

## **16 People and Communities: Effects on All Travellers**

### **Summary**

This chapter assesses the potential impacts of the proposed Scheme on travellers including pedestrians, cyclists and equestrians (collectively referred to as non-motorised users (NMUs)), and vehicle travellers.

The assessment of NMUs has been conducted in line with DMRB, Volume 11, Section 3, Part 8, Pedestrians, Cyclists, Equestrians and Community Effects. This assessment has assessed impacts to the journeys made by NMUs within local residential areas. The assessment of Vehicle Travellers has utilised guidance set out in DMRB, Volume 11, Section 3, Part 9, Vehicle Travellers. The assessment relates to the driving environment and likelihood of driver stress, the provision of public transport and changes to the 'View from the Road' within the existing A96 and proposed Scheme road corridors.

At present NMUs are limited in how they move around the existing A96 corridor between Inverness and Auldearn, with provision largely restricted to footpaths between communities. A small number of NMU routes would be adversely affected by the proposed Scheme, however in designing the proposed Scheme, the provision of new NMU facilities and structures has taken into account the needs of NMUs. There is a limited amount of provision along the existing A96, whilst crossings of the trunk road are uncontrolled and at-grade, apart from through Nairn. The proposed shared use path would provide a connection between Inverness and Nairn, with controlled at-grade crossings where necessary along the proposed Scheme. Links between communities would also be permanently enhanced and access to outdoor areas would be improved. In addition to being used for short journeys to access outdoor areas, it is hoped the new shared use path facility would be utilised for more long distance journeys, ultimately improving the continuity of journeys within the study area.

The introduction of road infrastructure into a largely rural environment would adversely affect the amenity value of some footpaths, with the proposed Scheme becoming visible in certain areas, particularly with the introduction of new junctions and embankments. However, the majority of impacts to sensitive NMU routes has been deemed to be neutral/negligible or slight adverse/beneficial. Landscaping and planting would be incorporated along the proposed Scheme to mitigate these impacts.

With regard to public transport there would be no effect on access to Nairn and Inverness Railway Stations, and an overall improvement for access to bus stops.

The existing A96 is a single carriageway road. As a result, driver stress levels are currently likely to be moderate or high in sections along the road in or on approach to urban areas, given the lack of overtaking opportunities. However, in rural sections of the road, as expected, low levels of driver stress exist given the low population levels nearby and the lack of major junctions along the trunk road. During construction there would be temporary delays on the local road network which may lead to frustration and an increase in driver stress. However, once operational, the dualling of the existing A96 would significantly reduce the levels of driver stress, with low stress levels also expected to be experienced along the majority of the proposed Scheme. The assessment of 'Views from the Road' has concluded that overall vehicle travellers would experience an improvement in views from the proposed Scheme in comparison to the views experienced from the existing A96.

### **16.1 Introduction**

- 16.1.1 This chapter presents the results of the Design Manual for Roads and Bridges (DMRB) Stage 3 Environmental Impact Assessment (EIA) for the A96 Dualling Inverness to Nairn (including Nairn Bypass) scheme (hereafter referred to as the proposed Scheme) in relation to impacts of effects upon travellers including pedestrians, cyclists and equestrians (collectively referred to as non-motorised users (NMUs)), and vehicle travellers.
- 16.1.2 Without appropriate design, the construction of a new road can compromise the ability of NMUs to travel around the local area, as well as deter users from using the local path network if routes are deemed undesirable and/or unsafe. A new road can also affect vehicle travellers by changing the driving conditions on a road which can affect driver stress.
- 16.1.3 The assessment of NMUs has involved a review of how pedestrian, cyclist and equestrian journey length and amenity would change on routes, as well as their access to the outdoors and public

transport. Vehicle travellers have been assessed in terms of how the 'View from the Road' and driver stress would alter as a result of the proposed Scheme.

- 16.1.4 'View from the Road' is defined in DMRB Volume 11, Section 3, Part 9, Vehicle Travellers (Highways Agency, Transport Scotland, Welsh Assembly Government and The Department for Regional Development Northern Ireland 1993b) as the '*extent to which travellers, including drivers, are exposed to different types of scenery through which a route passes.*' Its assessment considers the:
- type of scenery or landscape through which the route passes and may have wider views of;
  - extent to which travellers may be able to view the scene and the duration of the view;
  - quality of the landscape; and
  - presence of features of particular interest or prominence in the view and duration of visibility.
- 16.1.5 Consideration of the 'View from the Road' is an important aspect of design in that the nature and extent of views experienced affects the travellers' appreciation and enjoyment of the journey. A varied sequence of scenic views to the surrounding landscape would potentially help to alleviate driver stress, whereas, views from a road that are restricted by barriers such as forest blocks or cuttings create monotonous conditions with the potential to contribute to boredom and increased driver stress.
- 16.1.6 The A96 Dualling Inverness to Aberdeen Preliminary Engineering Non-Motorised User Strategy (Jacobs 2016b) has been prepared for the wider A96 Dualling Programme. In addition, the A96 Dualling Inverness to Nairn (including Nairn Bypass) Non-Motorised User Objective Setting and Context Report (Jacobs 2016c) has been prepared in support of the proposed Scheme and demonstrates how the proposed Scheme can enhance and promote walking and cycling initiatives. The design of the proposed Scheme has also taken into account guidance set out in Cycling by Design 2010 (Transport Scotland 2011).
- 16.1.7 The following general design objectives have been taken from the A96 Dualling Inverness to Nairn (including Nairn Bypass) Non-Motorised User Objective Setting and Context Report (Jacobs 2016c) and have been implemented:
- *'To ensure that there are no hazards to NMUs built into the scheme.*
  - *To ensure that opportunities for NMUs within the scheme are recognised and exploited.*
  - *To ensure that opportunities for NMUs on the surrounding networks, including National Cycle Network and superseded sections of the trunk road, are recognised and exploited.*
  - *The NMU network will be developed taking into account the dualling programme objective (and the Scottish Government's aim) of facilitating active travel in the corridor.*
  - *Development of the NMU network will take into account the needs of everyone regardless of age or disability (i.e. the NMU network will be developed taking into account the requirements of the Equality Act 2010 and Transport Scotland's Roads for All: Good Practice Guide for Roads).'*
- 16.1.8 This chapter is supported by the following appendices and figures:
- Appendix A16.1 (People and Communities - All Travellers Consultation);
  - Appendix A16.2 (Non-motorised User Baseline Conditions);
  - Appendix A16.3 (Non-motorised User Severance Schedule);
  - Appendix A16.4 (The Highland Council NMU Flow Data);
  - Appendix A16.5 (Assessment of Access to Outdoor Areas);
  - Appendix A16.6 (Full Assessment Results for Public Rights of Way and Other NMU);
  - Appendix A16.7 (Assessment of View from the Road);
  - Appendix A18.1 (Planning Policy Context for Environmental Assessment);

- Figure 16.1 (Existing Conditions for NMU);
- Figure 16.2 (Effects on NMU Routes);
- Figure 16.3 (Existing and Proposed Equestrian Crossing Locations);
- Figure 16.4 (Existing and Proposed Public Transport Options);
- Figure 16.5 (View from the Road Existing A96 - Eastbound);
- Figure 16.6 (View from the Road Existing A96 – Westbound);
- Figure 16.7 (View from the Road – WYP Proposed Scheme – Eastbound);
- Figure 16.8 (View from the Road – WYO Proposed Scheme – Westbound);
- Figure 16.9 (View from the Road – SY15 Proposed Scheme – Eastbound); and
- Figure 16.10 (View from the Road – SY15 Proposed Scheme – Westbound).

## **16.2 Relevant Legislative, Plans and Policies and Background**

- 16.2.1 This assessment has focused on the effects the proposed Scheme would have on NMUs and vehicle travellers, in order to reflect the increasing emphasis of planning policy in Scotland to encourage active forms of travel and improve the population's health. The assessment has been conducted in line with both national policy and local policy from The Highland Council (THC) and Moray Council, with a particular focus on policy aimed at improving NMU provision and increasing active travel.
- 16.2.2 The assessment has been carried out in accordance with Interim Advice Note IAN125/09 (Highways Agency 2009), which provides supplementary guidance for users of DMRB Volume 11, Environmental Assessment. Although IAN125/09 was superseded by IAN125/15 in October 2015 (Highways England 2015), this assessment has continued to adhere to IAN125/09. A review of IAN125/15 has confirmed that the changes relating to this chapter, primarily relate to the proposed combining of Chapter 15 (People and Communities: Community and Private Assets) and Chapter 16 (People and Communities: Effects on All Travellers) into a single chapter referred to as 'People and Communities'. Given that some of the key environmental considerations for the proposed Scheme relate to aspects covered by these environmental parameters (including access to properties and communities, agricultural land-take, and changes to paths and cycle routes) it has been determined that combining these chapters would reduce the clarity of reporting and readability for the DMRB Stage 3 Assessment. This approach has been confirmed with Transport Scotland.
- 16.2.3 Appendix A18.1 (Planning Policy Context for Environmental Assessment) describes the planning policies and guidance from national to local level which are relevant to the 'People and Communities: Effects on All Travellers' assessment. An assessment of the compliance of the proposed Scheme against all development plan policies relevant to this environmental topic is reported in Appendix A18.2 (Assessment of Development Plan Policy Compliance) and a summary overview is provided in Section 18.4 (Assessment of Compliance) in Chapter 18 (Policies and Plans).
- 16.2.4 In addition, Chapter 18 (Policies and Plans) and Chapter 15 (People and Communities: Community and Private Assets) provide more details in regard to discussions with THC regarding committed developments and their assessment.

## **16.3 Methodology**

### **Non-Motorised Users (NMUs)**

- 16.3.1 The assessment of NMUs has been conducted in accordance with guidance set out in the DMRB Volume 11, Section 3, Part 8, Pedestrians, Cyclists, Equestrians and Community Effects (Highways Agency, Transport Scotland, Welsh Assembly Government and The Department for Regional Development Northern Ireland 1993a). This assessment has aimed to assess impacts to the journeys which NMUs make in terms of amenity, accessibility, safety and security, as well as

continuity of journeys and journey lengths, both along and surrounding the proposed Scheme, during both construction and operational phases.

- 16.3.2 The baseline conditions have been established through a combination of a desk-based review, information gained from consultation and site visits. The desk-based review was completed using a Jacobs Geographic Information System (GIS) dataset, containing locations of all existing core paths, local paths, aspirational paths, and local cycle routes provided by THC in February 2016. In addition, routes of National Cycle Networks (NCNs) were gained from Sustrans (2015). The British Horse Society (BHS) has provided map information in regard to equestrian crossing points, HITRANS (2011) have provided details regarding active travel mapping, and ScotWays forwarded information on any Rights of Way maintained in the Catalogue of Rights of Way (CROW) (Table 1 in Appendix A16.1: People and Communities - Effects on All Travellers Consultation). In addition to the above information in regard to the local road network was gained from the local roads schedule. This information was analysed together with information reported in the following documents:
- A96 Dualling Inverness to Nairn (including Nairn Bypass): DMRB Stage 2 Scheme Assessment Report (Jacobs 2014);
  - A96 Dualling Inverness to Aberdeen Preliminary Engineering Non-Motorised User Strategy (Jacobs 2016b);
  - A96 Dualling Inverness to Nairn (including Nairn Bypass) Non-Motorised User Objective Setting and Context Report (Jacobs 2016c); and
  - A96 Dualling Programme: Strategic Environmental Assessment – Post Adoption Statement (CH2M 2016).
- 16.3.3 A one day site visit was conducted by the Jacobs landscape team in February 2016 to provide information on the current amenity of NMU routes, in order to inform the NMU assessment and from a judgement as to how the amenity is likely to change during construction and following completion of the proposed Scheme. In addition, a further site visit was undertaken by Jacobs in May 2016 to review selected routes.
- 16.3.4 It is noted that DMRB guidance recommends the use of origin/destination surveys where *'travel patterns [of pedestrian and other users] are complex and a scheme could have a major impact'*. These surveys could include the use of 'counts' to provide information including numbers and types of user. The Land Reform (Scotland) Act 2003 imposes certain requirements on local authorities in terms of maintaining public access. In addition, Scottish Planning Policy (The Scottish Government 2014) aims to maintain, enhance and promote access to open space, recreation opportunities and amenities and improve access for NMUs. It is therefore considered that regardless of levels of use and types of user, all routes should be maintained and/or improved where practicable. NMU count surveys are therefore not essential for the purposes of this assessment, but have been completed to help inform the design of the proposed Scheme.
- 16.3.5 The methodology utilised has primarily determined the type of user (including use by vulnerable users, such as school children, elderly and wheelchair users) from information provided during consultation with THC, Sustrans, the BHS, analysis of maps, as well as other site survey information.
- 16.3.6 Some NMU counts were undertaken in April 2016 to help inform the design of the proposed Scheme and, where necessary, this information has been used to supplement the details gained from other sources as mentioned above. Ten hour counts for pedestrian, cyclist and equestrian journeys were conducted at various locations, over two separate days, as recommended in DMRB Volume 11, Section 3, Part 8, Pedestrians, Cyclists, Equestrians and Community Effects (Highways Agency, Transport Scotland, Welsh Assembly Government and The Department for Regional Development Northern Ireland 1993a). The location and dates of surveys are provided in the A96 Dualling Inverness to Nairn (including Nairn Bypass) April 2016 Non-Motorised User Surveys Factual Report (Jacobs 2016a).
- 16.3.7 Some NMU flow data was also provided by THC in April 2016 and has been incorporated into the assessment, as shown in Table 1 of Appendix A16.4 (The Highland Council NMU Flow Data).

- 16.3.8 This assessment of NMUs has focused on the core path network, aspirational paths, local paths, local road network, public rights of way, national and local cycle routes and other NMU routes, such as woodland trails.

#### Core Paths

- 16.3.9 Core paths can include public rights of way, footpaths, tracks, cycle tracks, paths which are, or may be, covered by path agreements or path orders under the Land Reform (Scotland) Act 2003 (Sections 20 and 21), waterways, or other means by which persons may cross land. Part 1 of the Land Reform (Scotland) Act 2003 makes it the duty of local authorities to draw up a plan for a system of paths sufficient for the purpose of giving the public reasonable access.
- 16.3.10 THC developed the following criteria in their Inverness and Nairn Core Path Plan (THC 2008) for designating a path as a core path:
- linking settlements;
  - access to places of interest;
  - community demand;
  - multi-use potential;
  - access to facilities;
  - assist land management;
  - safe and fit for purpose;
  - consistent with access strategy;
  - close to where people live; and
  - links and supports to the wider (path) networks.

- 16.3.11 The majority of core paths within the study area link settlements, provide access to places of interest (i.e. woodland, outdoor access areas), provide access to facilities and/or link and support local paths.

#### Public Rights of Way

- 16.3.12 A public right of way is a defined route which has been used by the general public for at least 20 years and which links two public places (usually public roads). ScotWays maintains the National CROW in partnership with Scottish Natural Heritage (SNH).

#### Aspirational Paths

- 16.3.13 Aspirational paths hold no statutory designation, however they are recognised by THC as paths that could be made part of the overall core paths network. Aspirational paths can include paths that physically exist or that are not currently in place, but considered important for future development. They can include routes that THC would like to see made more accessible or that public access along them is secured. Aspirational paths can also provide a link where there is an aspiration to develop.
- 16.3.14 Information was received from THC on 21 June 2016 that the Aspirational paths used for this assessment are the most up to date, being developed last between 2006 and 2008.

#### Local Paths

- 16.3.15 Unlike core paths, local paths hold no statutory designation, however they are considered important by THC for providing links for NMUs. Local paths can either be links on roads (i.e. pavement) or wider network paths (other routes, usually through woodland or rural land). Within the study area, these are predominantly found within and between residential areas, or on routes to retail or employment areas.

### Cycle Routes

- 16.3.16 The NCN is a series of cycling and walking routes that connect major towns and cities, passes within a mile of half of all UK homes and now stretches over 14,000 miles across the length and breadth of the UK. Typically NCN routes are a mix of shared use paths free from motorised traffic, segregated routes through towns, predetermined rural footways and quiet roads. Where there is no practical alternative, the NCN may interface with and cross busy trunk roads. Local cycle routes are much shorter routes and usually connect communities to facilities, or facilities to facilities.

### Other NMU Routes

- 16.3.17 In addition to cycle routes, core paths and local paths, a number of routes whose legal status is unknown can be found within the study area. These include for example trails through woodlands.

### Study Area

- 16.3.18 In addition to the larger urban areas of Inverness and Nairn within the study area, a number of residential areas have been included in the assessment, including Smithton, Culloden and Balloch to the west and Auldearn to the east.

### Assessment Criteria for NMUs

- 16.3.19 The assessment of effects on NMUs aims to predict the impact the proposed Scheme would make on journeys made by pedestrians, cyclists and equestrians. The assessment has been separated into construction and operational phases, taking into account both local and regional impacts.

### Changes in Journey Length

- 16.3.20 A change in journey length is determined to have occurred where there is disruption to a path and therefore a diversion is put in place, or where there is an impact on the ability of NMUs to use the path in its current form. Route severance has been assessed in terms of whether NMU routes would be completely stopped up as part of the proposed Scheme or whether there would be changes in traffic flows. The assessments are both quantitative and qualitative (based on professional judgement), describing the change in journey anticipated for NMUs.

