitable for use by pedestrians and cyclists would provide a link between the Bucking Way Road, the proposed new local access road and Buckingway Business Park north of the A14 to Conington Road and the Cambridge Services to the south. This would provide a convenient new crossing for pedestrians and cyclists.	Permanent	Large beneficial
Bridleway Swavesey 15 (225/15) Utton's Drove	Low	Construction: There would be a slight loss of amenity close to where 225/15 terminates with the A14 due to the presence of construction but this is considered to have little practical consequence given that the amenity of the route is currently compromised by the existing A14.	Temporary	No change
		Operation: The bridleway would be connected to the proposed new local access road which would include a shared cycleway/footway. This would ensure connectivity between Utton's Drove and a wider NMU network, creating a new opportunity to use the route as part of a longer journey for people on foot, bicycle or horse.	Permanent	Large beneficial

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Footpaths Lolworth 5 and 6 (150/5 and 150/6)	Low	<p>Construction: There would be a slight loss of amenity where 150/5 meets the A14 due to the presence of widening activities. However this would not be noticeable since the footpath is already compromised by the presence of the A14 where it terminates. No impact is anticipated on 150/6.</p>	Temporary	No change
		<p>Operation: A new footpath would be provided alongside the southern boundary of the A14 which would link 150/5 to bridleway 16/1 at Bar Hill. This would create a new opportunity to reach the wider NMU network from the footpath increasing the recreational and utility value of the route. No long term change to amenity due to the presence of the A14 is predicted.</p>	Permanent	Large beneficial
Robin's Lane	Low	<p>Construction: The presence of construction works would have a slight effect upon the existing amenity of Robin's Lane close to its junction with the A14, although the presence of the A14 already compromises the amenity of the route for NMU so it is not considered to be noticeable.</p>	Temporary	No change
		<p>Operation: A new bridge would be provided to take Robin's Lane over the A14, instead of its current direct access onto the trunk road. A shared cycleway/footway/equestrian route would be provided over the bridge which would tie into the proposed shared use path along the new local access road between Swavesey and Girton. This would create a new opportunity to reach the wider NMU network from the footpath increasing the recreational and utility value of the route. No long term change to amenity due to the presence of the A14 is predicted.</p>	Permanent	Large beneficial

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Bridleway Bar Hill 1 (16/1)	Medium	Construction: The presence of widening works and works to Bar Hill junction would have a slight effect on amenity of 16/1 where it is close to the A14. However the presence of existing traffic noise from the A14 already compromises amenity so the difference is likely to be of no practical consequence.	Temporary	No change
		Operation: A short section of 16/1 (145m) would be stopped up where it would coincide with the proposed new A14 highway boundary. However 16/1 would link to the proposed new shared use path south of Bar Hill junction, meaning increased connectivity with a wider NMU network. This would slightly improve the overall amenity of the route.	Permanent	Minor beneficial
Bridleway Longstanton 10 (151/10)	Low	Construction: Approximately 170m of the route would coincide with the DCO boundary and be potentially disrupted by construction activities associated with the proposed widening of the A14. However this part of the route terminates at the A14 and offers little current amenity as a route.	Temporary	No change
Bridleway Longstanton 10 (151/10)	Low	Operation: The bridleway would be connected to the proposed new shared cycleway/footway facility on the local access road north of the A14. This would create a new opportunity to reach the wider NMU network from the footpath increasing the recreational and utility value of the route.	Permanent	Large beneficial

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
B1050 (Hatton's Road) and Bar Hill junction	High	Construction: Substantial construction activities associated with constructing the proposed new Bar Hill junction would cause noise, disturbance and some disruption to people crossing between Bar Hill and Hatton's Road. However access would be maintained.	Temporary	Moderate adverse
		Operation: A new NMU bridge suitable for use by pedestrians, cyclists and equestrians would provide a link between Bar Hill and Hatton's Road. This would provide a convenient new crossing for pedestrians and cyclists (including wheelchair users who would currently be unable to cross unless on the carriageway). The Bar Hill NMU bridge would also connect to bridleway 16/1.	Permanent	Large beneficial
Oakington Road and Dry Drayton Road (Pathfinder long distance walk)	High	Construction: Temporary disturbance from construction activities is likely but access is anticipated to be maintained.	Temporary	Minor adverse
		Operation: Two new roundabouts are proposed on Dry Drayton Road/ Oakington Road with a realignment of Oakington Road to the south of the A14. This would result in the shortening of the route by approximately 50m. In addition, the existing Dry Drayton junction bridge would be modified to accommodate a new footway/cycleway, which would be particularly beneficial to pedestrians including wheelchair users. The shared use path would tie into the proposed new shared use path alongside the local access road, increasing connectivity for NMU. The existing junctions with the A14 would be stopped up but this would be of no consequence for NMU since the A14 is currently inhospitable to NMU.	Permanent	Large beneficial

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Bridleway Dry Drayton 12 (66/12)	High	Construction: The route would be disrupted by construction of the proposed new local access road, which would affect 560m of the bridleway during construction. However, provided access to the Crematorium is maintained the inconvenience is not likely to affect many people.	Permanent	Moderate adverse
		Operation: Approximately 540m of the bridleway would be stopped up (between the new local access road and A14). However the new NMU provision on the local access road would improve access to the Cambridge Crematorium and surrounding area by non-motorised modes of transport.	Permanent	Large beneficial
The Avenue (Madingley)	Low	Construction: The 630m stretch of the Avenue approaching the A14 would be affected by construction activities, including adjacent soil storage areas and compound site. However the effect on amenity is minimal given the presence of the busy Girton interchange.	Temporary	No change
		Operation: The existing junction between The Avenue and A14 would be stopped up but this is not likely to affect NMU. The proposed local access road south of the A14 would cross The Avenue.	Permanent	No change
Footpaths Girton 7 and 8 (99/7 and 99/8)	Low	Construction: Footpath 99/7 would be entirely disrupted by construction activities associated with the local access road and Girton interchange. However this is not likely to affect NMU since the route already terminates at the A14 with no crossing. A further loss of amenity is likely to affect 99/8 during construction due to the proximity of the works and compound site but this would not be very noticeable given the existing presence of traffic noise from major highways in the area which already compromises amenity.	Temporary	Minor adverse
		Operation: Footpath 99/7 would be stopped up (400m). However route 99/8 would connect to the proposed new NMU route on the local access road from Girton interchange to Oakington Road roundabout. This would considerably increase the amenity and utility value of the footpath.	Permanent	Large beneficial

