17 Pedestrians, Cyclists, Equestrians and Community Effects

This chapter assesses the impact of the proposed scheme on pedestrians, cyclists, equestrians, and communities. It identifies paths and key community and outdoor facilities within the study area. The paths comprise core paths, rights of way, National Cycle Routes, equestrian routes, cycleways and local paths. An assessment of the changes in journey lengths and amenity value potentially arising from the proposed scheme is provided. Impacts on paths are used to determine potential severance impacts on communities and impacts on outdoor access. The proposed scheme incorporates provision for pedestrians and others, however where conflicts remain mitigation measures have been proposed to help alleviate potential significant impacts.

With the proposed scheme in place, the Forth Road Bridge would be a designated public transport corridor maintaining links between Fife and the Lothians for buses, taxis, pedestrians and cyclists. All other traffic would utilise the new Main Crossing.

As a result of the significant decreased traffic flow on the Forth Road Bridge, overall significant beneficial impacts on pedestrians and others using the bridge and surrounding area would be anticipated, especially paths and public parks in South Queensferry in the vicinity of the Forth Road Bridge and the A90 approach route, due to decreased noise levels and improved air quality.

Ferrytoll and Echline are the two areas where significant residual impacts are predicted to result in terms of changes to journey length, amenity value of paths, or access to the outdoors.

Significant relief from existing severance is identified between the Echline housing estate and bus stops on the A904. No significant residual community severance impacts are identified.

17.1 Introduction

17.1.1 This chapter presents the assessment of potential impacts on local communities and the journeys made by pedestrians, cyclists and equestrians. For ease of reference the terms 'pedestrians and others' and 'Non-Motorised Users' (NMUs) are used to describe this group. Impacts on local vehicular journeys are also considered where relevant.

17.1.2 In accordance with DMRB (Highways Agency et al., 1993), the assessment of impacts on pedestrians and others focuses on three main aspects:

- changes in journey lengths and times;
- changes in the amenity value of journeys; and
- changes in links between communities and their facilities.

17.1.3 Paths used by pedestrians and others are important because they can provide:

- access to local countryside and more remote areas on foot, bike or horse;
- opportunities for long-distance travelling;
- safe, non-motorised access to shops, places of business and schools; and
- opportunities to integrate access and land management.

17.1.4 The use of paths can help to improve health, reduce social exclusion, and unlike other modes of transport generally has few associated costs (e.g. fuel, travel tickets etc). A good path network can also encourage visitors to enjoy the outdoors and to visit places of landscape, historical and wildlife interest, therefore encouraging financial expenditure which supports the local rural economy. Well planned paths can potentially assist landowners and farmers to successfully integrate recreational use with land management operations.

17.1.5 In accordance with SNH guidance on EIA (SNH, 2006), an assessment specifically considering the impacts of the proposed scheme on access to the outdoors has been undertaken and is included in

this section. This draws on the findings of this DMRB assessment of impacts on NMUs and community access.

17.1.6 This chapter considers the impacts of the proposed scheme once operational. Temporary impacts during construction are considered in Chapter 19 (Disruption Due to Construction).

Land Reform (Scotland) Act 2003

17.1.7 The Land Reform (Scotland) Act 2003 Part 1 came into effect in February 2005 and establishes statutory rights of responsible access on and over most land, and inland water. The legislation offers a general framework of responsible conduct for both those exercising rights of access and for landowners.

17.1.8 Local authorities are granted new powers and duties to uphold and facilitate responsible access rights. There is a duty on local authorities to prepare a plan for a path network and to keep a list of 'core paths' (paragraph 17.3.2). Sections 13 and 19 of the Act state: '*It is the duty of the local authority to assert, protect and keep open and free from obstruction or encroachment any route, waterway or other means by which access rights may reasonably be exercised*'; and '*The local authority may do anything which they consider appropriate for the purposes of maintaining a core path and keeping a core path free from obstruction or encroachment*'.

17.1.9 Section 10 of the Act states that it is the duty of SNH to draw up and issue a Scottish Outdoor Access Code which sets out guidance in relation to access rights and responsibilities. It is the duty of SNH and local authorities to publicise the Code and for SNH to promote understanding of it. The Scottish Outdoor Access Code was drawn up by SNH and approved by the Scottish Parliament in July 2004.

17.2 Approach and Methods

Study Area

17.2.1 The study area for the assessment of impacts on NMUs includes all paths which fall within 2km of the proposed scheme, and key community facilities accessed by these paths. The extent of the study is however not limited to a 2km corridor since consideration of the wider area is particularly important in identifying potential community effects.