### Severance

- 16.3.21 Page 5/1 of DMRB Volume 11, Section 3, Part 8, Pedestrians, Cyclists, Equestrians and Community Effects (Highways Agency, Transport Scotland, Welsh Assembly Government and The Department for Regional Development Northern Ireland 1993a) guidance defines severance as: *'The separation of residents from facilities and services they use within their community caused by new or improved roads or by changes in traffic flow.'*
- 16.3.22 Maintaining connectivity of NMU routes is crucial for increasing the amount of people engaged in active forms of travel, a key goal of the Scottish Government, in turn reducing impacts to the environment through a reduction in private vehicle use. This chapter has included an assessment of how the proposed Scheme would affect connectivity of NMU routes, as well as the options for maintaining and/or enhancing connectivity of these routes, either through diversions or the provision of new NMU facilities. Figure 16.1 shows the existing NMU Routes within the study area and Figure 16.2 highlights the effects on NMU Routes. Table 1 of Appendix A16.3 (Non-motorised User Severance Schedule) includes a schedule of existing routes proposed to be severed as a result of the proposed Scheme and, where applicable, the proposed re-routing and/or mitigation for each severed route.
- 16.3.23 The assessment of severance has included an analysis of traffic flows to determine changes to the number of vehicles using the road and whether this would deter or encourage NMUs to use routes within the study area. The thresholds for the judgement were based upon the criteria for community severance derived from the DMRB Volume 11, Section 3, Part 8, Pedestrians, Cyclists, Equestrians and Community Effects (Highways Agency, Transport Scotland, Welsh Assembly Government and The Department for Regional Development Northern Ireland 1993a). Using those

criteria as a guide, new severance is considered likely to be low where a road would carry below 8,000 vehicles per day (Average Annual Daily Traffic); moderate where a route would have a threshold of 8,000 to 16,000 vehicles per day; and severe for a road where over 16,000 vehicles per day (in the opening year of 2021).

- 16.3.24 The assessment of severance has also included an analysis of all NMU routes that would be stopped up and not permanently re-routed as a result of the proposed Scheme.

Changes in Amenity Value

- 16.3.25 The amenity value of a route is defined in DMRB guidance as: the '*pleasantness of a journey*'. This relates in particular to NMUs exposure to traffic, as well as any associated noise, air quality, safety and visual impacts associated with the construction of the new road layout. A site walkover of selected paths was completed on 3 and 4 May 2016. It is acknowledged that any changes in amenity value would be subjective. However, for the purposes of this assessment it has been assumed that where NMUs would experience a reduction in traffic or road-related noise, and/or reduction in visual impact and/or improvement in air quality, there would be a possible perceived improvement in amenity value. Conversely, an increase in any such traffic or road-related impacts or a possible perceived reduction in safety has been assumed to constitute a reduction in amenity value. Full visual, air quality and noise assessments are reported in Chapters 7 (Air Quality), 8 (Noise and Vibration) and 10 (Visual).
- 16.3.26 Where the construction or operational phases of the proposed Scheme would lead to no significant change in journey length, amenity value, severance of a NMU route or any significant changes, these routes have been detailed in Table 1 of Appendix 16.2 (Non-motorised user Baseline Conditions) as having low sensitivity and Table 1 of Appendix 16.6 (Full Assessment Results for Public Rights of Way and other NMU Routes). However, those routes considered to have high or medium sensitivity have been highlighted in both Table 1 of Appendix 16.2 (Non-motorised user Baseline Conditions) and Table 16.8.
- 16.3.27 There is no published guidance for assessing the sensitivity of NMU routes to change. However it is recognised that certain routes would be more sensitive than others, for example routes used to access the beach front, residential or employment areas. The parameters used to help establish sensitivity of NMU routes have therefore been developed based on professional judgement, and experience accrued from other road infrastructure projects in the absence of recognised standard guidance. The parameters are set out below in Table 16.1.

**Table 16.1: Sensitivity Parameters for Effects on NMUs**

Sensitivity	Parameter
High	Popular routes regularly used to access community facilities, residential areas, employment centres and outdoor areas. Routes which are valued highly as they are key national or regional core paths, long distance walks or cycle routes. These routes may be key commuter routes or routes used to access tourist destinations. These routes may be key routes for vulnerable users such as the elderly, school children or people with disabilities.
Medium	Routes used by the public for local recreational purposes but where alternative routes exist. These are not key tourist or commuter routes.
Low	Routes rarely used by pedestrians, cyclists and equestrians as more attractive alternatives exist. These may be routes which have fallen into disrepair or which have been severed by historical development.

- 16.3.28 The magnitude criteria for the assessment of effects upon NMUs is set out below in Table 16.2. The criteria were developed based on a review of guidance contained within DMRB Volume 11, Section 3, Part 8, Pedestrians, Cyclists, Equestrians and Community Effects (Highways Agency, Transport Scotland, Welsh Assembly Government and The Department for Regional Development Northern Ireland 1993a).

**Table 16.2: Magnitude Criteria for Effects on NMUs**

Magnitude	Description
High adverse	<p>People are likely to be deterred from making trips to an extent sufficient to induce a reorganisation of their habits. This could lead to a change in location of centres of activity or in some cases to a permanent loss to a particular community.</p> <p>Considerable hindrance would be caused to people trying to make their existing journeys, for example by any of the following:</p> <ul style="list-style-type: none"> <li>• Creation of an increase in journey lengths &gt;500m.</li> <li>• A considerable adverse change in the existing views, air quality, noise levels or traffic flows resulting in a change in safety.</li> <li>• Increases in traffic volumes to over 16,000 vehicles per day on a road, such that it would be likely to deter use by most NMUs.</li> <li>• Three or more of the hindrances set out under 'low adverse' or two or more hindrances set out under 'medium'.</li> </ul>
Medium adverse	<p>Some residents, particularly children and elderly people, are likely to be dissuaded from making trips. Other trips would be made longer or less attractive, for example by any of the following:</p> <ul style="list-style-type: none"> <li>• Two or more of the hindrances set out under 'low' applying to single trips.</li> <li>• A noticeable adverse change in the existing views, air quality, noise levels or traffic flows resulting in a change in safety</li> <li>• Journey lengths would be increased by 250 to 500m.</li> <li>• Disruption of a previously uninterrupted NMU route or the creation of a new road nearby, which alters the character or a previously tranquil route.</li> <li>• Increases in traffic volumes to between 8,000 and 16,000 vehicles per day such that would be likely to deter use by some NMUs, particularly road cyclists, or cause noticeably more intimidating conditions.</li> </ul>
Low adverse	<p>In general the current journey pattern is likely to be maintained but with some hindrance to movement for example introduction of a new road to cross but for which traffic volumes are below 8,000 vehicles per day, a new bridge would need to be climbed or a subway traversed, or journeys would increase by up to 250m. An overall barely noticeable adverse change in the existing views, air quality, noise levels or traffic flows resulting in a change in safety</p>
Negligible	<p>Very little noticeable change from the current conditions used by pedestrians, cyclists and/or equestrians.</p>
Low beneficial	<p>A slight improvement to routes used by NMUs i.e. a Low beneficial change in the existing views, air quality, noise levels or traffic flows resulting in a change in safety.</p>
Medium beneficial	<p>Creation of a new crossing or facility that is likely to increase journeys made by foot, bicycle or horse i.e. new Overbridge crossing, new cycleway or pavement provision. Reductions in traffic to below 8,000 vehicles per day or by more than 30% such that conditions for NMUs such as road cyclists are less intimidating. An overall noticeable beneficial change in the existing views, air quality, noise levels or traffic flows resulting in a change in safety.</p>
High beneficial	<p>Provision of a new route for NMUs that may be safer, more direct or have a greater amenity value than routes previously used. New route would enhance links to the wider NMU network and/or improve access to outdoor, recreational and residential areas. Reductions in traffic to below the threshold of 8000 vehicles per day or by more than 60% to cause relief in severance and NMUs are more encouraged to take the route, particularly road cyclists. An overall considerable beneficial change in the existing views, air quality, noise levels or traffic flows resulting in a change in safety.</p>

- 16.3.29 When assessing the overall significance of the proposed Scheme on a NMU route, taking into account both changes in journey length (i.e. including any severance), likely flows along a route and amenity value, the sensitivity and magnitude criteria set out above in Tables 16.1 and 16.2, were considered against the matrix set out in Table 16.3 below. Professional judgement was also applied. Effects are considered to be significant where the effect is assessed as Moderate or Substantial.
- 16.3.30 In instances where no impact was identified during construction or operation of the proposed Scheme i.e. no impact on journey length, amenity or severance, the overall magnitude and significance and were determined as neutral.

**Table 16.3: Significance Criteria for Effects on NMUs**

Sensitivity \ Magnitude	Low	Medium	High
High	Moderate	Moderate/Substantial	Substantial
Medium	Slight/Moderate	Moderate	Moderate/Substantial
Low	Negligible/Slight	Slight	Moderate
Negligible	Negligible	Negligible/Slight	Slight
No impact	Neutral	Neutral	Neutral

Access to Outdoors

- 16.3.31 In addition to the methodology outlined above and in accordance with the SNH Guidance (SNH 2013), an assessment specifically considering the impacts on outdoor access has been completed.
- 16.3.32 The assessment of changes in access to outdoor areas for NMUs has focused on any changes to journeys undertaken for a variety of purposes including recreation, education, socialising, health benefits and travel from one place to another. The assessment criteria is broad in nature, relating to any recreational opportunities that are accessible to and practised by the general public. A qualitative description was completed based on changes in journey length and amenity value. Table 16.4 below summarises the types of outdoor access areas considered as part of this assessment, in line with guidance laid out in SNH (2013) guidance on conducting EIA.

**Table 16.4: Outdoor Access Areas Considered**

<b>Area Based Facilities</b>	National Park, Regional Park and Country Park
	Geoparks
	Munros
	Areas subject to S.49A Management Agreements including public access
	National Nature Reserve and Local Nature Reserves
	Local open space and green infrastructure
	Inland lochs and reservoirs
<b>Linear Access Facilities</b>	Promoted surfing, diving and climbing sites
	Core paths and the wider paths network available through access rights
	Long Distance Routes, regional routes, NCN
	Any other public rights of way that are not identified as core paths or local paths
	Permissive paths and routes on land where access rights do not apply
Rivers and canals	

*Assessment Criteria*

- 16.3.33 The assessment of changes in access to outdoors has taken account of the criteria set out above in Table 16.1 to 16.3. The assessment study area is set out in paragraph 16.3.18.

**Vehicle Travellers**

- 16.3.34 An assessment of vehicle travellers has been made in accordance with DMRB, Volume 11, Section 3, Part 9, Vehicle Travellers (Highways Agency, Transport Scotland, Welsh Assembly Government and The Department for Regional Development Northern Ireland 1993b). The assessment process is both quantitative and qualitative, and relates to the driving environment and likelihood of driver stress, the provision of public transport within the study area and changes to the 'View from the Road'.

Driver Stress

- 16.3.35 Driver stress is defined on page 3/1 of DMRB Volume 11, Section 3, Part 9, Vehicle Travellers (Highways Agency, Transport Scotland, Welsh Assembly Government and The Department for

Regional Development Northern Ireland 1993b) as *'the adverse mental and physiological affects experienced by a driver traversing a road network'*. Driver stress can be influenced by factors including road layout, junction frequency, surface of the road, speed and flow per lane.

*Study Area*

16.3.36 The study area for the assessment of driver stress is limited to the route of the existing A96 and the proposed Scheme. As the proposed Scheme is an improvement of an existing road, a direct comparison between the existing A96 and the proposed Scheme can be made.

*Assessment Criteria*

16.3.37 Driver stress was assessed in relation to frustration, fear of potential accidents and uncertainty of a route. The assessment of driver stress was guided by methodology presented in DMRB, Volume 11, Section 3, Part 9, Vehicle Travellers (Highways Agency, Transport Scotland, Welsh Assembly Government and The Department for Regional Development Northern Ireland 1993b).

16.3.38 The A96 Dualling Inverness to Nairn (including Nairn Bypass): DMRB Stage 2 Scheme Assessment Report (Jacobs 2014) scoped out the assessment of driver stress, as it was deemed not to be a key differentiator between route options. Driver stress was re-examined as part of this Environmental Statement, in line with DMRB guidance, and to reflect the proposed Scheme.

16.3.39 The methodology records average peak hourly flow per lane, in flow units per one hour, where a car or light van equals one flow unit and a commercial vehicle over 1½ tons unladen weight or a public service vehicle equals 3 flow units.

16.3.40 Traffic data detailing average peak hourly flows per lane were provided by Jacobs Traffic Model team in March 2016. As set out in DMRB guidance, driver stress should be assessed for the existing route network which would be affected by the proposed Scheme. The data define driver stress for stretches of the existing A96 and proposed Scheme longer than 1km, using a three point scale: high, moderate or low as presented below in Table 16.5.

**Table 16.5: Significance Criteria for Driver Stress Following DMRB Guidance**

<b>For Dual-Carriageway Roads</b>			
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
<b>For Single-Carriageway Roads</b>			
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 <sup>1</sup>	Moderate	Low
600-800	High	Moderate	Moderate
Over 800	High	High	High

16.3.41 Each road link is assigned a level of driver stress based on the methodology described above in Table 16.5. A value of driver stress was calculated for each link in the following scenarios:

- do-minimum scenario (i.e. without the proposed Scheme) - the worst year in the 15 years after opening (2036) ; and
- do-something scenario (i.e. with the proposed Scheme) - the worst year in the 15 years after opening (2036).

<sup>1</sup> "Moderate" in urban areas.

- 16.3.42 Dividing the existing A96 and the proposed Scheme into individual links allows for a clear assessment of driver stress with and without the proposed Scheme, allowing for easy identification of where beneficial and adverse experiences are likely to occur. Where driver stress changes from low to high, or *vice versa*, the change is assessed as being substantial. Where the assessment produces a change of only one level (i.e. low to moderate or *vice versa*), the change is deemed to be minor. Where there is no change in driver stress for both scenarios, the effect is considered negligible.
- 16.3.43 It must be stated that the driver stress assessment described in paragraphs 16.3.41 and 16.3.42 is only applicable to the operational stage of a new road. There is no specific methodology for the assessment of driver stress during the construction stage of the proposed Scheme. Therefore, this aspect of the assessment was based upon a descriptive explanation of how conditions on the existing road would be altered throughout the construction period. This was based upon a series of site visits undertaken from September 2015 to May 2016 by Jacobs design team to confirm driving conditions on the current road, as well as accident information provided by Jacobs traffic team and reported in the A96 Dualling Inverness to Nairn (including Nairn Bypass) Non-Motorised User Objective Setting and Context Report (Jacobs 2016c).

#### Public Transport

- 16.3.44 Public transport has been considered in terms of the potential for disruption in access to facilities during both the construction and operational phases. Railway stops have been reviewed using the National Rail (2015) website ([www.nationalrail.co.uk](http://www.nationalrail.co.uk)). The assessment of effects on access to bus stops has been completed through consultation with Stagecoach to search for routes and bus stops used within the study area, as well as consultation with THC Public Transport Team with regards school bus services. Only bus facilities with the potential to be disrupted in terms of access as a result of the proposed Scheme have been assessed as part of this chapter (see Table 16.11).
- 16.3.45 Increasing the proportion of the population using public transport within a local area would help The Scottish Government achieve its goal of promoting more sustainable patterns of transport and transitioning to a low carbon economy under its planning policy.

#### *Study Area*

- 16.3.46 The study area for the effects on bus travellers includes the existing A96, as well as any road on the local bus network that would be altered as part of the proposed Scheme.
- 16.3.47 The study area for rail travellers includes all railway stations within 1km of the proposed Scheme. This has been successfully used on similar Transport Scotland schemes such as the A9 Dualling: Luncarty to Pass of Birnam and has been deemed appropriate.

#### *Assessment Criteria*

- 16.3.48 The assessment of effects on public transport has been undertaken using a descriptive and qualitative approach (based on professional judgement). There is no specific guidance available for this aspect of the assessment in EIA.
- 16.3.49 Impacts are considered to be adverse where access for public transport travellers would be impeded or made more inconvenient. Impacts are considered to be beneficial where access to public transport would be improved and made more convenient.
- 16.3.50 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.

#### View from the Road

- 16.3.51 The 'View from the Road' assessment has been undertaken following guidance provided in DMRB Volume 11, Section 3, Part 9, Vehicle Travellers (Highways Agency, Transport Scotland, Welsh

Assembly Government and The Department for Regional Development Northern Ireland 1993b) and consideration of Guidelines for Landscape and Visual Impact Assessment (The Landscape Institute 2013). The assessment comprises a baseline assessment (informed through desk study and field survey) and an impact assessment as described below.

- 16.3.52 Baseline data was collected through desk-based studies including:
- review of web-based aerial photography to identify existing planting, earthworks and landform;
  - review of web-based panoramic photographs, road cameras and 3D imagery to understand the level of screening provided by existing vegetation, earthworks and landform; and
  - a web-based search to identify key views and areas of scenic quality from the existing route.
- 16.3.53 To verify the desk-based assessment results in relation to views from the road, site surveys were undertaken in November 2015 and February 2016. The site survey consisted of driving along the existing A96 in both directions in order to identify the existing visual experience from the carriageway. In addition site survey data gathered for the landscape and visual assessments, Chapter 9 (Landscape) and Chapter 10 (Visual) were also used to inform the baseline for the assessment of the views from the proposed Scheme.
- 16.3.54 The aim of the assessment was to compare the nature and quality of views likely to be experienced by travellers using the proposed Scheme with those currently experienced from the existing A96. The assessment considers the type of scenery that the route passes through, its quality, the presence of features of particular interest or prominence, the diversity of views, the extent to which travellers may be able to experience these views and the sequence in which they are seen. Whilst DMRB Volume 11 does not specifically require an assessment of the sequence in which views are perceived by travellers, this has been included as the unfolding experience of the journey is considered to be an important factor in helping to determine whether and to what degree changes are beneficial or not.
- 16.3.55 The assessment is supported by Figures 16.5 to 16.10.