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Washpit Road	Medium	Construction: Potential loss of amenity due to construction activities associated with the local access road on the north side of the A14. However this is not likely to be of any practical consequence in the context of the road adjacent to the Girton interchange.	Temporary	No change
		Operation: Approximately 60m of Washpit Road would be stopped up (between the new local access road and A14). However Washpit Road would tie into the proposed new local access road and associated shared use path, improving links to a wider NMU network.	Permanent	Moderate beneficial
Bridleways Madingley 2 and Girton 6 (154/2 and 99/6)	Medium	Construction: Much of 154/2 and all of 99/6 would coincide with the construction footprint of the proposed scheme and would therefore be unusable, causing substantial inconvenience to NMU.	Permanent	Large adverse
		Operation: 735 m of 99/6 would be permanently stopped up and re-routed northwards along the southern/western embankment of the A14 westbound link before tying in with the proposed new shared use path on the realigned Huntingdon Road. 154/2 where it crosses the A428 would be retained and not changed. However new bridleway would then be provided to link 154/2 and the southern highway boundary of the A428 with the existing M11 underpass for footpath 54/3. This would provide a more convenient route onto Huntingdon Road and would tie in with proposals associated with North West Cambridge Development to improve NMU routes. Overall a large beneficial effect is predicted as a result of the provision of a safer, quicker and more convenient route.	Permanent	Large beneficial

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Footpaths Madingley 3 and Girton 5 and 4 (154/3, 99/5 and 99/4)	High	Construction: No direct physical impacts or impacts upon amenity are predicted upon these routes during construction.	Temporary	No change
		Operation: There would be indirect beneficial effects as a result of the new bridleway identified above tying into footpath 154/3 leading to improved overall connectivity. (In addition Cambridgeshire County Council proposes to upgrade 99/4 and 99/5 into bridleways and a developer associated with the North West Cambridge development proposes to provide a signalised bridleway crossing on the A1307 Huntingdon Road to enable NMU to cross between the two. This would not be part of the A14 Cambridge to Huntingdon improvement scheme but is likely to be contemporaneous).	Permanent	Minor beneficial (from scheme itself)
Section 5:	Cambridge Northern Bypass to Histon and Milton (Figure 15.2 in the ES Figures - sheets 5-6)			
Girton Road and Sustrans local route 24	Very high	Construction: Very little construction activity from the scheme is predicted in this location so no noticeable change or loss of amenity is predicted.	Temporary	No change
		Operation: Traffic levels are not anticipated to change significantly on this route as a result of the proposed scheme. No significant impacts are anticipated on amenity and there would be no permanent modification of the route.	Permanent	No change

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
B1049 at Histon junction	Very high	Construction: There would be disruption to the NMU routes across the junction during construction of the junction improvement. This would cause temporary inconvenience to high numbers of cyclists and moderate numbers of pedestrians on a highly sensitive route in the vicinity of the junction although access would be maintained. This would be a key consideration as part of the consultation with the local highway authority that the contractor would be required to undertake in line with the <i>Code of Construction Practice (Appendix 20.2 in the ES Appendices)</i> .	Temporary	Moderate adverse
		Operation: All existing NMU paths and signalised crossings would be modified as part of the improvement works. However in the long term no significant effect on amenity is likely.	Permanent	No change
Bridleways Impington 6, Orchard Park 1 and Milton 6 and 7 (135/6, 284/1, 162/6 and 162/7) – the Cambridgeshire Guided Busway and NCN route 51	Very high	Construction: The route under the existing underbridge of the A14 would be affected during construction where the bridge would be widened. There may be temporary disruption when overhead working is required although busy times would be avoided where feasible. There would be disturbance, particularly during embankment works but this would only affect a short section of route.	Temporary	Minor adverse
		Operation: The widened Impington Guided Busway bridge may result in slightly improved amenity for NMU adjacent to the busway.	Permanent	Minor beneficial

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Byways Milton 3 and Impington 3 (Mere Way) (162/3 and 135/3)	Very high	Construction: The route under the existing underbridge of the A14 would be affected during construction where Kings Hedge's bridge would be widened. There may be temporary disruption when overhead working is required although busy times would be avoided where feasible. There would be disturbance, particularly during embankment works but this would only affect a short section of route.	Temporary	Minor adverse
		Operation: The widened bridge may result in slightly improved amenity for NMU following this route.	Permanent	Minor beneficial
A1309 Milton Road at Milton junction	Medium	Construction: There would be potential disruption to NMU on the junction although NMU are likely to divert to use the Jane Coston bridge.	Temporary	Minor adverse
		Operation: No impact is predicted from the scheme.	Permanent	No change
Jane Coston Bridge, Milton and NCN 11	Very high	Construction: No impact. The bridge is approximately 200m east of the scheme and not likely to be affected by proposed modifications to the west side of Milton roundabout.	Temporary	No change
		Operation: No impact.	Permanent	No change

NMU route	Baseline sensitivity as NMU route	Predicted change (description of impacts)	Timescale	Significance of effect
Section 6				
Huntingdon A14 viaduct area and the existing A14 (Figure 15.2 in the ES Figures – sheet 3, 4 and 7))				
Footpaths Huntingdon 9, 10 and 11 (133/9, 133/10, 133/11)	Very high	<p>Construction: During construction there would be some loss of amenity to 133/10 and 133/11 due to the construction of the new Views Common link road. There would also be temporary disruption (such as diversions) to the footpaths due to construction of the proposed new roundabout at the northern end of the link road and during demolition of the viaduct when temporary closure of 133/10 is anticipated. Access would be maintained along these routes at other times. No impact is anticipated on 133/9.</p>	Temporary	Moderate adverse
		<p>Operation: The demolition of the A14 viaduct and predicted 60 – 90% reduction in traffic on the de-trunked part of A14 is likely to improve amenity of the three footpaths due to the removal of the domineering highway infrastructure and the associated trunk road traffic noise. Approximately 140m of 133/11 would be stopped up. However a proposed new footway/cycleway would be provided along the eastern side of the new Views Common link road which would connect to 133/11, providing a new connection to Hinchingsbrooke Park Road adjacent to the school. This would provide a slight improvement to convenience for pedestrians and cyclists.</p>	Permanent	Moderate beneficial

NMU route	Baseline sensitivity as NMU route	Predicted change (Description of impacts)	Timescale	Significance of effect
B1514 Brampton Road, Hinchingsbrooke Park Road, Edison Bell Way and NCN 12 and 51.	Very high	Construction: During construction there would be some loss of amenity to Hinchingsbrooke Park Road due to the construction of the new Views Common link road. There would also be temporary disruption (such as diversions) to footways although overall access would still be maintained except during demolition of the viaduct when temporary closure of Brampton Road and the cycle route is anticipated.	Temporary	Moderate adverse
	Very high	Operation: Traffic volumes on Brampton Road and Edison Bell Way are not predicted to change more than 10% and would remain within 8,000-16,000 vehicles per day so there would be no significant change in terms of amenity or potential severance from traffic flows for NMU. Traffic volumes on Hinchingsbrooke Park Road would also not change significantly and remain under 8,000 vehicles per day. Under the DMRB guidance, routes with under 8,000 vehicles per day are not anticipated to cause more than slight community severance. The proposed new Views Common link road would have a junction with Hinchingsbrooke Park Road close to Hinchingsbrooke School. This would introduce a new road to be crossed by NMU, which would be achieved with the provision of a new signalised crossing with toucan crossings for pedestrians. The crossings would introduce localised inconvenience in this highly sensitive area with high numbers of schoolchildren present. There would also be new signalised crossings on Brampton Road which would cause some slight additional disruption to NMU, including cyclists on NCN 12/51. This disruption would be localised and not likely to affect overall use of the route. However there would be an overall improvement in amenity due to the removal of the domineering highway infrastructure and the associated trunk road traffic noise. No impact is predicted on Edison Bell Way.	Permanent	Moderate adverse

NMU route	Baseline sensitivity as NMU route	Predicted change (Description of impacts)	Timescale	Significance of effect
Huntingdon – Footpaths Huntingdon 6 and 4 (133/6, 133/4) and cycle route and permissive path from Mill Common/Castle Moat Road junction to Huntingdon railway station.	Very high	Construction: Construction of the new Mill Common link road would cause a loss of amenity to 133/4 and 133/6 due to noise. However there would be a direct impact upon the cycle route which would coincide with the footprint of the proposed new link road. This would disrupt the route and cause inconvenience to NMU wishing to access the railway station along this route. A diversion of approximately 500m is anticipated.	Temporary	Moderate adverse
		Operation: The new Mill Common link road would disrupt the cycle route across Mill Common, introducing a new road crossing to be made. This would cause slight inconvenience and loss of amenity. No permanent impact is anticipated on 133/4 and 133/6.	Permanent	Minor adverse
Huntingdon (south of existing A14): Footpaths Huntingdon 1,2, 35 and Brampton 12,13 and 14. (133/1, 133/2, 133/35, 28/12, 28/13 and 28/14).	High	Construction: There may be some slight loss of amenity to footpaths close to Mill Common during construction works to the retained, de-trunked A14 route.	Temporary	Minor adverse
		Operation: There would be an improvement in amenity for these footpaths due to the removal of the domineering highway infrastructure and the associated trunk road traffic noise. No physical impact is predicted.	Permanent	Minor beneficial
B1044 (The Avenue) and NCN route 51	Very high	Construction: Very little influence from construction activity is predicted for this location so no noticeable impact or loss of amenity is predicted.	Temporary	No change
		Operation: No impact is anticipated on the route during operation.	Permanent	No change

NMU route	Baseline sensitivity as NMU route	Predicted change (Description of impacts)	Timescale	Significance of effect
Footpaths Godmanchester 4 and 15 (102/4 and 102/15) and Ouse Valley Way	High	Construction: No impact is predicted during construction on these footpaths where they would cross under the de-trunked A14.	Temporary	No change
		Operation: No impact is predicted during operation on these footpaths where they would cross under the de-trunked A14.	Permanent	No change
B1044 Cambridge Road, NCN route 51 and the Pathfinder long distance walk	High	Construction: No impact is predicted during construction on this route where it crosses under the de-trunked A14.	Temporary	No change
		Operation: Traffic on the B1044 is predicted to decrease by up to 30% but since volumes are currently below 8,000 vehicles per day any existing severance would at worst be slight (under the DMRB guidance) and therefore a further decrease is not likely to be noticeable in terms of severance effects for NMU on the route. No other impacts are likely.	Permanent	No change
Rideaway and Moat's Way minor roads at Hemingford Abbots junction	High	Construction: No impact is predicted during construction.	Temporary	No change
		Operation: No impact is predicted during operation. Traffic flows would not cause severance effects for NMU on the route.	Permanent	No change
Bridleway Hemingford Grey 16 (122/16) and Gore Tree Farm overbridge	High	Construction: No impact is predicted during construction.	Temporary	No change
		Operation: No impact is predicted during operation. Traffic flows would not cause severance effects for NMU on the route.	Permanent	No change
Galley Hill junction	Low	Construction: No impact is predicted during construction.	Temporary	No change
		Operation: No impact is predicted during operation. Traffic flows would not cause severance effects for NMU on the route.	Permanent	No change

NMU route	Baseline sensitivity as NMU route	Predicted change (Description of impacts)	Timescale	Significance of effect
Footpaths Fenstanton 7 and 10 (87/7 and 87/10) and West End Road	Medium	Construction: No impact is predicted during construction.	Temporary	No change
		Operation: No impact is predicted during operation. Traffic flows would not cause severance effects for NMU on the route.	Permanent	No change
Hilton Road and underpass	Very high	Construction: No impact is predicted during construction.	Temporary	No change
		Operation: No impact is predicted during operation.	Permanent	No change
Conington Road and underpass and bridleway Fenstanton 18 and 19 (87/18 and 87/19)	High	Construction: No impact is predicted during construction.	Temporary	No change
		Operation: No impact is predicted during operation. Traffic flows would not cause severance effects for NMU on the route.	Permanent	No change

NMU route	Baseline sensitivity as NMU route	Predicted change (Description of impacts)	Timescale	Significance of effect
Footpaths Conington 2 and Fen Drayton 3 (53/2 and 86/3)	Low	<p>Construction: 530m of footpath 53/2 would be stopped up as it would be severed by the proposed new A14 Huntingdon southern bypass 385m south of the existing A14. No inconvenience to NMU is anticipated however since the route is largely disused due to its termination at the existing busy A14. No impact is predicted on 86/3.</p>	Temporary and permanent	No change
		<p>Operation: There would be no direct impact upon 86/3. However there would be a new footpath provided along the northern boundary of the eastbound de-trunked A14 route from the Mill Road/Huntingdon Road junction to the point where it would tie into the proposed NMU route commencing at Swavesey junction. The proposed new footpath would also cross the de-trunked A14 approximately 180m east of 86/3 and onto the new Conington Road bridge over the new A14. There would therefore be much greater connectivity between 86/3 and other routes suitable for NMU greatly enhancing the recreational and utility value of the route. Although 53/2 would be permanently stopped up, the new NMU route over Conington bridge would provide a new north-south route and the reduction of traffic flows of 60 to 70% on the de-trunked A14 would provide an increased opportunity for NMU to cross the A14 and continue journeys. The overall enhanced provision and connectivity may attract greater use of these routes.</p>	Permanent	Large beneficial

NMU route	Baseline sensitivity as NMU route	Predicted change (Description of impacts)	Timescale	Significance of effect
New Barns Road, Conington	Low	Construction: The proposed new A14 construction footprint would have an impact on New Barns Road so there would be some disturbance and disruption to this route during construction, with temporary inconvenience and loss of amenity as a result. However, since much of the works would be off-line, any disruption would be minimised and short term and not likely to cause inconvenience to many people.	Temporary	Minor adverse
		Operation: Connectivity of New Barns Road would be maintained with the proposed new Conington Road bridge which would also have a new shared footway/cycleway/equestrian facility provided. The reduction of traffic flows of 60 to 70% on the de-trunked A14 would provide an increased opportunity for NMU to cross the A14 and continue journeys, improving the utility and recreational value of the route.	Permanent	Large beneficial
Cambridge Road (near Fen Drayton)	Low	Construction: Some minor disruption during construction as the new NMU route is constructed adjacent to the junction with the A14. However impacts would be unlikely to cause noticeable disruption to NMU.	Temporary	No change
		Operation: The proposed new NMU route would be located where Cambridge Road currently has a junction with the A14. The reduction of traffic flows of 60 to 70% on the de-trunked A14 would provide an increased opportunity for NMU to cross the A14 and continue journeys. The overall enhanced provision and connectivity may attract greater use of these routes as the utility value of the routes would increase.	Permanent	Large beneficial