#### *Assessment Approach*

- 16.3.56 The first stage to the assessment was the identification of the type of landscape (landscape character/scenery) through which the existing A96 passes and the proposed Scheme would pass in order to establish the baseline for the assessment. This may comprise, for example, farmland, woodland or urban areas. The identification of the character of the landscape through which the existing A96 and the proposed Scheme passes has been established as part of the baseline studies to the Landscape Assessment, as reported in Chapter 9 (Landscape). This has been informed by landscape character assessments undertaken by the local authority and/or SNH which have been verified as part of the field studies.
- 16.3.57 DMRB Volume 11, Section 3, Part 9, Vehicle Travellers (Highways Agency, Transport Scotland, Welsh Assembly Government and The Department of Regional Development for Northern Ireland 1993b) requires consideration of '*any especially good or bad potential views along the route*'. To this end the assessment considers the scenic quality of views – i.e. the attractiveness of the landscape as determined through professional judgement by the combination of elements such as landform, water, ground cover/vegetation and built development, and the diversity of the view in relation to these elements (the diversity being judged as high, medium or low). In order to systematically record this the quality of the visual experience of the landscape through which the existing A96 and the proposed Scheme pass, both the immediate landscape and wider surrounds was determined as being high, medium or low following consideration of the landscape character, the presence of designated landscapes (such as National Scenic Areas or Special Landscape Areas) and the scenic quality of landscape.
- 16.3.58 The extent of the opportunities for travellers to view the wider landscape from the proposed Scheme varies with the relative level of the road, surrounding topography and vegetation. Drawing from DMRB Volume 11, Section 3, Part 9, Vehicle Travellers (Highways Agency, Transport Scotland, Welsh Assembly Government and The Department of Regional Development for Northern Ireland 1993b), the categories used in the assessment are detailed below:

- No view: road in very deep cutting or contained by earth bunds, environmental barriers, tree/shrub planting or adjacent structures.
- Restricted view: road in frequent cuttings, or with deep cuttings across slopes, with frequent environmental barriers, tree/shrub planting or adjacent structures blocking the view.
- Intermittent view: road generally at grade but with shallow cuttings, environmental barriers, tree/shrub planting or structures at intervals.
- Open view: road generally at grade or on embankment with views extending over the wider landscape or only restricted by existing landscape features.

16.3.59 In regard to the baseline situation, the extent of the views was established as part of the field studies and identification of where views of the surrounding scenery/landscape are possible and the duration of these views as part of the journey.

16.3.60 The assessment also considered the presence of features which might be of particular interest or prominence within the view. These may include natural landmarks (such as hills, waterbodies or distinctive stands of trees) or manmade elements (such as built heritage features, engineered structures or industrial complexes) which provide visual interest and/or a point of reference associated with the journey being undertaken, possibly a visual cue relating to the approach of the travellers destination, or a midway point for example.

16.3.61 In regard to the proposed Scheme the extent of views was also predicted through consideration of the alignment and elevation of the route, the location of earthworks and the proposed tree and shrub planting associated with the mitigation proposals.

#### *Study Area*

16.3.62 The assessment has focussed on the views which are currently experienced from the existing A96 and from the proposed Scheme. The views considered as part of the assessment extend to the visible skyline whether this is formed for example by surrounding landform, woodland or in views across the sea.

#### *Assessment Criteria*

16.3.63 The assessment of impact was undertaken through comparison of the existing 'baseline' and the views likely to be experienced by people travelling on the proposed Scheme to determine the extent to which the availability of scenic views and views to important landmarks/features of interest is likely to be changed and how the sequential experience of travellers would be affected. Whilst it is possible to quantify the extent to which scenic views or views to landmarks would change to inform the impact assessment, professional judgement is required to determine the degree to which the sequential experience of travellers would be adversely or beneficially affected.

16.3.64 These judgements consider the implementation of mitigation which is predominantly incorporated into the design through alignment, earthworks and landscape planting. However, because planting mitigation proposals are generally not likely to be effective in screening views during winter year of opening, this period can be considered similar to a scenario without mitigation planting. Views from the road at both winter year of opening and summer 15 years later (when mitigation planting has become established and would be effective in screening/controlling views) are reported as this aligns with the landscape and visual assessments.

16.3.65 DMRB Volume 11, Section 3, Part 9, Vehicle Travellers (Highways Agency, Transport Scotland, Welsh Assembly Government and The Department for Regional Development Northern Ireland 1993b) does not set out any criteria for the assessment of significance of changes to the view from the road. Typical key criteria developed for use in this assessment are included in Table 16.1. The assessment is not formulaic and the table only indicates general criteria for determination of impact significance. Professional judgements must be made about each scenario, with the criteria set out in Table 16.6 in the absence of robust DMRB guidance.

**Table 16.6: Significance Criteria for ‘View from the Road’**

Significance	Typical Criteria
Substantial	A major deterioration or improvement in views from the road. Adverse: The project would cause major deterioration to views or loss of views from the road where travellers currently experience extensive views of a high quality landscape, area of unique landscape character, or a varied sequence of prominent features of particular interest. Beneficial: The project would lead to a major improvement in a view where travellers would experience new extensive views of a high quality landscape, area of unique landscape character, or a varied sequence of prominent features of particular interest.
Moderate	A notable deterioration or improvement in views from the road. Adverse: The project would cause a notable deterioration to, or loss of views from the road where travellers currently experience partial/intermittent views of a high quality landscape (or extensive views of a medium quality landscape), area of unique/distinctive landscape character, or features of interest. Beneficial: The proposals would cause a notable improvement to views from the road where travellers would experience new partial/intermittent views of a high quality landscape (or extensive views of a medium quality landscape), area of unique/distinctive landscape character, or features of interest.
Slight	Minor deterioration or improvement in views from the road. Adverse: The project would cause limited deterioration to, or loss of views from the road where travellers currently experience views of low quality landscape/unremarkable or degraded landscape character, or has heavily restricted views/no view of surrounding landscape regardless of quality. Beneficial: The project would cause limited improvement to views from the road where the traveller would experience new views of unremarkable landscape, or has heavily restricted views/no view of surrounding landscape regardless of quality.
Negligible	No deterioration or improvement in views from the road.

Mitigation

- 16.3.66 Potential mitigation measures have been considered during this assessment and take into account best practice, legislation, guidance and professional experience.
- 16.3.67 As described in Chapter 1 (Introduction) and Chapter 5 (Overview of Assessment) the mitigation commitments and monitoring frameworks identified in the Strategic Environmental Assessments (SEAs) for the Strategic Transport Projects Review (STPR) (Jacobs, Faber Maunsell, Grant Thompson and Tribal Consulting 2008) and A96 Dualling Programme (CH2M 2015 and 2016) have also been taken into consideration in relation to the mitigation proposals.
- 16.3.68 The mitigation commitments relevant to this chapter detailed within the STPR SEA include:
- Fully consider community linkages and accessibility at all subsequent stages of decision making; and
  - Consultation with local communities over proposed transport interventions.
- 16.3.69 The mitigation commitments relevant to this chapter detailed within the A96 Dualling Programme SEA Post Adoption Statement include:
- Road design to accommodate crossings with local and national paths and cycleways with minimal disruption to their alignments;
  - Wherever possible paths and cycleways to be kept open using temporary diversions during construction stages of the projects; and
  - Route choice to take account of proximity of operational road traffic effects on receptors in populated areas to reduce potential noise and other adverse amenity effects (including community severance).
- 16.3.70 The specific mitigation measures in relation to the proposed Scheme are discussed further in Section 16.10 (Mitigation).

## **16.4 Limitations to the Assessment**

- 16.4.1 Although THC provided details of the core paths, wider path network, links on roads and aspirational paths to assist in the A96 Dualling process, only the core paths data is audited by THC on an ongoing basis. Therefore the other categories of data cannot be guaranteed to be free from errors or omissions, or to be an accurate representation of routes on the ground.

## **16.5 Baseline Description and Evaluation**

### **Non-Motorised Users (NMUs)**

- 16.5.1 There are numerous facilities within the study area which NMUs would utilise the local path network to access. This includes access to residential areas, employment centres, retail facilities, education facilities, coastal walks and leisure opportunities. The areas of Westhill, Smithton, Culloden and Balloch to the east of Inverness are primarily residential areas, within which residents can easily travel around by foot or bicycle. The Inverness Retail and Business Park is also located immediately south of the existing A96. The villages of Ardersier and Croy are situated approximately halfway between Inverness and Nairn. Both villages contain primary schools, whilst Inverness Airport and Dalcross Industrial Estate are located nearby. Nairn has two primary schools and a secondary school, as well as a number of retail shops and other employment facilities, such as the Balmakeith Business Park. Auldearn is a small village located east of Nairn and is within a commutable distance to Nairn for NMUs. Further detail of facilities found within the study area can be found in Chapter 15 (People and Communities: Community and Private Assets).
- 16.5.2 Figure 16.1 sets out the existing baseline conditions for NMUs within the study area. The sensitivity of each NMU route has been deemed in line with the criteria determined in Table 16.1, with a full assessment provided in Table 1 of Appendix A16.2 (Non-motorised User Baseline Conditions).
- 16.5.3 Given the nature of the existing A96 (high traffic volumes) and the lack of provision for NMUs, very few journeys of this nature are made, either along or crossing the existing A96, or on paths that adjoin the road. The only area where a significant amount of NMUs were recorded during NMU count surveys in April 2016, was along the existing NMU path beside the A96 between the Inverness Retail and Business Park and Milton of Culloden (Figure 16.1).
- 16.5.4 Annually updated traffic count data from the Department for Transport (2015) revealed very few cycle journeys in 2014. Between Inverness and Nairn, Annual Average Daily Flow (AADF) of six cyclists were recorded near Tradespark, with two at Polfalden and one at Brackley. The data suggests the existing A96 experiences greater use by cyclists between Nairn and Auldearn, with the largest AADF recorded being 12 along the existing A96 east of the Balmakeith Business Park, possibly reflecting commuter flows from Auldearn to the business park. AADF of four were recorded along the A939 Tomintoul - Granttown on Spey - Nairn Road near Househill (it should be noted that NCN1 briefly lies on the A939 Tomintoul - Granttown on Spey - Nairn Road and the road is the main access between Nairn and NCN1). The data indicates that the existing A96 is not utilised by cyclists in high numbers to the east of Auldearn, with a low figure reported near Hardmuir. This is likely to be due to the fact that NCN1 runs parallel to the existing A96 here.
- 16.5.5 NMU flow data received from THC in April 2016 indicated that core path NA04.02 along the Firhall Bridge crossing of the River Nairn is well used, with monthly flow data showing count ranges of 2,883 – 4,656 during 2014 and 2015. The Firhall Bridge route is known to be utilised by recreational travellers. A full list of the data provided by THC is included in Table 1 of Appendix A16.4 (The Highland Council NMU Flow Data).
- 16.5.6 NMU flow data received from NMU counts conducted in April 2016 revealed routes that were infrequently used throughout the study area. For example, 5 pedestrians and cyclists crossed the existing A96 at the intersection of Milton Road (U1136) and the A96. Similarly, a number of pedestrians and cyclists were recorded along Blackpark - Grigorhill - Newmill Road (U3010), with 22 recorded on a weekday and 11 on a weekend. A total of 42 and 34 pedestrians and cyclists were recorded along the B9111 Auchnacloch – Auldearn Road on a weekday and weekend day respectively, with an additional 11 recorded utilising the existing A96 underpass in this location. A

full list of NMU counts can be found in the A96 Dualling Inverness to Nairn (including Nairn Bypass) April 2016 Non-Motorised User Surveys Factual Report (Jacobs 2016a).

- 16.5.7 A detailed description of all NMU routes within the defined study area is provided in Table 1 of Appendix A16.2 (Non-motorised User Baseline Conditions) and displayed on Figure 16.1.

#### Equestrian Crossings

- 16.5.8 The locations of the uncontrolled equestrian crossing sites are described in Appendix A16.2 (Non-motorised User Baseline Conditions) and can be seen on Figure 16.3.

#### Core Paths

- 16.5.9 There are 20 core paths within the study area, nine of which are intersected by the proposed Scheme, as shown in Figure 16.1. In addition, 11 core paths are located within 500m of the proposed Scheme but would not be directly severed, as shown on Figure 16.1.
- 16.5.10 The potential effects on these core paths are described in Table 16.8.

#### Public Rights of Way

- 16.5.11 ScotWays confirmed that there are two public rights of way within the study area. These are R1 to the north-west of Auldearn and R2 at Balnaspirach (see Figure 16.1).

#### Aspirational Paths

- 16.5.12 Throughout the study area, there are eleven aspirational paths, of which the following six directly cross the proposed Scheme: A1, A4, A5, A6, A7 and A10. The following paths are located nearby to the proposed Scheme: A2, A3, A8, A9 and A11 (Figure 16.1).

#### Local Paths

- 16.5.13 There are 16 local paths, and a path network through Russell's Wood, located within the study area. Of these, eight local paths would be directly severed by the proposed Scheme and can be seen on Figure 16.1.
- 16.5.14 A network of paths also exists through Russell's Wood, along BlackPark - Grigorhill - Newmill Road (U3010). These are not routes recognised by THC but are well used by dog-walkers in the area as noted during site visits in May 2016.

#### Cycle Routes

- 16.5.15 The National Cycle Network 1 (NCN1) is a long distance cycle route which connects Dover and the Shetland Islands, via the east coast of the British Isles. Within Nairn, the cycle route is located east of the River Nairn and follows the A939 Tomintoul - Grantown on Spey - Nairn Road to the B9101 Auldearn - Cawdor Road. The NCN1 then crosses the B9101 Auldearn - Cawdor Road and follows C-class and U-class roads south of the B9090 Loch Flemington - Clephanton - Cawder - Nairn Road and B9006 Millburn Roundabout - Culcabock - Castle Hill - Culloden Moor - Croy - Gollanfield - Fort George Road before passing through Balloch via the C1028. The NCN1 between Balloch and Inverness passes through Culloden, Smithton and Cradlehall. The route of NCN1 can be seen on Figure 16.1.
- 16.5.16 A local shared use path exists between the University of the Highlands and Islands campus and the Inverness Retail and Business Park (see Figure 16.1).
- 16.5.17 In addition to the desk-based assessment, site visits identified a number of non-designated cycle routes comprising either segregated cycle paths or on-road routes, including a number of the core path routes identified by THC.

Local Road Network

16.5.18 There are a number of local roads that adjoin or cross the proposed Scheme. From west to east these are:

- Barn Church Road (C1032);
- Milton Road (U1136);
- Dalcross Station Road (C1020);
- Kerrowgair – Croy Road (C1017);
- Milton of Breachlich Road (U1025);
- B9006 Millburn Roundabout – Culcabock – Castle Hill – Culloden Moor – Croy – Gollanfield – Fort George Road;
- Loch Flemington Road (U1351);
- Gollanfield Road (C1013);
- Wester Glackton – Balcroy – Kilravock – Cawdor Road (U1017);
- Tomhommie – Ballinreich – Balnagowan Road (U1029);
- Cockhill access road;
- McDermotts Road (U2218);
- Access road to Roadside Cottage South;
- Delnies – Kildrummie – Howford Road (C1163);
- Moss-Side – Mosshall - Broadley Road (C1170);
- Balnaspirach Road;
- B9091 Croy – Clephanton – Kildrummie – Nairn Road;
- B9090 Loch Flemington – Clephanton – Cawder – Nairn Road;
- Local road linking B9091 Croy – Clephanton – Kildrummie – Nairn Road and B9090 Loch Flemington – Clephanton – Cawder – Nairn Road;
- Househill – Raitloan – Howford Road (C1175);
- A939 Tomintoul - Grantown on Spey - Nairn Road;
- Blackpark – Grigorhill – Newmill Road (U3010);
- B9111 Auchnacloch – Auldearn Road;
- B9101 Auldearn – Cawdor Road);
- Waterloo – Eastertown – Inshoch Road (U2997);
- Penick Road (U3164);
- Road from Egilsay House to Penick Road (U3164); and
- Ellands – Hardmuir – Boghole Road (U3036).

Access to the Outdoors

16.5.19 The key outdoor areas located within the study area are as follows (for further information see Chapter 15: People and Communities: Community and Private Assets):

- Area based facilities:
  - Kildrummie Kames Site of Special Scientific Interest (SSSI);
  - Culbin Sands;

- Woodlands, such as Tornagrain Woods, Russell's Wood and the Delnies Community Woodland;
- Dunbar Recreation Ground;
- Auldearn Community Trust Football Pitch;
- Culloden Playing Fields
- War Memorial (Tornagrain);
- Loch Flemington;
- Moray Firth and associated beaches; and
- Geddes Burn reservoir.
- Linear access facilities:
  - All core paths, local paths, links on roads and cycle routes identified in Table 1 of Appendix A16.2 (Non-motorised User Baseline Conditions); and
  - River Nairn.

### **Vehicle Travellers**

- 16.5.20 As stated in the A96 Strategic Business Case (Transport Scotland 2014), the majority of vehicle journeys along the existing A96, between Inverness and Hardmuir, are wholly internal trips between settlements, and a high proportion of journeys cover a distance of less than 25 miles, indicating the importance of the existing A96 as a connector between towns and cities throughout the corridor.

### Driver Stress

- 16.5.21 The assessment of driver stress has compared stretches of predicted high, moderate and low driver stress along the existing and proposed A96 for the expected traffic flows for the do-minimum scenario (without the proposed Scheme) and the do-something scenario (with the proposed Scheme). Driver stress along the existing A96 eastbound carriageway is predominantly low, with sections of high stress found around the Inverness Retail and Business Park and sections of moderate stress through Nairn Town Centre. For the westbound carriageway of the existing A96, driver stress is predominantly low, with high levels of stress found from Newton of Petty to the Seafeld Roundabout, as well as moderate levels through Nairn Town Centre.
- 16.5.22 The following paragraphs set out a qualitative description of current conditions and how these may contribute to driver stress for the do-minimum scenario in 2036.
- 16.5.23 The existing A96 runs through a primarily rural area with major junctions located on the approach to or within urban centres along the route. In the rural sections of the existing A96 drivers tend to experience reduced volumes of traffic and a free flow of movement.
- 16.5.24 In the urban sections of the existing A96, the number of at-grade junctions means vehicles enter the single carriageway at a speed much lower than vehicles already on the route, causing vehicles to either slow down or attempt dangerous overtaking manoeuvres, both of which contribute to unsafe driving conditions. Between 2008 and 2012, approximately half of all personal injury accidents on the existing A96 occurred at junctions (Jacobs 2014). Accident rates are high as the trunk road passes through Nairn, as well as on exit of Nairn heading east.
- 16.5.25 The nature of the existing A96 as a key transport route to the Highlands, as well as to Aberdeen and the north-east, has resulted in the trunk road becoming increasingly busy. In particular, the increased volume of traffic is mostly witnessed at urban junctions along the route.
- 16.5.26 The increased volume of traffic experienced at the urban junctions combined with the increasingly heavy duty nature of a significant proportion of this traffic, results in reduced journey time reliability within urban locations causing congestion and driver frustration.