15.8 Introduction (vehicle travellers)

- 15.8.1 Driver stress is defined as the adverse mental and physiological effects experienced by a driver travelling on the road network. Stress varies by individual but is primarily caused by frustration, route uncertainty and fear of accidents. It can be linked to congestion, slow-moving traffic, poor signage, busy traffic and complex junctions. Driver stress is currently elevated in the area of the scheme by the high frequency of congestion, which results in significant delays and unreliable journey times. Reducing congestion and improving journey time reliability are among the key objectives of the scheme.
- 15.8.2 The views travellers experience from the road also impact on the quality of the journey and there is a growing body of research that suggests road monotony leads to driving behaviour impairment comparable to that observed when the driver is fatigued (Larue, 2010; Larue et al., 2010). Monotony can be attributed to a lack of stimuli in the road environment (as found in long straight stretches of dual carriage highway or rural roads) and studies have indicated that impairment in driving performance as a result of monotony can emerge very early, after less than 20 minutes of driving (Larue et al., 2010; Michael, 2010).
- 15.8.3 The variation and quality of views from the road may also contribute to reducing driver stress. .

15.9 Method of assessment (vehicle travellers)

Guidance

- 15.9.1 Guidance on the methodology for this section has been taken from *Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 9, Vehicle Travellers* (Highways Agency et al., 1993b), which sets out a method for the assessment of driver stress and views from the road.

Study area

- 15.9.2 The study area for the assessment of driver stress is the A1/A14 corridor within the DCO boundary and adjacent public roads that link to the trunk road.
- 15.9.3 The study area for the assessment of views from the road considers the A1 and A14 trunk roads within the DCO boundary only. This is because the focus is on the potential effect of monotonous conditions on distance driving.

Driver stress

- 15.9.4 The *DMRB* (Highways Agency et al., 1993b) provides guidance on the measurement of driver stress. Driver stress has three main components: frustration, fear of potential accidents and uncertainty relating to the route being followed.

- 15.9.5 In this assessment, driver stress has been calculated by comparing average peak hourly flow per lane for each 'flow unit'. (A car or light van equals one flow unit. A commercial vehicle over 1.5 tons unladen weight or a public service vehicle equals three flow units). For each link, the worst average peak hour flow was used (i.e. where the a.m. peak is busier than the p.m. peak, the a.m. peak was selected and vice-versa).
- 15.9.6 The average vehicle speed for single carriageways and dual carriageways was also used.
- 15.9.7 For the purposes of this assessment, a three point descriptive value for the level of driver stress (Low, Moderate or High) has been used (as defined in *Table 15.8*).

Table 15.8: Descriptive scale for driver stress calculations following *DMRB* guidance

For dual-carriageway roads			
Average peak hourly flow per lane, in flow units/1 hour	Average journey speed (km/hr)		
	Under 60	60-80	Over 80
Under 1,200	High	Moderate	Low
1,200-1,600	High	Moderate	Moderate
Over 1,600	High	High	High
For single-carriageway roads			
Average peak hourly flow per lane, in flow units/1 hour	Average journey speed (km/hr)		
	Under 50	50-70	Over 70
Under 600	High	Moderate	Low
600-800	High	Moderate	Moderate
Over 800	High	High	High

- 15.9.8 The traffic model represents the road network as a number of different links between nodes where a change in the road occurs. This may be at a junction between two main roads, or where a side road joins a main road, or where the road goes from a single lane to two lanes. A driver stress value was calculated for each link in each of the following scenarios (*Appendix 15.1* in the *ES Appendices*):
- the do-minimum scenario (i.e. without the scheme) - the worst year in the 15 years after opening (2035); and
 - the do-something scenario (i.e. with the scheme) - the worst year in the 15 years after opening (2035).
- 15.9.9 In accordance with *DMRB* guidance, only the worst year in the 15 years after opening is considered. For this assessment, 2035 is the worst year.
- 15.9.10 The results of these calculations have then been presented spatially over a map using GIS software. This allows a clear view of the stretches of highway where drivers are more likely to experience high, moderate and low driver stress with and without the scheme. The results are shown on *Figure 15.3* in the *ES Figures*.

- 15.9.11 Where the difference in driver stress categorisation between the do minimum and do something scenarios is more than one level (e.g. from low to high), the effect is assessed as “significant” for the purposes of this assessment. Where the change is one level of classification (e.g. from low to moderate) the effect is assessed as slight and is not considered significant for the purposes of this assessment. Where there is no change, the effect is assessed as neutral. Reductions in driver stress level are considered to be beneficial effects, whereas increases are considered to be adverse. The assessed effect as a result of predicted traffic flows and speed during operation in 2035 is presented in the final column of *Table 15.9*.
- 15.9.12 There is no specific methodology for assessing the degree of driver stress during construction nor traffic data available to indicate how traffic flows and speeds would be likely to change during the construction period. Therefore a descriptive assessment as to how likely construction activities would affect driver stress during the construction period is provided in *section 15.13*.

Views from the road

- 15.9.13 The assessment of travellers’ views from the road considered the variation of views from the existing A1 and A14 trunk road and proposed scheme.
- 15.9.14 Views from the road are defined as the extent to which travellers, including drivers, are exposed to the different types of scenery through which a route passes. Aspects considered were:
- the types of scenery or landscape character as described and assessed for the baseline studies as part of the landscape and visual assessment;
 - the variation and quality of landscape proposals incorporated into the proposed design;
 - the extent to which travellers may be able to view the scene; and
 - features of particular interest or prominence in the view.
- 15.9.15 The four categories used in this assessment are:
- No view – road in deep cutting or contained by earth bunds, environmental barriers or adjacent structures;
 - Restricted view – frequent cuttings or structures blocking the view;
 - Intermittent view – road generally at ground level but with shallow cuttings or barriers at intervals; and,
 - Open view – view extending over many miles, or only restricted by existing landscape features.

Limitations

- 15.9.16 The *DMRB* provides guidance on categorising stress qualitatively as high, moderate or low based upon speeds and flows during peak hour flows over at least one kilometre of a route. Responses to driving conditions vary according to the individual.

15.9.17 Studies into driver monotony and response to views are relatively recent and no research has been identified linking the issue to specific conditions in the UK.

15.10 Baseline conditions for vehicle travellers

Driver stress

15.10.1 *Figure 15.3* in the *ES Figures* compares areas of predicted high, moderate and low driver stress for the expected traffic flows and speeds in 2035 for the 'do-minimum' scenario (i.e. existing road network) and the 'do-something' scenario representing the proposed scheme. As can be seen, the stretches of highway where high levels of driver stress would be likely to occur in the do-minimum scenario (i.e. the baseline) are:

- entire length of existing A14 corridor between Spittals junction and Milton junction;
- B1514 from Thrapston Road junction to the Huntingdon ring road;
- Huntingdon ring road;
- A1096 St. Ives to the A14 Galley Hill junction;
- B1050 from Longstanton to the A14 Bar Hill junction;
- M11 junctions 13 to 14;
- A1307 (Huntingdon Road) into Cambridge.

15.10.2 The predicted baseline conditions for driver stress are set out in *Table 15.9*, which takes account of the opening year average peak traffic flows and speed. *Table 15.9* also presents the assessment of how the proposed scheme with the highway improvements is likely to affect driver stress at these locations.

15.10.3 The following paragraphs set out a qualitative description of current conditions and how these may contribute to driver stress, depending upon the susceptibility of individual drivers to succumb to stress.

Frustration

15.10.4 The inadequate capacity of the carriageway is the main factor contributing to driver frustration along the existing A14. Vehicles travel at considerably reduced speed during peak hours due to congestion which contributes to drivers' stress. Congestion, reduced speed and traffic jams can become acute when an accident or breakdown forces the closure of one or more lanes.

Fear of accidents

15.10.5 The fear of accidents can become particularly acute when driving in adverse weather conditions when spray from vehicles reduces visibility. HGV traffic comprises up to 26% of the traffic counts on this part of the A14, which is well above the national average of 10%. The high numbers of HGVs on the A14 make overtaking more stressful and hazardous than it may otherwise be, increasing the fear of accidents.

Uncertainty of route

- 15.10.6 Junctions and destinations are adequately signposted on the existing carriageway. However some of the distances between successive merges and diverges are not in keeping with current design practice, which could lead to wrong or late choices being made by some drivers. There are also many local accesses to lanes and isolated properties that have minimal, if any, junction tapers, which can lead to slow driving or sudden speed changes by those wishing to access these locations.

Views from the road

- 15.10.7 The majority of the study area is characterised by relatively flat, open, arable land with little variation other than the occasional settlement or woodland. However, vegetation planted alongside the existing highway prevents open views, and for drivers along the existing A14 corridor in particular, views tend to be intermittent rather than open.
- 15.10.8 Settlements close to the route of the existing A14 include Brampton, Huntingdon, Godmanchester, Fenstanton, Bar Hill, Girton, Histon and Milton. Views of these settlements tend to be glimpsed for travellers along the A14 due to the presence of noise barriers (wooden fencing), screening vegetation and cuttings.
- 15.10.9 The notable exception is the landscape within the river corridor of the Great Ouse which is considered to be of high quality and views are obtained from the A14 as it crosses the river between Huntingdon and Godmanchester.
- 15.10.10 A summary of the baseline conditions for views from the road according to certain sections of the route is set out in *Table 15.10*, which also sets out the assessment of how the proposed scheme is likely to affect views from the trunk road.

15.11 Potential impacts (vehicle travellers)

Driver stress

Construction

- 15.11.1 Traffic management during construction could contribute to driver stress where it leads to additional congestion and unreliability of journey times.

Operation

- 15.11.2 During operation, the greater capacity of the trunk road and the introduction of a de-trunked local access road separating local traffic from the strategic highway network would alter traffic conditions.
- 15.11.3 The proposed new highway would be constructed to higher standards than the existing carriageway. Junctions on the new trunk road alignment would be grade separated and there would not be direct access onto the trunk road from farm accesses or minor roads. This would help to reduce fear of accidents and is likely to have a beneficial effect on driver stress.
- 15.11.4 The introduction of new sign gantries as part of the scheme would provide the opportunity to inform travellers in advance of incidents. This would be likely to reduce frustration or fear of accidents by allowing drivers to prepare for such incidents or take alternative routes where feasible.

- 15.11.5 The inclusion of modern signage throughout the scheme would also help inform drivers about routes. However this would not be significant benefit as route uncertainty is not considered to be a problem at present.
- 15.11.6 Vehicle travellers undertaking local journeys would be able to use the local access road and would not be exposed to such high volumes of heavy goods vehicles as on the trunk road, reducing two contributors of driver stress – frustration and fear of accidents.
- 15.11.7 *Chapter 7 of the ES* describes how traffic patterns and flows are predicted to change as a result of the scheme. *Table 15.9* compares the predicted driver stress for each section of highway for the two scenarios, with and without the proposed improvement scheme, using the method set out in the *DMRB* (Highways Agency et al., 1993b).

Table 15.9: Assessment of driver stress based on predicted traffic flows

Road sections	Baseline driver stress (without scheme, 2035)	Predicted driver stress (with scheme, 2035)	Effect
A1 Alconbury to Brampton Hut	Moderate	High to moderate ²	Slight adverse to neutral
A1 Brampton Hut to Brampton junction	Low to moderate	High to moderate	Significant adverse to neutral
A14 Ellington to Spittals	Moderate to low	Low	Slight beneficial to neutral
A14 Godmanchester to Trinity Foot/Swavesey	High	Low (de-trunked route)	Significant beneficial
A14 Swavesey to Girton	High	High	Neutral
M11 junctions 13 to 14	High to moderate	High	Neutral to slight adverse
B1514 Brampton Road	High	Moderate to high	Slight beneficial to neutral
Huntingdon ring road	High	High	Neutral
A1198 Ermine Street (Wood Green Animal Shelter to Godmanchester)	Moderate	Low	Slight beneficial
A1096 St Ives to Galley Hill	Moderate to high	Moderate to high	Neutral
Buckingway Road (Swavesey to Trinity Foot/Swavesey junction)	Moderate	Moderate	Neutral
Minor road (High Street) (Boxworth to Trinity Foot/Swavesey junction)	High to moderate	High to moderate	Neutral
B1050 Longstanton to Bar Hill	Low to moderate	Low to moderate	Neutral

² Where a result shows more than one category of stress (i.e. high to moderate) this indicates differences in average speed and or traffic flows between certain sections along that stretch of highway that affect the overall result.

Road sections	Baseline driver stress (without scheme, 2035)	Predicted driver stress (with scheme, 2035)	Effect
Oakington Road to Dry Drayton junction	High	High	Neutral
Dry Drayton Road to Dry Drayton junction	Moderate to high	Moderate to high	Neutral
A1307 Huntingdon Road	Moderate to high	Moderate to high	Neutral
A14 Huntingdon southern bypass Brampton interchange to new Godmanchester junction	N/A	High	Neutral (compared with 'do minimum' trunk road route)
A14 Huntingdon southern bypass new Godmanchester junction to Swavesey junction.	N/A	Moderate	Slight beneficial (compared with 'do minimum' trunk road route)

Views from the road

- 15.11.8 *Table 15.10* sets out the assessment of impacts upon views from the road for the two scenarios: with and without the proposed improvement scheme. For the scenario with the scheme, the assessment considers the situation once proposed landscaping proposed as part of the scheme design has become established.
- 15.11.9 There would be little change in the long term for views from the existing trunk roads to be widened. However the proposed new A14 Huntingdon southern bypass would be integrated into the landscape through bunds and in cutting for some stretches (*Chapter 10 of the ES*). As a result views would be relatively restricted.