Public Transport

- 16.5.27 The majority of journeys within the study area are made by car, with public transport less frequently used.
- 16.5.28 There are a number of bus services operated by Stagecoach which currently utilise the existing A96 and the surrounding network of local roads. THC and D&E Coaches provide school bus services for Culloden Academy, Nairn Academy, Auldearn Primary, Ardersier Primary, Balloch Primary and Croy Primary. However following consultation between Jacobs and D&E Coaches in July 2016, it was confirmed that no formal school bus stops are located along the existing A96, with school children instead collected via a request service along the local road network. Given the request service has the potential to change on a term by term basis, the assessment of school bus services has not been considered further as any assessment of effects completed at the time of writing may be inaccurate during the construction and operational phases of the proposed Scheme. It must be noted however that arrangements would be made to reduce any potential effects (See Section 16.10 (Mitigation)).
- 16.5.29 Table 16.7 below and Figure 16.4 set out the bus stops utilised by Stagecoach services, within close proximity of the proposed Scheme.

**Table 16.7: Bus Stops Utilised within the Study Area**

<b>Bus Stop (approximate chainage for guidance)</b>	<b>Bus Route</b>
Inverness Retail and Business Park, Tesco (ch800)	5: Inverness (Union Street) to Balloch, 5A: Inverness (Union Street) to Croy (Ardcroy Road)/Croy (Ardcroy Road) to Inverness (Union Street), 5B: Inverness (Union Street) to Culloden (Ardcroy Road), 11: Inverness to Elgin/Elgin to Inverness, 15: Inverness (Bus Station) to Ardersier (High Street) or Nairn (Sainsbury's) and 26B: Inverness to Croy.
Culloden, Milton of Culloden (ch2760)	10: Inverness Bus Station to Aberdeen Union Square/Aberdeen Union Square to Inverness Bus Station, 11: Inverness to Elgin/Elgin to Inverness and 15: Inverness (Bus Station) to Ardersier (High Street) or Nairn (Sainsbury's).
Culloden, Allanfearn Farm (ch3650)	10: Inverness Bus Station to Aberdeen Union Square/Aberdeen Union Square to Inverness Bus Station, 11: Inverness to Elgin/Elgin to Inverness and 15: Inverness (Bus Station) to Ardersier (High Street) or Nairn (Sainsbury's).
Culloden, Lower Cullernie Road End (ch4550)	15: Inverness (Bus Station) to Ardersier (High Street) or Nairn (Sainsbury's)
Tornagrain, Lay-by (ch9340)	10: Inverness Bus Station to Aberdeen Union Square/Aberdeen Union Square to Inverness Bus Station and 11: Inverness to Elgin/Elgin to Inverness.
Gollanfield, Ardersier Road End (ch14100)	10: Inverness Bus Station to Aberdeen Union Square/Aberdeen Union Square to Inverness Bus Station and 11: Inverness to Elgin/Elgin to Inverness.
Gollanfield, Lay-by (ch15300)	10: Inverness Bus Station to Aberdeen Union Square/Aberdeen Union Square to Inverness Bus Station and 11: Inverness to Elgin/Elgin to Inverness.
Nairn, Delnies Woods Caravan Site (ch18950)	10: Inverness Bus Station to Aberdeen Union Square/Aberdeen Union Square to Inverness Bus Station and 11: Inverness to Elgin/Elgin to Inverness.
Auldearn, Waterloo Road (ch25710)	10: Inverness Bus Station to Aberdeen Union Square/Aberdeen Union Square to Inverness Bus Station, 11: Inverness to Elgin/Elgin to Inverness and 11A: Inverness to Elgin.
Auldearn, Hardmuir Toll (ch31100)	10: Inverness Bus Station to Aberdeen Union Square/Aberdeen Union Square to Inverness Bus Station and 11: Inverness to Elgin/Elgin to Inverness.

- 16.5.30 There are two railway stations in the study area, at Inverness and Nairn (Figure 16.4).
- 16.5.31 In addition, HITRANS has a long standing plan for new railway stations at Dalcross and Seafield. Dalcross Railway Station would be located adjacent to the Inverness Airport, directly off the Kerrowgair – Croy Road (C1017), with the Seafield Railway Station located north of the existing A96 near the Inverness Retail and Business Park. However at the time of writing planning permission had yet to be secured for either.

- 16.5.32 There are also two bus stops located on either side of the airport access road, immediately west of Mid Coul Junction, which are disused at present but have the potential to be re-opened if approval was granted for the Dalcross Railway Station (Figure 16.4).

View from the Road

- 16.5.33 This section describes the nature, extent and scenic quality of views experienced by travellers on the existing A96 for both eastbound and westbound journeys. In general terms the route runs through an area predominantly characterised by farmland, occasionally interspersed by mixed and conifer woodland and passing through the historic town of Nairn.

*Description of Eastbound Views from the Existing A96 (Inverness to Hardmuir)*

- 16.5.34 A description of the existing views experienced by eastbound travellers from the existing A96 is provided in Table 1 of Appendix A16.7 (Assessment of View from the Road), the extent of views being illustrated in Figure 16.5.
- 16.5.35 As indicated in Table 1 of Appendix A16.7 (Assessment of View from the Road), eastbound travellers on the existing A96 typically experience short to medium distance views of a landscape predominantly given over to open, large scale arable farmland, with the views of the farmland and wider surrounds interrupted occasionally by blocks of roadside mixed or coniferous woodland and passage through the historic town of Nairn.
- 16.5.36 Passage through these blocks of woodland serve to provide a sequence of open vistas across the surrounding farmlands, the vistas intermittently interrupted by the enclosure of the woodland blocks. Views from the existing A96 are typically of low visual diversity, and of low to medium scenic quality, the quality rising where more open, longer distance views are experienced of the wider landscape and the Moray Firth/Black Isle to the north. In views to the south, travellers also experience intermittent views of the ridge and conifer plantations of Drumossie Muir which run broadly parallel to the existing A96 and offer a contrast to the intensively farmed landscapes of the lower lying slopes providing a more scenic backdrop to the farmlands.
- 16.5.37 In regard to notable features and landmarks, while travellers are aware of the Moray Firth to the north and the wooded ridgelines to the south there are no notable natural landmarks. Travellers do however experience views of the Norbord Factory stack and associated plume between Allanfean and Tornagrain in addition to Inverness Airport on exiting Tornagrain Woods. While the passing of these features provide no or very limited scenic or visual interest they provide travellers with reference markers against which to gauge progress along the A96.

*Description of Westbound Views from the Existing A96 (Hardmuir to Inverness)*

- 16.5.38 A description of the existing views experienced by westbound travellers from the existing A96 is provided in Table 2 of Appendix A16.7 (Assessment of View from the Road), the extent of the views being illustrated in Figure 16.6.
- 16.5.39 As indicated in Table 2 of Appendix A16.7 (Assessment of View from the Road), westbound travellers on the existing A96 typically experience short to medium distance views of a landscape predominantly given over to arable farmland, views occasionally interrupted by blocks of mixed or coniferous woodland and passage through the historic town of Nairn. The blocks of woodland enhance the sequential experience for travellers, intermittently interrupting and framing the open vistas across the surrounding farmlands. Within the more open sections travellers occasionally experience longer distance views of a more scenic nature with views to the Black Isle and the Northwest Highlands beyond the Kessock Bridge/Beaully Firth, the frequency of these views increasing as the route nears Inverness. Westbound views from the existing A96 are typically of low to medium visual diversity and of low to medium scenic quality, with the quality rising where more open, longer distance views are experienced of the Black Isle and Northwest Highlands to the north and north-west, and the hills to the south.
- 16.5.40 Notable features and landmarks visible include the Moray Firth to the north and the wooded ridgelines to the south. The Kessock Bridge and the mountains beyond provide important visual

references helping to mark progress towards Inverness and upland areas. Travellers also experience views of Inverness Airport and the Norbord Factory stack. While these are not of scenic interest they provide travellers with distinctive visual references on the journey.

### **Summary of Baseline**

- 16.5.41 The existing A96 provides poor NMU connectivity along its route. Provision at present is limited to a shared cycleway and footway in place around the Mid Coul Junction roundabout and by the Inverness Retail and Business Park, with small stretches of pavement found along various other sections of the route. Along the road there are no controlled crossings of the trunk road for NMUs outwith Nairn, with users forced to cross live traffic.
- 16.5.42 The existing A96 is a busy road, resulting in drivers often feeling frustrated, particularly during peak times.
- 16.5.43 Although a number of bus stops are located along the existing A96, access to the stops is poor with often limited NMU provision.
- 16.5.44 Views from the road are of low to medium quality, with drivers predominantly experiencing short to medium distance views over agricultural land and woodland, with longer distance views to the Black Isle and Beaully/Moray Firths in parts.

## **16.6 Consultation**

- 16.6.1 Stakeholder feedback has been used to gather information on key local NMU issues. The information received has been used to inform the assessment, where appropriate, as well as aid the design of the proposed Scheme. A summary of the key concerns and issues raised by stakeholders can be found in Table 1 of Appendix A16.1 (People and Communities - Effects on All Travellers Consultation). These concerns have been taken into consideration with the design of the proposed Scheme.
- 16.6.2 Additional consultation was completed as part of the A96 Dualling Inverness to Nairn (including Nairn Bypass) Non-Motorised User Objective Setting and Context Report (Jacobs 2016c) and have been taken into consideration to inform the design of the proposed Scheme.
- 16.6.3 One of the key issues identified throughout the consultation process for both the DMRB Stage 2 and 3 Assessments was the issue of severance to NMU routes as a result of the proposed Scheme.
- 16.6.4 An A96 Dualling Programme NMU Forum was established, consisting of key stakeholders/consultees to seek feedback in relation to the proposed Scheme. Details of NMU Forum members can be found in Table 1 of Appendix A16.1 (People and Communities - Effects on All Travellers Consultation). The purpose of the forum was to agree the A96 Dualling Programme NMU Strategy and update the forum members on the latest NMU proposals and seek their feedback.

## **16.7 NMU Proposals**

- 16.7.1 The needs of NMUs have been considered throughout the development of the proposed Scheme, with various features incorporated into the design to maintain and improve routes utilised by NMUs.
- 16.7.2 As part of the proposed Scheme, a shared use path will provide NMUs with a connection, approximately 23km in length, between Inverness and Nairn. For the majority of the route, the newly constructed path will have a minimum path width of 2.5m and will be separated from live traffic by a buffer of between 0.5m and 1.5m depending on the traffic speed. This is in line with guidance set out in Cycling by Design (Transport Scotland 2011). There are no at-grade crossings of the dual carriageway. Where required, crossings are provided at grade separated junctions or specific NMU underpasses. The total length of shared path that will be provided is approximately 30km; this includes the 23km route between Inverness and Nairn as well as provision at junctions, NMU underpasses, connections to bus stops and links to the existing path network.

- 16.7.3 Between the Inverness Retail and Business Park and Smithton Junction the shared use path will be adjacent to the westbound carriageway for approximately 500m, then adjacent to the Ashton Farm Access Road to Smithton Junction. In total this section of path will be approximately 0.95km in length and 3m in width. To continue on the shared path to Balloch Junction, users would cross under the dual carriageway via the PS01 (Smithton Junction Underbridge) at ch1750.
- 16.7.4 Between Smithton Junction and Balloch Junction the shared use path will be adjacent to the eastbound carriageway and generally follow the edge of the earthworks. This section of the route will be approximately 3.2km in length and 3m in width. The reason for a wider path here is due to anticipated high usage numbers and greater passing opportunities as NMUs wish to access the Inverness Retail and Business Park. A NMU underpass will allow access under the dual carriageway to the proposed shared path and the existing A96 from Milton Road (U1134)/core path IN08.05. In addition to the primary route a 300m length of path, adjacent to the westbound carriageway of the proposed scheme, will provide a link between core paths IN08.15 and IN08.16. To continue on the shared use path to Mid Coul Junction, users would cross under the dual carriageway via the PS02 (Balloch Junction Underbridge) at ch5000.
- 16.7.5 Between Balloch Junction and Mid Coul Junction the shared use path will be adjacent to the westbound carriageway and generally follow the edge of the earthworks. Users will have to cross the existing A96 on the west side of the PS03 (A96 Kerrowaird Underbridge) at ch8500. This section of path will be approximately 5.5km in length and 2.5m in width. To continue to Brackley Junction, users would pass under the westbound merge and diverge via a NMU underpass. The proposed layout of this junction results in NMUs being able to navigate through the junction without stopping or having to cross any road.
- 16.7.6 Between Mid Coul Junction and Brackley Junction the shared use path will remain adjacent to the westbound carriageway and generally follow the edge of the earthworks. This section of the path will be approximately 3.8km in length and 2.5m in width. To continue to Nairn West Junction users would cross over the dual carriageway via the PS06 (Brackley Junction Overbridge) at ch14100. The proposed layout of this junction results in NMUs being able to navigate through the junction without stopping or having to cross any road.
- 16.7.7 Between Brackley Junction and Nairn West Junction the shared use path will use the existing A96 for approximately 600m before crossing the dual carriageway via the PS21 (Gollanfield Road Overbridge) at ch15300. East of this point the path sits adjacent to the westbound carriageway, generally at the edge of the earthworks. This section of path will be approximately 4km in length and 2.5m in width. To continue along the shared use path into Nairn, users would cross over the dual carriageway via the PS10 (Nairn West Junction Overbridge) at ch17950.
- 16.7.8 From Nairn West Junction the shared use path will follow the existing A96, adjacent to the westbound carriageway, for a distance of approximately 1.2km until the junction at Delnies Woods Caravan Park. From this junction there will be two routes into Nairn.
- 16.7.9 For the first route the shared use path will continue adjacent to the westbound carriageway of the existing A96 for approximately 1.3km between the junction and Delnies House, where users would then follow an existing path into Nairn.
- 16.7.10 The second route will follow the new link road to the south-west of Nairn for approximately 3.5km. It will then follow the Moss-Side – Mosshall – Broadley Road (C1170) and B9090 Loch Flemington – Clephanton – Cawder – Nairn Road for approximately 650m before joining the dual carriageway to cross the River Nairn via the PS14 (River Nairn Underbridge) at ch22400. Approximately 400m to the east of the River Nairn Bridge, the shared path will leave the dual carriageway and connect into the Househill – Raitloan – Howford Road (C1175)/NCN1. The full length of this section of the route will be approximately 4.9km and 2.5m in width. Within this section there will be a NMU underpass to provide a connection between the existing Delnies – Kildrummie – Howford Road (C1163) south of the dual carriageway and the shared path. On the east side of the River Nairn Bridge, there will be a NMU link between the shared path adjacent to the dual carriageway and the River Nairn core path NA04.03.

- 16.7.11 Between Nairn and Auldearn approximately 500m of new path will be provided adjacent to the B9111 Auchnacloch – Auldearn Road as it passes under the dual carriageway via the PS22 (B9111 Underbridge) at ch25725. This path will be 2.5m in width.
- 16.7.12 Between Bogside of Boath and Boath Steading approximately 420m of new path will be provided adjacent to the Auldearn – Station – Drum Road (C1172) as it passes under the dual carriageway via the PS18 (C1172 Underbridge) at ch27350. This path will be 2.5m in width.
- 16.7.13 Lighting provided at the six junctions will assist NMUs to navigate through the junctions. Lighting is not proposed to be included at the PS21 (Gollanfield Road Overbridge) at ch15300. NMU underpasses will be provided with lighting. In addition, carefully designed landscaping plans would generally hide views of the proposed Scheme and enhance the amenity value of NMU routes. Further details of landscaping plans can be found in Chapter 9 (Landscape).

## **16.8 Impacts**

### **Non-Motorised Users (NMUs)**

- 16.8.1 The following impact assessment takes into account ‘embedded mitigation’ (mitigation incorporated into the design of the proposed Scheme), which comprises all NMU proposals stated in Section 16.8 (NMU Proposals). The assessment therefore identifies potential impacts that remain despite the embedded mitigation, with measures to avoid or reduce these potential impacts identified in Section 16.10 (Mitigation), where appropriate.
- 16.8.2 The assessment in Table 16.8 has focused on those NMU routes valued as a high or medium sensitivity, in order to focus the assessment on routes deemed to be most sensitive. The assessment of NMU routes deemed to be of a low sensitivity can be seen in Table 1 of Appendix A16.6 (Full Assessment Results for Public Rights of Way and Other NMU Routes). Table 16.8 includes for guidance only the approximate road chainages for each NMU route, which are displayed on Figure 16.1.
- 16.8.3 Any reference to effects on amenity value includes potential impacts to noise, visual and air quality during the construction or operational phases. Where a change in traffic flow would affect the amenity value of a route or deter or encourage NMUs to utilise a route, reference has been made.
- 16.8.4 Although traffic flows would increase along the proposed Scheme, NMU routes which would adjoin the shared use path are not deemed to be severed as the facility would provide a safe crossing.
- 16.8.5 Table 16.8 should be read in combination with Appendix A16.3 (Non-motorised User Severance Schedule), which sets out changes in journey length, a description of the change and amenity value for NMUs utilising routes valued as having a low baseline sensitivity.