Table 15.10: Assessment of views from the road

Trunk road section	Existing view (baseline)	Predicted impact with scheme (after vegetation becomes established)
A1 Alconbury to Brampton Hut (approximately 3km)	Intermittent views of open agricultural land. Short sections of screening vegetation and shallow cuttings prevent open views.	No noticeable change. Once new planting becomes established there would be short sections of tall screening vegetation in addition to shallow cuttings and grassland. Views would remain intermittent.
A14 Brampton Hut to Spittals	Views vary between open and restricted. Noise barriers at Brampton and shallow cuttings and screening vegetation by Hinchbrooke restrict views. Outside of these areas views are open.	N/A (no change but no longer trunk road).

Trunk road section	Existing view (baseline)	Predicted impact with scheme (after vegetation becomes established)
A14 Spittals to Godmanchester	Views largely restricted by noise barriers and screening vegetation. Short sections of open views from viaduct.	N/A. No longer trunk road. New highway layout due to removal of viaduct.
A14 Godmanchester to Galley Hill	Predominantly open views of gently undulating land. Some parts of this stretch are lightly tree lined providing some screening.	N/A (no change but no longer trunk road).
A14 Galley Hill to Trinity Foot	Views are initially restricted due to frequent barriers and shallow cuttings but open out after Fenstanton.	N/A (no change but no longer trunk road).
A14 Trinity Foot to Girton interchange	Intermittent to restricted views due to screening vegetation.	Views would be intermittent with some areas of retained and proposed new woodland, although much of the proposed landscape would be grassland. The proposed new Swavesey and Bar Hill NMU bridges would add interest.
A14 Girton interchange to Histon	Views are restricted by cuttings initially but open out over arable land towards Histon.	No change.
A14 Histon to Milton	Views are restricted on westbound side by noise barriers and tall development. Views on the eastbound side are intermittent to open.	No noticeable change. Noise barriers would be replaced on westbound side and views would be likely to remain intermittent to open on westbound side.
A1/A14 Brampton Hut to Brampton interchange	Intermittent to open views due to screening vegetation.	Views would be generally restricted. New structures, bunds, tall screening vegetation and noise barriers would restrict views on A14.
New A14 Brampton interchange to Godmanchester	N/A	Intermittent to restricted views. Hedgerow planting, screening woodland and cuttings would restrict views. However landscaping proposals are varied between grassland and woodland and would add some variety.
New A14 Godmanchester to Swavesey	N/A	Intermittent to restricted. Mitigation bunds and woodland screen planting would restrict views from much of this section. However landscaping proposals are varied between grassland and woodland and would add some variety.

15.12 Mitigation (vehicle travellers)

- 15.12.1 The *construction code of practice* sets out extensive requirements relating to traffic management. The main contractor will liaise with the Highways Agency, Cambridgeshire County Council and the police to agree and implement a Traffic Management Plan. Mitigation to help minimise disruption to the highway network, where reasonable and practicable, would include the use of intelligent transport systems to implement variable speed limits, lane control and variable message signs. The main contractors would also be required to provide the Highways Agency with regular updates regarding any disruption caused by construction works on the road network.
- 15.12.2 An information webpage would be provided and updated on the Highways Agency's website to reflect construction and community liaison requirements of the scheme. It would provide up-to-date information on the progress of the construction works, areas affected by construction, mitigation in place to reduce adverse effects of construction, information regarding planned construction works and works recently completed. This would help drivers to plan their journeys and take account of potential disruption from construction of the scheme.

15.13 Significance of effects (vehicle travellers)

Driver stress

Construction

- 15.13.1 During construction, it is anticipated that there would be an increase in driver stress. However, this would be reduced by implementation of the mitigation and traffic management requirements set out in the *construction code of practice* enabling drivers to be aware of likely disruptions and to plan their routes and journeys accordingly. The likely requirements for traffic management during construction are set out in *Appendix 3.2 of the ES Appendices* and summarised in *Chapter 7 of the ES*. On the basis of the measures proposed, no likely significant effects on driver stress during construction are envisaged.

Operation

- 15.13.2 During operation a significant beneficial effect is predicted for the existing A14 route that would be de-trunked between the Godmanchester junction and Trinity Foot/Swavesey junction. This is mainly due to the predicted reduction in traffic flows, particularly a reduction in goods vehicles.
- 15.13.3 However a significant adverse effect is predicted for the A1 between Brampton Hut junction and Brampton junction, affecting the northbound route for approximately 1.5km. This is due to greater traffic flows along the A1 in the 'do something' scenario. Although the A1 would be widened to accommodate the additional traffic, the flows would be high enough to place this section of highway into the 'high' driver stress category according to the guidance followed.

- 15.13.4 There are no other areas where significant differences in driver stress predictions would occur. As can be seen in *Table 15.9*, there are four stretches of highway where slight beneficial effects are predicted from the scheme (sections on the A14, B1514 Brampton Road and A1198 Ermine Street) and two sections where slight adverse effects have been predicted (A1 Alconbury to Brampton Hut and M11 junction 13 to 14). These are relatively short stretches of highway (less than 3km).
- 15.13.5 Improvements in highway layout, clearer signage and reductions in the numbers of junctions along the trunk road are likely to contribute to reduced levels of driver stress throughout the entire scheme (through reducing fear of accidents, frustration and route uncertainty). However there is no method to quantify this effect. The quantification of driver stress based upon traffic flows and predicted average speeds, as set out in *Table 15.9*, should therefore be considered as indicative (refer to *Limitations*) and consideration should also be given to the qualitative assessment of driver stress based likely to result from the improved highway design and disruption during construction.

Views from the road

- 15.13.6 Views on widened sections of the A1 and A14 trunk roads are not anticipated to change greatly from the baseline conditions once vegetation becomes established. However there would be new points of interest included through the proposed Swavesey and Bar Hill NMU bridges that would be designed to a high standard.
- 15.13.7 The intermittent use of environmental bunds and cuttings along the proposed new A14 Huntingdon southern bypass would limit views out from the road in some places, particularly from lower vehicles. Views out would become further screened in the longer term when mitigation planting along the environmental bunds mature. This would restrict views particularly along the section between the river Great Ouse viaduct and Conington Road bridge (a distance of approximately 9km). However views from the river Great Ouse viaduct would be relatively open and the highway design allows for some more open views north of Conington to reduce driver monotony. Under normal driving conditions the part of the route with restricted views would be passed through within 10 minutes and consequently the risk of driving monotony is not particularly high. The proposed landscaping would provide variety and interest along the highway embankments.
- 15.13.8 No likely significant effects on views from the road are envisaged.