**Table 16.8: Effects on NMUs**

Route (approximate chainage for guidance)	Baseline Sensitivity	Description of Impacts to Journey Length and/or Severance	Description of Impacts to Amenity	Potential Impact		
				Overall Magnitude of Change to Journey Length and/or severance	Overall magnitude of Change to Amenity	Overall Significance of Effect
<b>Core Path (IN=Inverness, NA=Nairn)</b>						
IN08.03 (ch2300 to ch2750)	High	<p><b>Construction:</b> Journey length may be impacted due to construction activities. However, it is anticipated that access would be maintained in some capacity, either through temporary diversions or along the existing route wherever possible.</p>	<p><b>Construction:</b> There would be an adverse effect on amenity as it would be directly impacted by the widening and extending of Caulfield Road.</p>	Low adverse (temporary)	Medium adverse (temporary)	Moderate adverse (temporary)
		<p><b>Operation:</b> No impact is predicted once operational with no noticeable changes to the path in terms of journey length and amenity.</p>		No impact (permanent)		Neutral (permanent)
IN08.10 (ch1140)	High	<p><b>Construction:</b> Journey length would be impacted due to construction activities. However, it is anticipated that access would be maintained in some capacity, either through temporary diversions or along the existing route wherever possible.</p>	<p><b>Construction:</b> An adverse effect on amenity is anticipated with the construction of the new road alignment around Smithton Junction which adjoins the footpath.</p>	Low adverse (temporary)	Medium adverse (temporary)	Moderate adverse (temporary)
		<p><b>Operation:</b> The path would follow a similar route to present along the Ashton Farm Access Road. From here it would adjoin the new shared use path, providing a link to the Inverness Retail and Business Park.</p> <p>In order to cross the dual carriageway alignment and reach core path IN08.30, NMUs would have to make a detour via Smithton Junction to the east, of approximately 1.2km. The new crossing at the PS01 (Smithton Junction Underbridge) at ch1750 would provide safer crossing of the A96.</p>	<p><b>Operation:</b> An adverse effect on amenity is also anticipated with clear views of the Smithton Junction which adjoins the footpath.</p>	Medium adverse (permanent)		Moderate adverse (permanent)

**A96 Dualling Inverness to Nairn (including Nairn Bypass)**  
**DMRB Stage 3: Environmental Statement**  
**Chapter 16: People and Communities: Effects on All Travellers**



Route (approximate chainage for guidance)	Baseline Sensitivity	Description of Impacts to Journey Length and/or Severance	Description of Impacts to Amenity	Potential Impact		
				Overall Magnitude of Change to Journey Length and/or severance	Overall magnitude of Change to Amenity	Overall Significance of Effect
IN08.15 (ch3450 to ch3580)	High	<b>Construction:</b> Access along the path would be severed and rerouted during the construction of the proposed Scheme.	<b>Construction:</b> An adverse effect on amenity anticipated with the construction of the new road alignment which would sever the footpath.	Medium adverse (temporary)		Moderate adverse (temporary)
		<b>Operation:</b> Core path IN08.15 would be permanently stopped up by approximately 100m with no access provided across the proposed Scheme. The path would be re-routed to the south of the proposed Scheme to adjoin core path IN08.16, a reduction in trip length of 180m. In order to cross the proposed Scheme and reach core path IN08.21, NMUs would have to utilise IN08.05 along the Underpass (PS24: Milton of Culloden Underpass) at ch2795, a diversion of approximately 2.3km to the west.	<b>Operation:</b> An adverse effect on amenity is anticipated with the proximity of the proposed Scheme where the path was previously in a more agricultural setting.	High adverse (permanent)	Medium adverse (permanent)	Substantial adverse (permanent)
IN08.16 (ch3850)	High	<b>Construction:</b> Access along the path would be severed and rerouted during the construction of the proposed Scheme.	<b>Construction:</b> An adverse effect on amenity anticipated with the construction of the new road alignment which would sever the footpath.	Medium adverse (temporary)		Moderate adverse (temporary)
		<b>Operation:</b> The core path may be severed by 55m, with no access provided across the proposed Scheme. The path would be re-routed to the south of the proposed Scheme to adjoin core path IN08.16, a reduction in trip length of 180m. In order to cross the proposed Scheme and reach core path IN08.21, NMUs would have to utilise core path IN08.05 along the Underpass (PS24: Milton of Culloden Underpass) at ch2795, a diversion of approximately 2.6km to the west.	<b>Operation:</b> An adverse effect on amenity is anticipated with the proximity of the proposed Scheme where the path was previously in a more agricultural setting.	High adverse (permanent)	Medium adverse (permanent)	Substantial adverse (permanent)

**A96 Dualling Inverness to Nairn (including Nairn Bypass)**  
**DMRB Stage 3: Environmental Statement**  
**Chapter 16: People and Communities: Effects on All Travellers**



Route (approximate chainage for guidance)	Baseline Sensitivity	Description of Impacts to Journey Length and/or Severance	Description of Impacts to Amenity	Potential Impact		
				Overall Magnitude of Change to Journey Length and/or severance	Overall magnitude of Change to Amenity	Overall Significance of Effect
IN08.30 (ch950 to ch1100)	High	<b>Construction:</b> There would be temporary disruption as the core path is linked to the diverted L1. However, it is anticipated that access would be maintained in some capacity during construction, either through temporary diversions or along the existing route wherever possible.	<b>Construction:</b> Very little noticeable changes in terms of amenity during the construction, however exposure to noise may be increased.	Low adverse (temporary)		Moderate adverse (temporary)
		<b>Operation:</b> No significant impact is predicted once operational, with no noticeable changes to the path in terms of length and amenity.		No impact (permanent)		Neutral (permanent)
IN08.32 (ch5350 to ch5400)	High	<b>Construction:</b> Journey length would be impacted due to construction activities. However, it is anticipated that access would be maintained in some capacity, either through temporary diversions or along the existing route wherever possible.	<b>Construction:</b> There would be temporary disruption in amenity, with an adverse effect anticipated, as a result of the path being severed.	Low adverse (temporary)	Medium adverse (temporary)	Moderate adverse (temporary)
		<b>Operation:</b> The northern 230m of the core path would be permanently diverted through Balloch Junction, with a 1km diversion to the west anticipated. On the basis that very few NMUs are expected to use the core path at its northern extent to access the trunk road, the effect is not anticipated to be significant. The path would tie in with the shared use path along the southbound of the dual carriageway alignment, providing a safe crossing of the proposed Scheme.	<b>Operation:</b> There would be an adverse effect on amenity along the path, with clear views of the Balloch Junction in a previously more agricultural setting.	Low adverse (permanent)	Medium adverse (permanent)	Moderate adverse (permanent)
NA04.02 (ch22680 to ch22940)	High	<b>Construction/operation:</b> There would be no change in journey length.	<b>Construction/operation:</b> Users of the footpath may experience glimpsed views of the new PS14 (River Nairn Underbridge) at ch22400 and PS15 (C1175 Underbridge) at ch22850, with an adverse effect on amenity anticipated.	Low adverse (temporary during construction, permanent once operational)	Medium adverse (temporary during construction, permanent once operational)	Moderate adverse (temporary during construction, permanent once operational)

**A96 Dualling Inverness to Nairn (including Nairn Bypass)**  
**DMRB Stage 3: Environmental Statement**  
**Chapter 16: People and Communities: Effects on All Travellers**



Route (approximate chainage for guidance)	Baseline Sensitivity	Description of Impacts to Journey Length and/or Severance	Description of Impacts to Amenity	Potential Impact		
				Overall Magnitude of Change to Journey Length and/or severance	Overall magnitude of Change to Amenity	Overall Significance of Effect
NA04.03 (ch22470) and NA04.04 (ch22100)	High	<b>Construction:</b> Journey length would be impacted due to construction activities. However, it is anticipated that access could be maintained in some capacity, either through temporary diversions or along the existing route wherever possible.	<b>Construction:</b> Users of the footpath would experience clear views of the PS14 (River Nairn Underbridge) at ch22400, as well as glimpsed views of the PS15 (C1175 Underbridge) at ch22850, with an adverse effect anticipated. Construction activities would also result in an increase in noise locally.	Low adverse (temporary)	Medium adverse (temporary)	Moderate/Substantial adverse (temporary)
		<b>Operation:</b> Users of the footpath would be routed under the PS14 (River Nairn Underbridge) at ch22400. There would be an increase in journey length of 120m to the south of the proposed Scheme. The proposed Scheme would provide a link from the core path to the shared use path.	<b>Operation:</b> The path would suffer an adverse effect on amenity, with clear views of the proposed Scheme here being routed under the new PS14 (River Nairn Underbridge) at ch22400. The introduction of the proposed Scheme would also result in an increase in noise locally as a result of new traffic.	Low adverse (permanent)	High adverse (permanent)	Moderate/Substantial adverse (permanent)
NA04.13 (ch19350 to ch20670) (Delnies Wood)	Medium	<b>Construction:</b> No significant impact is predicted during construction, with no noticeable changes to the path in terms of length and amenity.		No impact (temporary)		Neutral (temporary)
		<b>Operation:</b> There would be no change in journey length along the path. Traffic volumes would be significantly reduced along the existing A96 road to low severance levels.	<b>Operation:</b> A beneficial effect on amenity anticipated with an improvement in safety when accessing the existing A96 with lower traffic volumes.	Medium beneficial (permanent)		Slight/Moderate beneficial (permanent)
NA04.16 (ch22650 to ch22850) and NA04.17 (ch22650)	High	<b>Construction/operation:</b> There would be no change in journey length.	<b>Construction/operation:</b> There would be a negligible impact on amenity value due to distance from the proposed Scheme and existing screening.	Negligible (temporary during construction, permanent once operational)		Slight adverse (temporary during construction, permanent once operational)

**A96 Dualling Inverness to Nairn (including Nairn Bypass)**  
**DMRB Stage 3: Environmental Statement**  
**Chapter 16: People and Communities: Effects on All Travellers**



Route (approximate chainage for guidance)	Baseline Sensitivity	Description of Impacts to Journey Length and/or Severance	Description of Impacts to Amenity	Potential Impact		
				Overall Magnitude of Change to Journey Length and/or severance	Overall magnitude of Change to Amenity	Overall Significance of Effect
NA04.20 (ch21340 to ch21850)	Medium	<b>Construction:</b> There would be no change in journey length.	<b>Construction:</b> There would be an adverse effect on amenity with views of the Nairn Bypass section of the proposed Scheme during construction activities.	No impact (permanent)	Low adverse (temporary)	Slight adverse (temporary)
		<b>Operation:</b> There would be no direct change to length of journeys along the core path. The core path would tie in with the shared use path at its eastern extent.	<b>Operation:</b> The path would suffer an adverse effect on amenity with clear views experienced of the Nairn Bypass section of the proposed Scheme.	No impact (permanent)	Low adverse (permanent)	Slight adverse (permanent)
<b>Aspirational Path</b>						
A8 (ch14490 to ch15300) (Loch Flemington)	Medium	<b>Construction/operation:</b> There would be no change in journey length.	<b>Construction/operation:</b> There would be an adverse effect on the amenity value of the path with views expected of Brackley Junction during construction and operation.	Low adverse (temporary)		Slight adverse (temporary)
A9 (ch26740 to ch27410)	Medium	<b>Construction:</b> No significant impact is predicted during construction, with no noticeable changes to the path in terms of length and amenity.		No impact (permanent)		Neutral (temporary)
		<b>Operation:</b> There would be no change in journey length along the path. Traffic volumes would be significantly reduced along the existing A96 road to low severance levels.	<b>Operation:</b> A beneficial effect on amenity anticipated with an improvement in safety when accessing the existing A96 with lower traffic volumes.	Low beneficial (permanent)		Slight beneficial (permanent)
A10 (ch22400)	Medium	<b>Construction:</b> Journey length would be impacted due to construction activities. However, it is anticipated that access would be maintained in some capacity, either through temporary diversions or along the existing route wherever possible.	<b>Construction:</b> Users of the footpath would experience clear views of the PS14 (River Nairn Overbridge) at ch22400, as well as glimpsed views of the PS15 (C1175 Underbridge) at ch22850, with an adverse effect anticipated. Construction activities would also result in an increase in noise locally.	Low adverse (temporary)	Medium adverse (temporary)	Moderate adverse (temporary)

**A96 Dualling Inverness to Nairn (including Nairn Bypass)**  
**DMRB Stage 3: Environmental Statement**  
**Chapter 16: People and Communities: Effects on All Travellers**



Route (approximate chainage for guidance)	Baseline Sensitivity	Description of Impacts to Journey Length and/or Severance	Description of Impacts to Amenity	Potential Impact		
				Overall Magnitude of Change to Journey Length and/or severance	Overall magnitude of Change to Amenity	Overall Significance of Effect
		<b>Operation:</b> Users of the footpath would be routed under the PS14 (River Nairn Underbridge) at ch22400, with no direct change to the path alignment. There would be no change in journey length.	<b>Operation:</b> The path would suffer an adverse effect on amenity, with clear views of the proposed Scheme here being routed under the new PS14 (River Nairn Underbridge) at ch22400. The introduction of the proposed Scheme would also result in an increase in noise locally as a result of new traffic.	No impact (permanent)	Medium adverse (permanent)	Moderate adverse (permanent)
<b>Local Path</b>						
L1 (ch800 to ch2750)	Medium	<b>Construction:</b> Journey length would be impacted due to construction activities. However, it is anticipated that access would be maintained in some capacity, either through temporary diversions or along the existing route wherever possible.	<b>Construction:</b> An adverse effect on amenity is anticipated during construction activities which would cross the footpath.	Low adverse (temporary)		Slight adverse (temporary)
		<b>Operation:</b> The path would be permanently re-routed to the north of the proposed Scheme, with no significant change to the existing route. To the south of the proposed scheme, the path would follow the shared use path. The shared use path would remove the existing need to cross the trunk road via an uncontrolled, at-grade crossing.	<b>Operation:</b> There would be an adverse effect on the amenity value of the path with the construction of the new PS01 (Smithton Junction Underbridge) at ch1755.	Medium beneficial (permanent)	Low adverse (permanent)	Slight beneficial (permanent)
L3 (ch2040 to ch3240)	Medium	<b>Construction:</b> Journey length would be impacted due to construction activities. However, it is anticipated that access would be maintained in some capacity, either through temporary diversions or along the existing route wherever possible.	<b>Construction:</b> There would be an adverse effect on amenity as it would be directly impacted by the widening of Caulfield Road.	Low adverse (temporary)		Slight adverse (temporary)
		<b>Operation:</b> No impact is predicted once operational with no noticeable changes to the path in terms of journey length and amenity.		No impact (permanent)		Neutral (permanent)

**A96 Dualling Inverness to Nairn (including Nairn Bypass)**  
**DMRB Stage 3: Environmental Statement**  
**Chapter 16: People and Communities: Effects on All Travellers**



Route (approximate chainage for guidance)	Baseline Sensitivity	Description of Impacts to Journey Length and/or Severance	Description of Impacts to Amenity	Potential Impact		
				Overall Magnitude of Change to Journey Length and/or severance	Overall magnitude of Change to Amenity	Overall Significance of Effect
L5 (ch3350)	Medium	<b>Construction:</b> No significant impact is predicted during construction, with no noticeable changes to the path in terms of length and amenity.		No impact (temporary)		Neutral (temporary)
		<b>Operation:</b> There would be no change in journey length along the path. Traffic volumes would be significantly reduced along the existing A96 road to low severance levels.	<b>Operation:</b> A beneficial effect on amenity anticipated with an improvement in safety when accessing the existing A96 with lower traffic volumes.	Low beneficial (permanent)		Slight beneficial (permanent)
Network of paths through Russell's Wood (ch24700 to ch25400)	Medium	<b>Construction:</b> Access is likely to be temporarily severed for certain paths during construction, however a number of paths would remain unaffected.	<b>Construction:</b> There would be an adverse effect on amenity for those paths closest to the proposed Scheme as a result of construction activities which would include the removal of woodland in the area around the footpath.	Medium adverse (temporary)		Moderate adverse (temporary)
		<b>Operation:</b> A number of paths through the woods would be permanently severed.	<b>Operation:</b> An adverse effect on amenity is anticipated with the presence of infrastructure in a previously rural setting and the loss of woodland.	Medium adverse (permanent)		Moderate adverse (permanent)
<b>Local Road Network</b>						
Barn Church Road (C1032)/L2/A7 (ch1750 and ch5120)	Medium	<b>Construction:</b> No significant change in journey length is anticipated.	<b>Construction:</b> There would be temporary diversions and disruption, including an adverse effect on amenity, with the construction of new Smithton Junction to the west and Balloch Junction to the east, which cross the existing alignment.	No impact (temporary)	Low adverse (temporary)	Slight adverse (temporary)

**A96 Dualling Inverness to Nairn (including Nairn Bypass)**  
**DMRB Stage 3: Environmental Statement**  
**Chapter 16: People and Communities: Effects on All Travellers**



Route (approximate chainage for guidance)	Baseline Sensitivity	Description of Impacts to Journey Length and/or Severance	Description of Impacts to Amenity	Potential Impact		
				Overall Magnitude of Change to Journey Length and/or severance	Overall magnitude of Change to Amenity	Overall Significance of Effect
		<b>Operation:</b> The introduction of a shared use path would tie in with L2 at the Smithton Junction and A7 at the Balloch Junction, creating a safe crossing of the proposed Scheme. A7 would be diverted by 100m to the north-west, with no change in length to L2. Traffic flows along the road would be reduced from high to low where the road adjoins Smithton Junction.	<b>Operation:</b> An adverse effect on amenity is anticipated with the introduction of the Smithton and Balloch Junctions, which cross the existing alignment.	Medium beneficial (permanent)	Low adverse (permanent)	Slight beneficial (permanent)
Milton Road (U1136)/IN08.05 (ch2750)	High	<b>Construction:</b> Journey length would be impacted due to construction activities. However, it is anticipated that access would be maintained in some capacity, either through temporary diversions or along the existing route wherever possible.	<b>Construction:</b> There would be temporary diversions and disruption, including an adverse effect on amenity, with realignment of existing A96, including visual, noise and safety impacts as the construction works cross the path.	Low adverse (temporary)	Low adverse (temporary)	Moderate adverse (temporary)
		<b>Operation:</b> The road would be permanently stopped up by approximately 60m from where it adjoins the A96, with the new PS24 (Milton of Culloden Underpass) at ch2795 constructed. The new underpass would provide a safe crossing of the trunk road.	<b>Operation:</b> A slight adverse effect on amenity is anticipated largely related to visual impacts, however improvements to safety would result from the new underpass.	Medium beneficial (permanent)	Low beneficial (permanent)	Moderate/Substantial beneficial (permanent)
B9090 Loch Flemington – Clephanton – Cawder – Nairn Road (ch22110)	Medium	<b>Construction:</b> A slight increase in journey length anticipated as a result of construction activities.	<b>Construction:</b> Temporary diversions and disruption are anticipated, including an adverse effect on amenity, with the construction of PS13 (B9090 Overbridge) at ch22100.	Low adverse (temporary)	Medium adverse (temporary)	Moderate adverse (temporary)

**A96 Dualling Inverness to Nairn (including Nairn Bypass)**  
**DMRB Stage 3: Environmental Statement**  
**Chapter 16: People and Communities: Effects on All Travellers**



Route (approximate chainage for guidance)	Baseline Sensitivity	Description of Impacts to Journey Length and/or Severance	Description of Impacts to Amenity	Potential Impact		
				Overall Magnitude of Change to Journey Length and/or severance	Overall magnitude of Change to Amenity	Overall Significance of Effect
		<b>Operation:</b> No significant change in journey length is anticipated, with a small length of shared use path provided along the road to the north of the dual carriageway alignment. Traffic flows for northbound travellers would be reduced from moderate to low, therefore improving the attractiveness of the road for NMUs.	<b>Operation:</b> A small loss to amenity is anticipated with the new road alignment through the local area.	Medium beneficial (permanent)	Low adverse (permanent)	Slight beneficial (permanent)
Local road linking B9091 Croy - Clephanton - Kildrummie - Nairn Road	Medium	<b>Construction:</b> Journey length would be impacted due to construction activities. However, it is anticipated that access would be maintained in some capacity, either through temporary diversions or along the existing route wherever possible.	<b>Construction:</b> There would be an adverse effect on amenity as improvements are made to the road during construction activities.	Low adverse (temporary)	Low adverse (temporary)	Slight adverse (temporary)
		<b>Operation:</b> There would be no change in journey length.	<b>Operation:</b> The new shared use path would be provided removing the need for NMUs to walk along the roadside, with a beneficial effect on the amenity anticipated.	No impact (permanent)	Medium beneficial (permanent)	Moderate beneficial (permanent)
Househill – Raitloan – Howford Road (C1175)/NCN1 (ch22880)	High	<b>Construction:</b> Journey length would be impacted due to construction activities. However, it is anticipated that access would be maintained in some capacity, either through temporary diversions or along the existing route wherever possible.	<b>Construction:</b> Users of the footpath would experience clear views of the PS15 (C1175 Underbridge) at ch22850, with an adverse effect anticipated. Construction activities would also result in an increase in noise locally.	Low adverse (temporary)	Medium adverse (temporary)	Moderate/Substantial adverse (temporary)
		<b>Operation:</b> Users of the footpath would be routed over the PS15 (C1175 Underbridge) at ch22850, with no direct change to the path alignment. There would be no change in journey length.	<b>Operation:</b> The path would suffer an adverse effect on amenity, with clear views of the proposed Scheme here being routed over the new PS15 (C1175 Underbridge) at ch22850. The introduction of the proposed Scheme would also result in an increase in noise locally as a result of new traffic.	No impact (permanent)	Medium adverse (permanent)	Moderate/Substantial adverse (permanent)

**A96 Dualling Inverness to Nairn (including Nairn Bypass)**  
**DMRB Stage 3: Environmental Statement**  
**Chapter 16: People and Communities: Effects on All Travellers**



Route (approximate chainage for guidance)	Baseline Sensitivity	Description of Impacts to Journey Length and/or Severance	Description of Impacts to Amenity	Potential Impact		
				Overall Magnitude of Change to Journey Length and/or severance	Overall magnitude of Change to Amenity	Overall Significance of Effect
A939 Tomintoul - Granttown on Spey - Nairn Road (ch23820)	Medium	<b>Construction:</b> Journey length would be impacted due to construction activities. However, it is anticipated that access would be maintained in some capacity, either through temporary diversions or along the existing route wherever possible.	<b>Construction:</b> There would be an adverse effect on visual amenity, during construction of PS16 (A939 Overbridge) at ch23850. Construction activities would also result in an increase in noise locally.	Low adverse (temporary)	Low adverse (temporary)	Slight adverse (temporary)
		<b>Operation:</b> The new alignment of PS16 (A939 Overbridge) at ch23850 would provide a more direct route for NMUs.	<b>Operation:</b> An adverse effect on visual amenity is anticipated. The introduction of the proposed Scheme would also result in an increase in noise locally as a result of new traffic.	Medium beneficial (permanent)	Low adverse (permanent)	Slight beneficial (permanent)
Blackpark - Grigorhill - Newmill Road (U3010) (ch24720)	Medium	<b>Construction:</b> Journey length would be impacted due to construction activities. However, it is anticipated that access would be maintained in some capacity, either through temporary diversions or along the existing route wherever possible.	<b>Construction:</b> There would be an adverse effect on visual amenity. Construction activities would also result in an increase in noise locally.	Low adverse (temporary)	Medium adverse (temporary)	Moderate adverse (temporary)
		<b>Operation:</b> The road would be stopped up to the south of Russell's Wood, with NMUs having to utilise the A939 Tomintoul - Granttown on Spey - Nairn Road or the B9111 Auchnacloch – Auldearn Road instead. The shortest route would be along the A939 Tomintoul - Granttown on Spey - Nairn Road, a diversion of approximately 3.35km to the west. There is currently no NMU provision along the route. Traffic flows along the road would however be reduced from high to moderate.	<b>Operation:</b> The presence of the proposed Scheme through a previously agricultural landscape would result in an adverse effect on visual amenity. The introduction of the proposed Scheme would also result in an increase in noise locally as a result of new traffic.	High adverse (permanent)		Moderate/Substantial adverse (permanent)

**A96 Dualling Inverness to Nairn (including Nairn Bypass)**  
**DMRB Stage 3: Environmental Statement**  
**Chapter 16: People and Communities: Effects on All Travellers**



Route (approximate chainage for guidance)	Baseline Sensitivity	Description of Impacts to Journey Length and/or Severance	Description of Impacts to Amenity	Potential Impact		
				Overall Magnitude of Change to Journey Length and/or severance	Overall magnitude of Change to Amenity	Overall Significance of Effect
B9111 Auchnacloch – Auldearn Road/NA04.07 (ch25720)	High	<b>Construction:</b> A slight increase in journey length is anticipated.	<b>Construction:</b> A slight loss of visual amenity would be anticipated with construction of the PS22 (B9111 Underbridge) at ch25725. In addition there would be an increase in exposure to noise, and potential for safety impact as construction works would cross the route.	Low adverse (temporary)	Medium adverse (temporary)	Moderate/substantial adverse (temporary)
		<b>Operation:</b> There would be no significant change in journey length for NMUs, as core path NA04.07 would be re-routed along the new shared use path through the PS22 (B9111 Underbridge) at ch25725. Core path NA04.07 would be improved and widened to 2.5m, instead of the existing 1.5 to 2m.	<b>Operation:</b> An adverse effect on visual and noise amenity is likely as a result of the proposed Scheme being in close proximity.	No impact (permanent)	Medium adverse (permanent)	Moderate/substantial adverse (permanent)
U2997 Waterloo – Eastertown – Inshoch Road (ch26650)	Medium	<b>Construction:</b> Journey length would be impacted due to construction activities. However, it is anticipated that access would be maintained in some capacity, either through temporary diversions or along the existing route wherever possible.	<b>Construction:</b> An adverse effect on amenity, particularly noise and visual, is anticipated with the construction of the proposed Scheme and Sustainable Drainage Systems e.g Basin and Pond (hereafter referred to as SUDS), north of Auldearn which are in close proximity to the road.	Low adverse (temporary)	Medium adverse (temporary)	Moderate adverse (temporary)
		<b>Operation:</b> The road would be stopped up near the Mill of Boath, with NMUs re-routed north through the new PS28 (Auldearn NMU Underpass) at ch26700, with no significant change in journey length.	<b>Operation:</b> NMUs would experience a significant loss in visual and noise amenity, due to the close proximity of the proposed Scheme through a previously agricultural landscape.	No impact (permanent)	Medium adverse (permanent)	Moderate adverse (permanent)
Allanfearn Farm access track/IN08.21 (ch3600)	High	<b>Construction:</b> There would be no change in journey length.	<b>Construction:</b> An adverse effect on noise and visual amenity is anticipated due to the proximity of the construction works, whilst access to the track from the south would be disrupted.	Low adverse (temporary)		Moderate adverse (temporary)

**A96 Dualling Inverness to Nairn (including Nairn Bypass)**  
**DMRB Stage 3: Environmental Statement**  
**Chapter 16: People and Communities: Effects on All Travellers**



Route (approximate chainage for guidance)	Baseline Sensitivity	Description of Impacts to Journey Length and/or Severance	Description of Impacts to Amenity	Potential Impact		
				Overall Magnitude of Change to Journey Length and/or severance	Overall magnitude of Change to Amenity	Overall Significance of Effect
		<b>Operation:</b> There would be no direct impact to journey lengths. Access from the path to core paths IN08.15 and IN08.16 would be severed. The reduced traffic flows along the existing A96 would contribute to a low severance level, with a safer crossing of the road anticipated.	<b>Operation:</b> An adverse effect on noise and visual amenity is anticipated with the presence of the dual carriageway alignment immediately south.	Medium adverse (permanent)		Moderate/substantial adverse (permanent)
<b>General</b>						
IN08.04 (ch2750), IN08.23 (ch180 to ch2300) and Local cycle track between the University of the Highlands and Islands campus and the Inverness Retail and Business Park (ch640 to ch800)	High	<b>Construction/operation:</b> No significant impact is predicted during construction or operation, with no noticeable changes to the paths in terms of length and amenity.		No impact (temporary during construction, permanent once operational)		Neutral (temporary during construction, permanent once operational)
IN08.24 (ch180 to ch400), NA04.15 (ch17630 to ch18350), A2 (ch180 to ch600), A5 (ch1700), A11/B9101 Auldearn - Cawdor Road (ch5000) L4 (ch2270)	Medium					

- 16.8.6 The new shared use path network will create a new long distance route throughout the majority of the study area. The path will provide a safer route between Inverness and Nairn, and the surrounding residential areas. The facility would ensure NMUs would not need to use the live dual carriageway alignment to move around the local area. It is hoped the facility will encourage active travel for both local journeys between communities, as well as longer distance journeys between Inverness and Nairn, and wider afield.
- 16.8.7 The new shared use path would provide a means of active travel along the majority of the proposed Scheme, improving connections between communities whilst providing a significant enhancement to the NMU provision along the existing A96, which is limited. The path would provide direct links to the surrounding THC path network as well as a safer means of crossing the new road at various locations. Although the shared use path would end at the PS15 (C1175 Underbridge) at ch22850, it would link in with NCN1 which provides a direct link into Nairn and to the existing A96 heading into Auldearn, where core path NA04.07 is routed and provides a route into Auldearn. There is the potential for the shared use path to be adopted as part of the long distance route NCN1. The shared use path would also tie into the urban path network within Nairn via the Nairn West junction.
- 16.8.8 The opportunity to create a connected cycle route through the use of both new infrastructure and the existing A96 is considered to be essential in order to affect the continuity of journeys both within and outside the proposed Scheme. In addition, it is hoped that by removing a significant volume of traffic from the existing A96 through Nairn an increase in active travel in the town can be realised.
- 16.8.9 An overall Substantial beneficial effect is anticipated as a result of the shared use path.
- 16.8.10 The proposed Scheme would have both beneficial and adverse effects upon equestrian crossing locations identified. The effects the proposed Scheme would have on the ability of equestrians to cross the trunk road are detailed below in Table 16.9 and have been completed in line with parameters set out in Table 16.1 to 16.3. The table refers to chainages for a locational reference so it can be cross referenced with Figure 16.3.

**Table 16.9: Effects of the Proposed Scheme on Equestrian Crossing Locations**

Equestrian Crossing Location (approximate chainage for guidance)	Baseline Sensitivity	Description of Impacts	Potential Impact	
			Magnitude of Change	Significance
Intersection of existing Ashton Farm access and A96 (ch1140)	Medium	<b>Construction:</b> Journey length would be impacted due to construction activities. However, it is anticipated that access would be maintained in some capacity, either through temporary diversions or along the existing route wherever possible. Equestrian users would suffer an adverse effect on amenity value at the crossing location due to the proximity of construction activities.	Medium adverse (temporary)	Moderate adverse (temporary)
		<b>Operation:</b> The equestrian crossing would be lost, with new grade separated crossings provided through the Smithton Junction, a diversion of 1.4km to the east. The new shared use path would prevent the need for equestrians to cross the trunk road via uncontrolled at-grade crossings, as well as providing a longer walking route for horse riders. An adverse effect on amenity is anticipated with a reduction in agricultural setting for the equestrian user, however overall the impact is considered beneficial.	Low beneficial (permanent)	Slight beneficial (permanent)

Equestrian Crossing Location (approximate chainage for guidance)	Baseline Sensitivity	Description of Impacts	Potential Impact	
			Magnitude of Change	Significance
Intersection of Milton Road (U1136) and A96 (ch2760)	Medium	<p><b>Construction:</b> Journey length would be impacted due to construction activities. However, it is anticipated that access would be maintained in some capacity, either through temporary diversions or along the existing route wherever possible. Equestrian users would suffer an adverse effect on amenity value at the crossing location, including visual, noise and safety impacts as the construction works cross the path.</p>	Low adverse (temporary)	Slight adverse (temporary)
		<p><b>Operation:</b> The new PS24 (Milton of Culloden Underpass) at ch2795 would be a designated NMU underpass along Milton Road (U1136), creating a traffic free crossing of the proposed Scheme. Equestrian users would suffer an adverse effect on amenity value at the crossing location with a reduction in agricultural setting. However, taking into account journey length and amenity, overall the impact is considered beneficial.</p>	Low beneficial (permanent)	Slight beneficial (permanent)
Junction between Allanfean Farm access track and the A96 (ch3350)	Medium	<p><b>Construction:</b> No significant change in journey length or amenity value is anticipated.</p>	Negligible (temporary)	Negligible (temporary)
		<p><b>Operation:</b> Due to the existing A96 being de-trunked, traffic levels would reduce resulting in a safer environment for equestrians when crossing the existing A96. A slight adverse effect on amenity is anticipated with a reduction in agricultural setting, however overall the impact is considered beneficial.</p>	Low beneficial (permanent)	Slight beneficial (permanent)
Intersection of Gollanfield Road and A96 (ch15320)	Medium	<p><b>Construction:</b> Journey length would be impacted due to construction activities. However, it is anticipated that access would be maintained in some capacity, either through temporary diversions or along the existing route wherever possible. Equestrian users would suffer an adverse effect on amenity value at the crossing location.</p>	Medium adverse (temporary)	Moderate adverse (temporary)
		<p><b>Operation:</b> A new grade separated crossing would be provided through the PS21 (Gollanfield Road Overbridge) at ch15300 would provide a safe crossing of the proposed Scheme. Equestrian users would suffer an adverse effect on amenity value at the crossing location with a reduction in agricultural setting, however overall the impact is considered beneficial.</p>	Low beneficial (permanent)	Slight beneficial (permanent)
Junction between the access track to	Medium	<p><b>Construction:</b> No significant change in journey length or amenity value is anticipated.</p>	Negligible (temporary)	Negligible (temporary)

Equestrian Crossing Location (approximate chainage for guidance)	Baseline Sensitivity	Description of Impacts	Potential Impact	
			Magnitude of Change	Significance
Ruthwen Cottage and A96 (ch20550), Junction between B911 and A96, to the west of Auldearn (ch25760) and Intersection of A96 and Penick Road (U3164) (ch27200)		<p><b>Operation:</b> There would be no direct change to journey length, however the de-trunked nature of the A96 here would result in less traffic along this section of the road, creating a safer crossing. There would be a Negligible effect on amenity value</p> <p>However, taking into account journey length and amenity, overall the impact is considered beneficial.</p>	Low beneficial (permanent)	Slight beneficial (permanent)

- 16.8.11 Overall, a Slight beneficial effect is predicted for equestrians within the study area as new grade separated crossings of the trunk road would be provided through junctions, providing safe, traffic-free crossings of the trunk road, opportunities which they currently do not experience.

#### **Access to Outdoor Areas**

- 16.8.12 A full assessment of access to outdoor areas can be found in Appendix A16.5 (Assessment of Access to Outdoor Areas).
- 16.8.13 The majority of impacts on access to outdoor areas during the construction and operational phases would be Slight (adverse or beneficial) or Negligible.
- 16.8.14 A Moderate beneficial effect has been deemed on access to Delnies Community Woodland, Delnies Wood and Kildrummie Kames SSSI once operational, as a result of improvements in amenity value.

#### **Vehicle Travellers**

##### Driver Stress

- 16.8.15 The construction of the proposed Scheme could contribute to driver stress where journey times are increased as a result of temporary diversions put in place and/or slower journey times with traffic management in place.
- 16.8.16 Speed limits along the proposed Scheme would be 50mph between the Inverness Retail and Business Park roundabout and Milton of Culloden, before becoming national through to the end of the proposed Scheme. All local roads and junction approaches would be national speed limit, bar Barn Church Road (C1032), which would be 40mph.
- 16.8.17 The proposed Scheme would be constructed to higher standards than the existing A96. Junctions on the new dual carriageway would be grade separated and there would not be direct access onto the trunk road from farm access tracks or minor roads, resulting in a reduced fear of accidents.
- 16.8.18 The enhanced capacity of the proposed Scheme would reduce the number of vehicles using the existing A96, as well as reduce the interaction with slow moving agricultural vehicles and HGVs, significantly reducing driver stress along this road. Driver stress levels along the majority of the existing A96 would be reduced to low or moderate.
- 16.8.19 Table 16.10 below compares the predicted driver stress within the study area, with and without the proposed Scheme.