15.14 Introduction (bus travellers)

- 15.14.1 This assessment considers bus passengers' physical access to bus services and how the scheme may affect this access. It is recognised that people who travel by bus usually also undertake part of their journeys on foot, by bicycle or by car.

15.15 Method of assessment (bus travellers)

- 15.15.1 The assessment of effects on bus travel has been undertaken using a descriptive and qualitative approach. There is no specific guidance available for this aspect of the assessment in EIA.
- 15.15.2 Where bus stops are to be moved from the main A14 alignment to the local access road, this has been noted and a judgement on the relative convenience has been made, taking account of the proximity of residential areas or services. A judgement has also been made as to whether access to bus stops may be disrupted by construction activities, based on expected construction activity.
- 15.15.3 Impacts are considered to be adverse where access for bus travellers would be impeded or made more inconvenient. Impacts are considered to be beneficial where access to bus stops would be improved and made more convenient.
- 15.15.4 Effects have been considered to be significant where they would be permanent beneficial or adverse effects. Disruption during construction has not been considered significant since impacts would be temporary and over a relatively short time period in any given location.

15.16 Baseline conditions (bus travellers)

Cambridgeshire guided busway

- 15.16.1 The Cambridgeshire guided busway includes a shared use path suitable for cyclists, pedestrians and horse riders. The busway predominantly follows the route of the old Huntingdon to Cambridge railway track through the former stations of Oakington, Longstanton and Histon to Cambridge railway station and then onwards to Addenbrooke's Hospital and Trumpington Park & Ride.
- 15.16.2 The route links the settlements of St Ives, Impington and Histon to Cambridge by means other than the private car. It is seen as a strategically important route for sustainable transport into and out of Cambridge.

Bus routes

- 15.16.3 The main bus routes (other than the guided busway) identified within the scheme area include six services that follow the A14 between Huntingdon and Cambridge. Bus services 1A, 1B and 5 are operated by Whippet and link Cambridge and Huntingdon with stops at various locations in between along the A14 route. The bus service Citi 5 is operated by Stagecoach and operates along the A14, linking some villages north of the trunk road with Cambridge. There are also two direct services between Huntingdon and Cambridge (349 and 350), which are operated by National Express.
- 15.16.4 Bus services 2, 3 and 8 are all operated by Whippet and have routes between some of the villages south of the A14, two of which link to Cambridge whilst service 3 links to Huntingdon.
- 15.16.5 Several other services operate within Huntingdon and between Huntingdon and other towns and villages.

Bus stops on A14

- 15.16.6 There are bus stops on the existing A14 at Swavesey junction (by Buckingham Business Park), Robin's Lane and Cambridge Crematorium. Currently bus travellers using these bus stops would need to cross the A14 to get between eastbound and westbound bus services. For bus travellers wishing to get between the eastbound bus stop and Cambridge Crematorium, the distance is over 1km, mostly on grass verge rather than tarmacked footway, assuming the crossing is made at Dry Drayton junction rather than over the A14 dual carriageway itself. This is inconvenient for people and would be impractical for those using wheelchairs. Crossing between the eastbound and westbound bus stops at Swavesey is similarly inconvenient although not such a distance to travel over Swavesey junction and a cycleway has recently been provided.
- 15.16.7 There is no overbridge to link the eastbound and westbound bus stops at Robin's Lane so bus travellers would have no choice but to cross over the A14 carriageway itself, which is hazardous to cross as a pedestrian.

15.17 Potential impacts for bus travellers

- 15.17.1 The first column of *Table 15.11* sets out the location of current bus stops within the footprint of the proposed scheme which may be affected either temporarily during construction or permanently during operation.
- 15.17.2 The potential impacts upon bus stops from the construction phase of a highway could include disruption of access to bus stops, confusion for bus users from poorly signposted routes and lack of visibility of bus stops due to fencing and other construction works.
- 15.17.3 The improvements of the existing trunk road, with objectives to separate local and distance traffic, would affect the location and availability of bus stops along the existing and proposed A14 trunk road.

15.18 Mitigation

- 15.18.1 The *construction code of practice* will place a requirement on the contractors to liaise with bus operators and Cambridgeshire County Council to help plan suitable mitigation for construction phased impacts. The contractors would be required to maintain access for bus users so that they can continue to use the bus services throughout the construction phase. Adequate signage, information and temporary bus stops will be provided where required.
- 15.18.2 The proposed design of the scheme includes the relocation of bus stops from the existing A14 trunk road onto the local access road. The new bus stops would be accessible from the proposed NMU routes. The second column of *Table 15.11* describes the main changes to bus stops that would occur from implementing the scheme (the operational impacts).

Table 15.11: Assessment of effects on bus travellers

Current bus stops	Description of impacts	Residual effect
Section 1: A1 Alconbury to Brampton Hut		
N/A		
Section 2: A1/A14 Brampton Hut to East Coast main line		
N/A		
Section 3: East Coast main line to Swavesey		
A1198 Ermine Street, Wood Green Animal Shelter (Bus stop reference: 0500HGODM010 and - 0500HGODM011 Wood Green Shelter) Whippet coaches service no. 5	Construction: Minor disruption possible during works to the new Ermine Street road bridge. Operation: The effect on bus travellers during operation would be neutral.	Adverse to neutral during construction phase and neutral during operation. (Not significant)
A14: Swavesey junction (bus stop reference: 0500SSWAV010 – Swavesey Junction) Whippet coaches service no. 5	Construction: There would be major disruption during the construction phase associated with the creation of the new Swavesey junction. The existing bus stops would need to be temporarily relocated and access to and from these temporary bus stops would likely be inconvenient during construction. Operation: It is proposed that bus stops would be relocated on the new local access road, on the realigned Bucking Way Road on the west side of Buckingway Business Park. This would be beneficial in the long term as bus travellers from Buckingway Business Park would no longer need to cross the A14 to access west-bound services. The new locations would also be accessible by wheelchair users who would currently struggle to access the bus stops due to the current lack of a suitable NMU route.	Adverse during construction phase but beneficial during operation. (Significant)

Current bus stops	Description of impacts	Residual effect
Section 4: A14 Swavesey to Girton		
<p>A14 Robins Lane junction (bus stop reference: 0500SLOLW002 – Robins Lane)</p> <p>Whippet coaches service no. 8</p>	<p>Construction: There would be major disruption during the construction phase associated with the creation of the new Robin's Lane bridge. The existing bus stops would need to be temporarily relocated and access to and from these temporary bus stops would likely be inconvenient during construction.</p> <p>Operation: Bus stops would be relocated onto Robin's Lane and the proposed new local access road that would run parallel to the A14 on the north side. This would be beneficial in the long term as bus travellers would no longer need to cross the A14 carriageway to access the bus stops. The new locations would also be accessible by wheelchair users who would currently struggle to access the bus stops due to a current lack of a suitable NMU route.</p>	<p>Adverse during construction phase but beneficial during operation.</p> <p>(Significant)</p>
<p>Bar Hill junction:</p> <p>(bus stop references: 0500SBARH003 – Saxon Way; and 0500SBARH008 – Menzies Hotel)</p> <p>Whippet coaches service no. 1A and 5</p>	<p>Construction: There would be major disruption during the construction phase associated with the creation of the new Bar Hill junction. The existing bus stops would need to be temporarily relocated and access to and from these temporary bus stops would likely be inconvenient during construction.</p> <p>Operation: Bus stops would likely be reinstated in similar locations to the baseline although the bus service would likely follow the local access road rather than the trunk road. The effect on bus travellers during operation would be neutral.</p>	<p>Adverse during construction phase but neutral during operation.</p> <p>(Not significant)</p>

Current bus stops	Description of impacts	Residual effect
<p>A14 Cambridge Crematorium (bus stop reference: 0500SBARH012 – Crematorium) Whippet coaches service no. 5</p>	<p>Construction: There would be disruption during the construction phase associated with widening of the A14. Access to and from these bus stops would likely be inconvenient during construction. However access to these bus stops is inconvenient in the baseline situation so the impact would be negligible.</p> <p>Operation: Bus stops would be permanently relocated onto the proposed local access road south of the Cambridge Crematorium. This would be beneficial in the long term as bus travellers would no longer need to cross the A14 to access the bus stops. The new locations would also be accessible by wheelchair users who would currently struggle to access the bus stops due to a lack of suitable NMU route.</p>	<p>Neutral during construction but beneficial during operation.</p> <p>(Significant)</p>
Section 5: Cambridge Northern Bypass to Histon and Milton		
N/A		
Section 6: Huntingdon A14 viaduct demolition and de-trunked A14		
<p>Huntingdon Railway Station (bus stop reference: 0500HHUNT090) Stagecoach in the Fens service no. B</p>	<p>Construction: There would be disruption during the construction phase associated with works to tie in the proposed Mill Common link road to Huntingdon railway station car park. There may be disruption to services and access may be inconvenient.</p> <p>Operation: Bus stop would likely be reinstated in a similar location to the baseline. The effect on bus travellers during operation would be neutral.</p>	<p>Adverse during construction phase but neutral during operation.</p> <p>(Not significant)</p>
<p>B1514: Brampton Road (bus stop reference: 0500HHUNT012 – Railway Station) Stagecoach in the Fens service no. 45 and 66 Whippet coaches service no. 400, 402 and 7</p>	<p>Construction: There would be disruption during the construction phase associated with works to tie in the proposed Mill Common link road to the B1514. There may be disruption to services and access may be inconvenient.</p> <p>Operation: Bus stop would likely be reinstated in a similar location to the baseline. The effect on bus travellers during operation would be neutral.</p>	<p>Adverse during construction phase but neutral during operation.</p> <p>(Not significant)</p>

Current bus stops	Description of impacts	Residual effect
B1514: Brampton Road (bus stop reference: 0500HHUNT011 – Playing Field) Stagecoach in the Fens service no. 66 and A Whippet coaches service no. 400 and 7	Construction: Minor disruption possible during works to Hinchingsbrooke Park Road. Operation: The effect on bus travellers during operation would be neutral.	Adverse to neutral during construction phase and neutral during operation. (Not significant)
Hinchingsbrooke Park Road, Huntingdon: (bus stop reference: 0500HHUNT099 – Hinchingsbrooke School) Whippet coaches service no. 400	Construction: Minor disruption possible during works to Hinchingsbrooke Park Road and the proposed Views Common link road. Operation: The effect on bus travellers during operation would be neutral.	Adverse to neutral during construction phase and neutral during operation. (Not significant)

15.19 Significance of effects on bus travellers

- 15.19.1 Access to several of the bus stops has the potential to be impeded during the construction phase. In order to mitigate this the *construction code of practice* sets out a requirement upon the contractor to liaise with bus companies, provide clear information for passengers and make necessary provision to maintain access to bus services. Furthermore, access to bus stops on the existing A14 trunk road is already inconvenient. The residual effect is therefore likely to be adverse but not significant.
- 15.19.2 During operation effects would be neutral or beneficial. The relocation of bus stops from the existing trunk road to the local access road would make them accessible for pedestrians including wheelchair users who are currently unlikely to be able to access the bus stops. The residual effect is therefore predicted to be significantly beneficial since the bus services would be available to more people.

15.20 Summary and conclusion for all travellers

Non-motorised users

- 15.20.1 During construction, mitigation will be in place to limit the inconvenience to pedestrians, cyclists and equestrians. Nevertheless, construction activities and associated haul routes would have some effects on key recreational and utility routes. The impacts would be in the main short-term and minor, and would include exposure to noise, dust and visual impacts of construction activities and temporary diversions and route closures.
- 15.20.2 In some places, large adverse effects upon public rights of way are predicted where routes are within the proposed scheme footprint, or where substantial construction activities are proposed in close proximity to those locations for a prolonged period during the construction phase.

- 15.20.3 During operation, the proposed Huntingdon southern bypass would permanently alter the public rights of way network in the rural area south of the existing A14 between the Offords and Conington. New routes, footbridges and footways would be provided to ensure continued connectivity in the public rights of way network north and south of the new road. However despite this mitigation, the character of the routes would change as the introduction of new traffic noise and highway infrastructure would affect the tranquillity of the area. The main effects of this would be on recreational journeys.
- 15.20.4 The scheme would also have large beneficial effects on the ability to undertake journeys on foot, by bicycle or by horse. The introduction of the new NMU route between Swavesey and Girton would greatly improve connectivity for non-car based travel. Furthermore, the new crossings over the A14 would be compliant with modern standards ensuring paved footways suitable for wheelchair users.

Vehicle travellers

- 15.20.5 During construction, effective traffic management and regular updates on the Highways Agency website would be in place. However, some disruption to vehicle travellers would be possible, which may contribute to increased driver stress
- 15.20.6 During operation, the provision of high quality road, separation of local and through traffic, and reduced fear of accidents would provide long term beneficial effects, reducing driver stress.
- 15.20.7 Views from the road are likely to be relatively restricted along the new trunk road alignment as landscape mitigation in the form of bunds, cuttings and screening would restrict views. However the section of road that this would affect is relatively short (18km) and not likely to result in impairment of driver performance as a result of driving monotony. Furthermore, new features such as the proposed high quality Swavesey and Bar Hill NMU bridges would add points of focal interest along the trunk road journey.

Bus Travellers

- 15.20.8 Access to existing bus stops along the A14 trunk road between Swavesey and Girton is poor and hazardous where the A14 needs to be crossed. Although a certain amount of disruption and inconvenience is likely during the construction phase this would be carefully managed to ensure access to bus stops is maintained. In the long term, the effects on access to bus services is likely to be greatly improved as new bus stops relocated on the proposed local access road would now be accessible by wheelchair users and without the need to cross the trunk road.

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