**Table 16.10: Assessment of Driver Stress Based on Predicted Traffic Flows**

Road Sections	Baseline Driver Stress (without proposed Scheme, 2036)	Predicted Driver Stress (with proposed Scheme, 2036)	Effect
Existing A96 eastbound carriageway	Predominately high around the Inverness Retail and Business Park, moderate through Nairn town centre, low and moderate from Balmakeith Business Park to Auldearn and on leaving Auldearn.	Predominantly low with moderate sections through Nairn town centre.  Significant reductions in driver stress levels would occur from the Raigmore Interchange to Newton of Petty, where levels would change from high to low.	Substantial beneficial
Existing A96 westbound carriageway	Predominantly high from Raigmore Interchange to Newton of Petty and moderate through Nairn town centre, low from Newton of Petty to Nairn town centre, moderate from Balmakeith Business Park to the B9111 Auchnacloch – Auldearn Road and low to the east.	The full length of the proposed Scheme would experience low driver stress levels.	Substantial beneficial

Public Transport

- 16.8.20 The following assessment on public transport takes into account ‘embedded mitigation’, which comprises all proposals for the re-location of affected bus stops and/or creation of new stops. The assessment therefore identifies potential impacts that remain despite the embedded mitigation, with measures to avoid or reduce these potential impacts identified in Section 16.10 (Mitigation), where appropriate.
- 16.8.21 As identified above in Table 16.7, there are a number of bus services that operate throughout the study area. Table 16.11 below describes the effects the proposed Scheme may have on identified bus facilities.

**Table 16.11: Construction and Operational Phase Effects on Bus Travellers**

Bus Stop	Construction Phase Effects	Operational Phase Effects	Summary of Effect
Inverness Retail Park, Tesco	There would be disruption in access to the Inverness Retail Park bus stop for residents from Smithton and Culloden due to the construction of the Smithton Junction, which would cause disruption to core path IN08.10 and L3 along Barn Church Road (C1032).	There would be no change in access for residents of Culloden as L3 would adjoin the shared use path at Smithton Junction, whilst core path IN08.10 would follow the new Ashton Farm Access Road with no significant change in journey length. Residents of Cradlehall would continue to use the local cycle track across the disused railway line.	Adverse during construction and neutral during operation. (Not significant)
Culloden, Milton of Culloden	Access to the bus stop for residents of Culloden would be disrupted as the new road carriageway would sever core path IN08.05, the main access route to the stop. There would be no change in access to residents of Cairnlaw, to the north of the carriageway.	Residents of Culloden would access the stop via the PS24 (Milton of Culloden Underpass) at ch2795, which core path IN08.05 would be routed along. There would be no change in access to residents of Cairnlaw, to the north of the carriageway.	Adverse during construction and neutral during operation. (Not significant)

Bus Stop	Construction Phase Effects	Operational Phase Effects	Summary of Effect
Culloden, Allanfearn Farm	There would be disruption in access for residents from Culloden and Balloch due to the construction of new carriageway. There would be no change in access to properties north of the dual carriageway alignment.	Residents of Culloden and Balloch would be required to make a detour through the PS24 (Milton of Culloden Underpass) at ch2795, as core paths IN08.15 and IN08.16 would be re-routed to the south of the carriageway, with no means provided to cross the carriageway. However it is likely that residents would instead utilise the Culloden, Milton of Culloden stop. There would be no change in access to properties north of the dual carriageway alignment.	Adverse during construction and operation. (Not significant)
Lower Cullernie Road End	There would be disruption in access for residents of Balloch due to the construction of PS02 (Balloch Junction Underbridge) at ch5000.	Access to the stop from the south would be provided via the shared use path through the new Balloch Junction.	Adverse during construction and neutral during operation. (Not significant)
Tornagrain, Lay-by	There would be slight disruption for residents who utilise the Dalcross Station Road (C1020) to access the Tornagrain lay-by bus stops, as a result of the construction of PS04 (C1020 Dalcross Station Road Overbridge) at ch9595.	No change in access from Dalcross Station Road (C1020) once operational as L8 would be re-routed along the new PS04 (C1020 Dalcross Station Road Overbridge) at ch9595.	Adverse to neutral during construction and neutral during operation. (Not significant)
Gollanfield, Ardersier Road End	Access would be disrupted during construction of the new PS06 (Brackley Junction Overbridge) at ch14100.	The bus stops would be moved onto the dual carriageway alignment west approach at ch13730. The stops would be accessible via the new shared use NMU path through Brackley Junction.	Adverse during construction and neutral during operation. (Not significant)
Gollanfield, Lay-by	Access to the stops would be disrupted as a result of construction of the new PS21 (Gollanfield Road Overbridge) at ch15300.	The bus stops would be permanently lost, with new stops provided in eastbound and westbound lay-bys (at ch15500). The stops would be accessed via the new shared use path along the PS21 (Gollanfield Road Overbridge) at ch15300. This would be beneficial as it would remove the need for individuals to cross the A96 via an uncontrolled at-grade crossing, therefore providing safer access.	Adverse during construction and beneficial during operation. (Not significant)
Nairn, Delnies Woods Caravan Site	Slight disruption in access is possible as a result of improvements works to the Delnies - Kildrummie - Howford Road (C1163).	There would be no change in access to bus stops.	Neutral during both construction and operation. (Not significant)
Auldearn, Waterloo Road	Slight disruption in access is anticipated for NMUs travelling from Auldearn, with the construction of the PS22 (B9111 Underbridge) at ch25725.	There would be no change in access to bus stops.	Neutral during both construction and operation. (Not significant)
Auldearn, Hardmuir Toll	Slight disruption in access is possible for residents to the north of the carriageway.	There would be no change in access to bus stops.	Neutral during both construction and operation. (Not significant)

16.8.22 In addition the proposed bus stops outlined in Table 16.11, a new bus stop would be provided along the slip road connecting the PS10 (Nairn West Junction Overbridge) at ch17950 with the existing A96.

- 16.8.23 Whilst it is outside of the study area, a temporary Slight adverse effect is anticipated on access to Inverness Railway Station, as a result of construction of PS01 (Smithton Junction Underbridge) at ch1750. There would be an improvement in access to Inverness Railway Station for NMU from the proposed Scheme once operational, with the provision of a shared use path providing a safer access route along the proposed Scheme. However, given the distance of the station from the proposed Scheme, this effect is anticipated to be a Slight beneficial one.
- 16.8.24 A temporary Slight adverse effect is anticipated on access to Nairn Railway Station along the B9090 Loch Flemington – Clephanton – Cawder – Nairn Road and B9091 Croy - Clephanton - Kildrummie - Nairn Road from the south, with the construction of the proposed Scheme over these two roads near Broadley. Once operational, there would be no change in access along the B9090 Loch Flemington – Clephanton – Cawder – Nairn Road, with an overall Negligible effect deemed. From the B9091 Croy - Clephanton - Kildrummie - Nairn Road, NMUs would be diverted approximately 0.85km through the new PS13 (B9090 Overbridge) at ch22100, in order to re-join the road and access Nairn Railway Station.
- 16.8.25 In addition, the construction of a shared use path, as well as the diversions of L5 and L11, would provide safe and direct links to the proposed railway station at Dalcross and/or re-opening of disused bus stops.
- 16.8.26 The proposed Seafield Railway Station would be accessible by the shared use path through Smithton Junction.

#### View from the Road

- 16.8.27 Potential impacts on 'View from the Road' (either adverse or beneficial) may result from the following:
- The loss of existing views from the road, for example due to changes to the alignment or introduction of screening elements such as roadside cuttings.
  - Opening up of new views of the surrounding landscape or particular landmarks, for example due to changes in the route alignment or removal of existing screening elements such as cuttings or roadside woodland.
  - Alterations to the sequence of views experienced by the traveller, for example due to changes to the alignment or introduction of intermittent screening elements such as acoustic barrier fencing or roadside woodland.
- 16.8.28 The potential impacts on views from the road in the absence of mitigation measures aside from those 'embedded' within the proposed Scheme proposals are essentially similar to residual impacts for the winter year of opening before mitigation planting has become established. These impacts are reported in Section 16.11 (Residual Impacts).

## **16.9 Mitigation**

- 16.9.1 Mitigation measures for the proposed Scheme in relation to this Chapter (Effects on All Travellers) are detailed below and take into account best practice, legislation, guidance and professional experience. The mitigation commitments identified in the SEAs for the STPR (Jacobs, Faber Maunsell, Grant Thompson and Tribal Consulting 2008) and A96 Dualling Programme (CH2M 2015 and 2016) have also been taken into consideration.

### **Non-Motorised Users (NMUs)**

#### Construction

- 16.9.2 Alternative routes and diversions for any NMU routes directly impaired by construction works shall be provided where possible following appointed contractor liaison with and seeking permission from THC. Any temporary diversions of footpaths would be made by the appointed contractor via an application to THC. This includes any temporary diversions required to be put in place for core

paths. Temporary signage would be provided to inform members of the public of the diversions in place.

- 16.9.3 Exact details of accessibility along certain NMU routes during the construction phase is unknown at this stage, with a determination to be made by the appointed contractor who shall implement a Traffic Management Plan for the construction period.
- 16.9.4 Construction would be undertaken in line with best practicable measures to ensure noise, air and dust impacts are reduced as far as reasonably practicable, whilst also reducing the visual impacts of works were feasible. The appointed contractor shall set out in its Construction Environmental Management Plan (CEMP) the typical best practicable measures which would include fencing off construction sites, dust suppression techniques and completion of work during agreed hours.

#### Operation

- 16.9.5 The design of the proposed Scheme and shared use path has aimed to maintain connectivity of NMU routes wherever possible in line with the A96 Dualling Inverness to Nairn (including Nairn Bypass) Non-Motorised User Objective Setting and Context Report (Jacobs 2016c). The proposed Scheme aims to ensure road design accommodated crossings with local and national paths and cycleways, with minimal disruption to their alignments. The proposed Scheme has also been designed to improve community links.
- 16.9.6 A number of NMU routes severed by the proposed Scheme would be permanently re-routed once operational to maintain connectivity for NMUs. The routes would be diverted as directly as possible, along existing local roads or along the proposed Scheme. In regard to core paths, any proposed diversions or extinguishments would have to be discussed and agreed with THC. Details of all severed routes and proposed diversions, which have also been considered as 'embedded mitigation' and are already considered within the impact assessment are described in Table 1 of Appendix A16.3 (Non-motorised User Severance Schedule) and displayed on Figure 16.2.
- 16.9.7 Once operational, landscape planting and noise mitigation incorporated into the design of the proposed Scheme may also serve to improve the amenity value experienced by NMU routes nearby. Signage would also be provided to direct NMUs, where necessary along the proposed Scheme.
- 16.9.8 No further mitigation is proposed as part of this assessment for implementation during the operational phase.

#### **Vehicle Travellers**

##### Driver Stress

###### *Construction*

- 16.9.9 The use of standards compliant traffic management during construction would help to reduce delays on the existing A96 and help to mitigate driver stress during the construction phase to some extent. Construction would be programmed to avoid lengthy delays and/or closures where possible.
- 16.9.10 A Traffic Management Plan shall be implemented by the appointed contractor throughout the construction period to ensure the safety of road users, and to minimise disruption to road users during the construction phase. Reasonable precautions would be incorporated to avoid or reduce disruption for road users with consideration given to timing of the works and specified haul roads for construction plant and traffic.
- 16.9.11 Measures would also include speed limits through construction areas, temporary cones for lane control, details on road diversions and closures, lighting requirements for work areas at night and road message and sign requirements.

- 16.9.12 The Traffic Management Plan shall follow guidance outlined in the Traffic Signs Manual (Department for Transport 2009). The appointed contractor would liaise with Transport Scotland, the relevant local authorities and the police in order to ensure disruption to road users is kept as low as possible during construction
- 16.9.13 Information shall be provided to Traffic Scotland regarding the construction proposals, allowing them to update their website and inform members of the public of on-going construction works. The website would provide up to date information on locations where construction works are occurring, areas where delays would be anticipated and locations where construction has been completed and traffic management subsequently removed.

#### *Operation*

- 16.9.14 During the operational phase of the proposed Scheme, new lay-bys would be constructed to provide suitable places of rest for drivers. Lay-bys would be constructed at the following locations:
- on the eastbound and westbound carriageways near Balnaspirach at ch20000;
  - on the eastbound and westbound carriageways to the east of PS15 (C1175 Underbridge) at ch23200;
  - on the westbound carriageway to the east of PS18 (C1172 Underbridge) at ch27800;
  - on the eastbound carriageway to the east of PS18 (C1172 Underbridge) at ch27900; and
  - on the westbound carriageway at Wester Hardmuir at ch29800.
- 16.9.15 Lay-bys would be designed to allow vehicle travellers safe access and exit from the carriageway, as well sufficient parking distance from the carriageway, ultimately contributing to a lower feeling of driver stress.
- 16.9.16 The provision of new lay-bys is considered to be embedded mitigation, with no further mitigation proposed.

#### Public Transport

- 16.9.17 The existing A96 will be retained for local access and will be available for use by existing bus services. The existing bus stops will be retained or relocated as close as possible to their existing positions. The exact details of the bus services provided following the opening of the new dual carriageway will be a matter for bus service providers and any proposed changes to services would be subject to consultation by the relevant service provider with local communities at that time.
- 16.9.18 The appointed contractors shall liaise with bus operators with routes affected by the proposed Scheme to ensure minimal disruption in access to bus stops occurs during the construction phase. Both would be considered within the Traffic Management Plan and consulted regarding the provision of temporary bus stops if necessary and/or the requirement for additional signage and information to ensure bus stops operate, where possible, as they do at present.
- 16.9.19 The design of the proposed Scheme includes the permanent relocation of a number of bus stops which would be superseded by the new route once operational. The location of new bus stops can be seen in Figure 16.4. The remaining bus stops would stay on de-trunked sections of the existing A96. No further mitigation is proposed as part of this assessment for implementation during the operational phase.
- 16.9.20 Appointed contractors shall liaise with Network Rail to identify the potential need for signposting during both the construction and operational phases to both Inverness and Nairn Railway Stations.

View from the Road

- 16.9.21 A number of the proposed measures to mitigate landscape, visual and other impacts, would also have an influence on the nature and extent of views from the road. These include environmental barriers, the planting of trees and other vegetation to screen views of the road and associated traffic from visually sensitive receptors such as nearby residents or to provide landscape or ecological mitigation.
- 16.9.22 In addition to addressing landscape and visual impacts, landscape mitigation measures have been developed giving consideration to the views which would be experienced by travellers on the proposed Scheme. The planting design has been developed in order to ‘control’ views from the proposed Scheme providing travellers with a varied sequence of views of the surrounding countryside and landmark features while also providing attractive short range views within the route corridor. Use of the planting in this way in order to provide visual diversity would potentially help to alleviate driver stress. In addition to planting along the road corridor it is anticipated that special landscape measures would be incorporated at junctions and other key areas in order to provide travellers with a readily recognisable sense of place. A description of the main elements of the mitigation proposals is provided in Chapter 9 (Landscape).

**Summary of Mitigation**

- 16.9.23 Table 16.12 below provides a summary of the mitigation measures to be implemented as part of the proposed Scheme.

**Table 16.12: Mitigation Summary Table**

Project Activity	Potential Impacts	Description of the Mitigation Measures	How the Measures would be Implemented, Measured and Monitored	Mitigation Item
Construction	Disruption in access to bus stops for NMUs.	The appointed contractors shall liaise with bus operators with routes affected by the proposed Scheme to ensure minimal disruption in access to bus stops occurs during the construction phase.	Discussion between the appointed contractor and bus companies.	AT1
Construction	Severance of NMU routes.	Alternative routes and diversions for any NMU routes directly impaired by construction works shall be provided where possible following appointed contractor liaison with and seeking permission from THC	Appointed contractor to liaise with THC.	AT2
Construction	Disruption in amenity value of NMU routes.	The appointed contractor shall set out in its Construction Environmental Management Plan (CEMP) the typical best practicable measures which would include fencing off construction sites, dust suppression techniques and completion of work during agreed hours. (Refer to <b>Mitigation Items GR1+GR2</b> )	Appointed contractor to implement mitigation measures such as fencing off construction sites, working during agreed hours.	AT3
Construction	Disruption to vehicles travellers.	The appointed contractor shall implement a Traffic Management Plan	Discussion between appointed contractor and Transport Scotland.	AT4
Construction and operation	Disruption in access to train stations.	The appointed contractor shall liaise with Network Rail to identify the potential need for signposting during both the construction and operational phases to both Inverness and Nairn Railway Stations.	Discussion between appointed contractor and Network Rail.	AT5

Project Activity	Potential Impacts	Description of the Mitigation Measures	How the Measures would be Implemented, Measured and Monitored	Mitigation Item
Operation	Loss of bus stops.	The appointed contractor shall liaise with bus operators with regard to re-location/ provision of bus stops relating to the proposed Scheme	Discussion between appointed contractor and bus companies.	Refer to AT1
Operation	Severance of NMU routes.	The appointed contractor shall implement the requirements of the NMU design for the proposed Scheme to ensure that connectivity of NMU routes is maintained wherever possible in line with A96 Dualling Inverness to Nairn (including Nairn Bypass) Non-Motorised User Objective Setting and Context Report (Jacobs 2016c).	New routes incorporated into design of the proposed Scheme.	AT6
Operation	Driver stress	Lay-bys shall be included at various locations along the proposed Scheme to provide areas of rest.	Incorporated into the design of the proposed Scheme.	AT7
Operation	Damage to views experienced by vehicle travellers	Landscape planting shall be implemented to ensure views from the road are maintained and/or are enhanced and do not become monotonous in line with the mitigation proposals outlined in Chapter 9 (Landscape). (Refer to <b>Mitigation Item GR5</b> )	Incorporated into the design of the proposed Scheme.	AT8

## 16.10 Residual Impacts

### Non-Motorised Users (NMUs)

- 16.10.1 During construction, mitigation would be in place to limit the inconvenience to NMUs. However, the scale of construction works would have some effects on routes used by NMUs. The impacts would be primarily temporary and slight, and would include exposure to noise, dust and visual impacts of construction activities and temporary diversions and route closures.
- 16.10.2 Following implementation of the construction mitigation proposals, it is expected that residual impacts on NMUs during the construction of the proposed Scheme will be of Negligible or Slight significance (adverse or beneficial) for disruption during construction.
- 16.10.3 During the operation of the proposed Scheme, approximately 30km of shared use path would be constructed. The path would tie in with existing paths to create a connection between Inverness to Nairn, as well as a separate section through Auldearn. The facility would provide remote farmsteads, hamlets and villages with access to the shared use path, enhancing access between these communities, as well as providing new links to outdoor areas, resulting in an overall substantial beneficial effect.
- 16.10.4 A small number of footpaths that would be severed by the proposed Scheme would be permanently re-routed, with an extended length in diversion experienced (Figure 16.2). In addition, a small number of aspirational paths crossed by the proposed Scheme would be severed permanently, however due to a number of alternative routes existing nearby these severed routes, this effect has not been deemed to be significantly adverse.
- 16.10.5 The proposed Scheme would be clearly visible from certain NMU routes. Where feasible, landscaping and vegetation planting would be included to screen the proposed Scheme. However despite this, the proposed Scheme would adversely affect the amenity value of certain footpaths, with the proposed Scheme becoming visible where it would be on embankment, or with the construction of certain junctions.

- 16.10.6 Overall residual impacts to the 80 identified NMU routes are reported in Table 2 of Appendix A16.6 (Full Assessment Results for Public Rights of Way and Other NMU). The majority of impacts to sensitive NMU routes would be neutral/negligible or Slight adverse/beneficial. Moderate adverse effects have been deemed for 15 paths, largely due to the introduction of road infrastructure into a previously rural environment thereby affecting their amenity, with the journey length also increasing on a small number of these routes. With the provision of mitigation, Substantial adverse effects remain for core paths IN08.15 and IN08.16. These routes would be severed by the proposed Scheme with no crossing points to core path IN08.21 provided at the point of severance. Alternative routes across the proposed Scheme would be available, however these would involve a detour in excess of 2km and full details are set out in Table 16.8.
- 16.10.7 Conversely, a Slight and Moderate beneficial effects have been deemed for a number of paths which would adjoin the new shared use path, thereby improving connectivity to the wider NMU network within the study area. In addition, routes L2 and IN08.05 would experience Slight and Moderate beneficial effects respectively, from the introduction of new crossing points which would improve safety at locations where formal crossing points are not currently provided for NMUs on the existing A96. A moderate beneficial effect is also anticipated on the Local road linking the B9091 Clephanton – Kildrummie – Nairn Road, with the new shared use path routed along the road.

### **Vehicle Travellers**

#### Driver Stress

- 16.10.8 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 measures described in paragraph 16.9.9 to 16.9.16 above. On the basis of the measures proposed, no likely significant effects on driver stress during construction are envisaged.
- 16.10.9 During operation, a Substantial beneficial effect is predicted for the existing de-trunked A96 in both directions, between the Inverness Retail and Business Park and Newton of Petty. This is mainly due to the significant reduction in vehicle travellers travelling on the de-trunked road, with vehicles predicted to utilise the new dual carriageway alignment to travel along the study area.
- 16.10.10 The proposed Scheme would predominantly have permanent low to moderate levels of driver stress given the enhanced capacity of the road as well as the construction of safer, grade separated junctions. An overall Moderate beneficial impact is anticipated for driver stress levels along the proposed Scheme.
- 16.10.11 Driver stress is anticipated to remain moderate along the existing A96 through Nairn town centre, given the urban nature of the route as. The realigned eastbound carriageway of the Delnies – Kildrummie – Howford Road (C1163) would experience permanent moderate levels of driver stress, as it is anticipated to be utilised as an access road to the new carriageway from residential areas to the west of Nairn.

#### Public Transport

- 16.10.12 Access to bus stops has the potential to be impeded during the construction phase. In order to mitigate this, the appointed contractor will be required to liaise with bus companies, to provide clear information for passengers and make necessary provision to maintain access to bus services. Replacement bus stops would be provided where necessary. Overall, although a certain amount of disruption and inconvenience in access to bus stops is likely during the construction phase, this would be carefully managed to ensure access to bus stops is maintained where possible, with a Slight adverse residual impact deemed.
- 16.10.13 During operation, bus stops would either be retained or relocated as close as possible to their existing position along the proposed Scheme. In general, effects on access to bus stops is likely to be either a negligible or Slight beneficial one, with the new shared use path making access safer and more convenient for those bus stops relocated to the proposed Scheme. For those remaining

on the existing A96, this route would experience lower traffic volumes making it safer for those accessing these bus stops. The locations of new bus stops can be seen in Figure 16.4.

- 16.10.14 There would be no effect on access for rail travellers. However, it is anticipated that links to a potential rail station at Dalcross and Seafield would be beneficial in the long-term.

View from the Road

- 16.10.15 This section and provides a summary of the assessment of the views experienced by travellers on the proposed Scheme in the winter year of opening and summer, 15 years after the opening, the full assessment being presented in Appendix A16.7 Assessment of View from the Road. The assessment is supported by Figures 16.7 to 16.10 which illustrate the character of the landscape through which the proposed Scheme runs, the nature of views (such as no view, restricted, intermittent and open) and Figure 9.5 which illustrate the extent of existing and mitigation planting in the vicinity of the route which would have a bearing on the extent of the views available from the proposed Scheme.
- 16.10.16 For the majority of its routing, the proposed Scheme passes through an area predominantly characterised by large scale, open farmland, interspersed by mixed and conifer woodlands. For the most part the views from the proposed Scheme are broadly similar in nature to the views currently experienced, however whereas the existing A96 passes through the town of Nairn, the realignment of the A96 passes to the south of the settlement through farmland.
- 16.10.17 The assessment of impacts on the views experienced by eastbound travellers in the winter year of opening and summer 15 years after opening is provided in Table 3, and the effects on westbound travellers in Table 4 of Appendix A16.7 (Assessment of View from the Road) and a summary of both is provided below.

Assessment of Eastbound Views (Inverness to Hardmuir) from the Proposed Scheme

- 16.10.18 An assessment of the impacts on views likely to be experienced by eastbound users of the proposed Scheme in the winter year of opening and summer 15 years after opening is provided in Table 3 of Appendix A16.7 (Assessment of View from the Road).
- 16.10.19 As assessed in Appendix A16.7 (Assessment of View from the Road), eastbound travellers would experience changes in the nature of views currently experienced from the existing A96 as a result of the proposed Scheme, the principal changes resulting from the routing of the proposed Scheme to the south of Nairn and changes in the vertical alignment of the road level. In addition, changes in the nature and extent of the views would occur as a result of the implementation of environmental (noise) barriers in addition to bunds and false cuttings, and the establishment of woodland planting over time along the road corridor giving rise to a reduction in the extent of views. In respect of landmarks and notable features, travellers of the proposed Scheme would be able to appreciate views of existing features such as Alturlie Point and the Moray Firth in addition to the Norbord factory and Inverness Airport which provide points of reference for travellers as they journey from west to east and an indication of their progress. Compared to the existing A96, the length of open views from the proposed Scheme in the summer 15 years after opening would be less than those currently experienced however the scenic quality of views would be greater.
- 16.10.20 While the transition from an urban environment to one which is predominantly rural in character would be similar in nature to the existing A96, users that travel the majority of the proposed Scheme would be aware of continuous passage through agricultural/rural landscapes and the bypassing of Nairn resulting in views of a greater scenic quality. While the passage through these agricultural/rural landscapes would exhibit relatively subtle changes in character for most travellers, the intermittent interruption of views from the proposed Scheme by the proposed areas of woodland and earthworks would give rise to a sequence of views across rural landscapes with changes in the perspective of distant scenery and diversity of the available views. These changes would be most discernible between the Smithton Junction and Kerrowaird with views to the north, but also appreciable in the section east of Nairn West Junction and Balnaspirach where travellers would experience views to the south across the forest edge farmlands to the foothills beyond.

- 16.10.21 Travellers on the sections of the proposed Scheme through the rural landscapes would benefit most, with Moderate beneficial impacts occurring in both winter year of opening and summer after 15 years for the sections of the proposed Scheme from Balloch Junction to Kerrowaird (ch5300 to ch8300), Inverness Airport to Drumine (ch10800 to ch12600), Blackcastle Quarry to Mardon House (ch18900 to ch19400), Meikle Kildrummie to east of Balnaspirach (ch20100 to ch21400), and River Nairn to Crook (ch22300 to ch22800). At Balloch Junction (ch4600 to ch5300) and the section of the proposed Scheme from Mardon House to Meikle Kildrummie (ch19400 to ch20100) impacts would be Moderate beneficial in winter year of opening, reducing to slight beneficial in summer after 15 years when views would be more limited by established planting.
- 16.10.22 Moderate adverse impacts would occur in both winter year of opening and summer after 15 years on the stretches of the proposed Scheme from Crook to Nairn East Junction (ch22800 to ch25700) where cuttings and woodland would restrict views. From Bogside of Boath to Hardmuir (ch27300 to ch30900) impacts would initially be Slight adverse in winter year of opening, increasing to Moderate adverse in summer after 15 years, when a notable reduction in the extents of views would be experienced as a result of passage through cuttings and woodland.
- 16.10.23 In most instances the changes in the eastbound views from the road resulting from the proposed Scheme would be beneficial in nature and it is considered that on balance travellers would experience an improvement in the eastbound views from the road as compared to the existing A96.

Assessment of Westbound Views (Hardmuir to Inverness) from the Proposed Scheme

- 16.10.24 A detailed assessment of the impacts on views likely to be experienced by westbound users of the proposed Scheme in the winter of the year of opening and summer 15 years after opening is provided in Table 4 of Appendix A16.7 (Assessment of View from the Road).
- 16.10.25 As assessed in Table 4 of Appendix A16.7 (Assessment of View from the Road), westbound travellers would experience changes in the nature of views currently experienced from the existing A96 as a result of the proposed Scheme, the principal changes resulting from the routing of the proposed Scheme to the south of Nairn and changes in the vertical alignment of the road level. In addition, changes in the nature and extent of the views would occur as a result of the implementation of environmental (noise) barriers and establishment of woodland planting along the road corridor, giving rise to a reduction in the extent of views from the winter year opening and summer year 15. In respect of landmarks and notable features, travellers of the proposed Scheme would be able to appreciate views of existing features such as the Moray Firth and the Black Isle in addition to the Norbord factory, Inverness Airport and the Kessock Bridge which provide points of reference for travellers as they drive from east to west. Compared to the existing A96, the proportion of the route from which open views would be gained in the summer 15 years after opening would be lower than currently experienced, however the scenic quality of views would be improved.
- 16.10.26 While the transition from a rural environment to an urban situation at the western end of the proposed Scheme would be similar in nature to the existing A96, users that travel the majority of the proposed Scheme (and are familiar with the original alignment), would be aware of continuous passage through agricultural/rural landscapes and the absence of travel through the centre of Nairn resulting in views of a greater scenic quality. While the passage through these agricultural/rural landscapes would exhibit relatively subtle changes in character for most travellers, the intermittent interruption of views from the proposed Scheme by the proposed areas of woodland and earthworks would give rise to a sequence of views across rural landscapes with changes in the perspective of distant scenery and diversity of the available view. These changes would be most discernible between Balnaspirach and Nairn West Junction where travellers would experience views across the forest edge farmlands to the foothills beyond and between Kerrowaird and the Smithton Junction where travellers experience views across the coastal farmlands to Balloch and Culloden in addition to intermittent views towards the Black Isle and the Kessock Bridge. Views of these features would build a sense of approaching Inverness, a sense of arrival achieved through the use of a more formalised and distinctive approach to the planting design as per the objectives set out in Appendix A9.2 (Landscape Objectives).

- 16.10.27 Travellers on the sections of the proposed Scheme through the rural landscapes would benefit most, with Moderate beneficial impacts occurring in both winter year of opening and summer after 15 years for the sections of the proposed Scheme from Mill of Boath to Nairn East Junction (ch26500 to ch25700), Crook to the River Nairn (ch22800 to ch22300), East of Balnaspirach to Meikle Kildrummie (ch21600 to ch20100), Meikle Kildrummie to Mardon House (ch20100 to ch19400) and Kerrowaird to Balloch Junction (ch8300 to ch5800). On the section of the proposed Scheme at Balloch Junction (ch5800 to ch4600) impacts would be Moderate beneficial in winter year of opening, reducing to Slight beneficial in summer after 15 years when views would be more limited by established planting.
- 16.10.28 Moderate adverse impacts would occur at fewer locations, though over longer stretches of route including the stretches of the proposed Scheme from Hardmuir to Bogside of Boath (ch30900 to ch27300) where a notable reduction in the extents of views would be experienced due to cuttings and woodland.
- 16.10.29 In most instances the changes in the westbound views from the road would be beneficial in nature and on balance travellers would experience an improvement in the westbound views from the proposed Scheme as compared to the existing A96.

## **16.11 Monitoring and Management**

- 16.11.1 The management and maintenance of the shared use path would be conducted by both Transport Scotland's Operating Company and The Highland Council, ensuring the facility is maintained to a standard suitable for use by NMUs. In addition, Transport Scotland would manage the new road lay-bys. Management and maintenance of the new and/or re-located bus stops along the proposed Scheme would be conducted by The Highland Council.

## **16.12 References**

CH2M (on behalf of Transport Scotland) (2015). A96 Dualling Programme: Strategic Environmental Assessment – Tier 2 Environmental Report. Non-Technical Summary.

CH2M (*on behalf of Transport Scotland*) (2016). A96 Dualling Programme: Strategic Environmental Assessment – Post Adoption Statement.

Department for Transport (2009). Traffic Signs Manual. Traffic Safety Measures and Signs for Road Works and Temporary Situations. Part 1: Design. Chapter 8 [Online] Available from [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/203669/traffic-signs-manual-chapter-08-part-01.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/203669/traffic-signs-manual-chapter-08-part-01.pdf) [Accessed 1 September 2016].

Department for Transport (2015). Traffic Counts [Online] Available from [www.dft.gov.uk/traffic-counts/cp.php?la=Highland](http://www.dft.gov.uk/traffic-counts/cp.php?la=Highland) [Accessed 16 December 2015].

Highlands and Islands Transport Partnership (HITRANS) (2011). Regional Transport Strategy.

Highways Agency, Transport Scotland, Welsh Assembly Government and The Department for Regional Development Northern Ireland (1993a). Design Manual for Roads and Bridges Volume 11, Section 3, Part 8, Pedestrians, Cyclists, Equestrians and Community Effects, 1993.

Highways Agency, Transport Scotland, Welsh Assembly Government and The Department for Regional Development Northern Ireland (1993b). Design Manual for Roads and Bridges Volume 11, Section 3, Part 9, Vehicle Travellers, 1993.

Highways Agency (2009). Interim Advice Note IAN125/09(W).

Highways England (2015). Interim Advice Note IAN125/15.

Jacobs, Faber Maunsell, Grant Thornton and Tribal (*on behalf of Transport Scotland*) (2008)

Strategic Transport Projects Review Environmental Report.

Jacobs (*on behalf of Transport Scotland*) (2014). A96 Dualling Inverness to Nairn (including Nairn Bypass): DMRB Stage 2 Scheme Assessment Report.

Jacobs (*on behalf of Transport Scotland*) (2016a). A96 Dualling Inverness to Nairn (including Nairn Bypass) April 2016 Non-Motorised User Surveys Factual Report.

Jacobs (*on behalf of Transport Scotland*) (2016b). A96 Dualling Inverness to Aberdeen Preliminary Engineering Non-Motorised User Strategy.

Jacobs (*on behalf of Transport Scotland*) (2016c). A96 Dualling Inverness to Nairn (including Nairn Bypass) Non-Motorised User Objective Setting and Context Report [Unpublished].

National Rail (2015) [Online] Available from [www.nationalrail.co.uk/css/OfficialNationalRailmaplarge.pdf](http://www.nationalrail.co.uk/css/OfficialNationalRailmaplarge.pdf) [Accessed 1 February 2016].

The Highland Council (THC) (2008). Core Path Plan – Inverness and Nairn.

The Highland Council (THC) (2016). A96 Dualling Inverness to Nairn (including Nairn Bypass) Scoping Response.

Scottish Natural Heritage (SNH) (2013). A Handbook on Environmental Impact Assessment. Guidance for Competent Authorities, Consultees and others involved in the Environmental Impact Assessment Process in Scotland [Online] Available from [www.snh.gov.uk/docs/A1198363.pdf](http://www.snh.gov.uk/docs/A1198363.pdf) [Accessed 1 December 2015].

Sustrans (2015) [Online] Available from [www.sustrans.org.uk/ncn/map](http://www.sustrans.org.uk/ncn/map) [Accessed 1 January 2015].

The Landscape Institute (2013) Guidelines for Landscape and Visual Impact Assessment (GLVIA). Third edition.

The Scottish Government (2014). Scottish Planning Policy (SPP).

Transport Scotland (2011). Cycling by Design 2010.

Transport Scotland (2014). Inverness to Aberdeen Corridor Study.

#### **EU Directives and National Legislation**

Land Reform (Scotland) Act (2003). London: HMSO.