Baseline Conditions

17.2.2 Baseline data were collected through desk-based assessment, consultation, and site survey:

<u>Desk-Based Assessment</u>

- A review of Ordnance Survey Maps:
  i. Landranger 65 1:50 000 (2007);
  ii. Explorer 350 1:25 000 (2006); and
  iii. OS Colour Raster 1:10 000 (2006).
- Interrogation of the Jacobs Arup GIS Database.
- A review of relevant local plans and strategies:
  i. Rural West Edinburgh Local Plan (2006);
  ii. Dunfermline and the Coast Local Plan (2002);
  iii. Dunfermline and West Fife Local Plan (2008);
  iv. West Lothian Local Plan (2005); and

v. Scottish Outdoor Access Code (2005).

- A review of core path plans:
  i. Adopted Edinburgh Core Paths Plan (2008);
  ii. Draft Consultative Fife Core Paths Plan (2008); and
  iii. West Lothian Draft Core Paths Plan (2008).
- A web based search to identify:
  i. existing and proposed paths (recreational and functional), and rights of way used by pedestrians, cyclists and equestrians;
  ii. key community facilities within and in close vicinity to the study area, including doctors' surgeries, hospitals, schools, aged persons' care homes, shops, post offices, churches, parks and sport centres;
  iii. community catchment areas represented by non-denominational primary school catchments (denominational primary school catchments are less clearly defined than non-denominational catchments, since distance from the school is not a constraint on enrolment);
  iv. outdoor access facilities as specified in Appendix 5, Table 2 of 'A Handbook on Environmental Impact Assessment' (SNH, 2006) – e.g. parks, local open spaces and reservoirs, woodlands and linear facilities e.g. paths, rights of way, cycleways; and
  v. public transport links including bus and train routes and locations of bus stops and train stations.

Consultation

- Consultation responses (refer to Chapter 6: Consultation and Scoping) specifically relating to pedestrians and others: those from City of Edinburgh Council, Fife Council, West Lothian Council, Community Councils (North Queensferry, Queensferry and District, Rosyth), Forestry Commission, North Queensferry Heritage Trust, the Ramblers Association, ScotWays, SNH, Spokes, Sustrans, West Lothian Bridleways Association;
- consultation meetings with City of Edinburgh Council, Fife Council, West Lothian Council and Sustrans; and
- information obtained during public exhibitions in January 2009.

Site Survey

17.2.3 To verify the results of the desk-based assessment and consultation, site surveys of paths used by pedestrians and others and key community facilities were undertaken in April 2008, November 2008 and February 2009. These surveys did not include user counts (refer to paragraph 17.2.6).

Number and Type of User

17.2.4 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.

17.2.5 As noted in paragraph 17.1.8, the Land Reform (Scotland) Act 2003 imposes certain requirements on local authorities in terms of maintaining public access. In addition, the National Planning Policy Guideline (NPPG) 11: Sport, Physical Recreation and Open Space and Scottish Planning Policy (SPP) 17: Planning for Transport aim to increase travel by NMUs and improve access even where usage levels are low. It is therefore considered that regardless of levels of use and types of user, all routes should be maintained and/or improved where practicable and origin/destination surveys were therefore not required for the purposes of EIA.

17.2.6 It should be noted that although counts were not undertaken specifically for the purposes of EIA, pedestrian and cycle counts were carried out at the proposed Ferrytoll Junction and Queensferry Junction to determine optimum NMU design (e.g. whether to provide at-grade or underpass crossings and whether to install controlled or uncontrolled crossing points).

17.2.7 For this assessment, the type of user was determined from information provided in the local authority core path plans (adopted and draft), consultation and site visits. Information on numbers of vulnerable users is based on population statistics and consultation with local authorities and community facilities.

Impact Assessment

17.2.8 The assessment of the potential impacts of the proposed scheme on pedestrians, cyclists, equestrians and community effects was undertaken with reference to DMRB Volume 11, Section 3, Part 6 (Highways Agency et. al. 1993) and SNH's Handbook on Environmental Impact Assessment (SNH, 2006).

17.2.9 The approach and method used includes assessment of impacts on:

- paths (journey length and amenity value);
- community severance; and
- access to the outdoors.

17.2.10 The significance of potential impacts on pedestrians, cyclists, equestrians and communities has been determined as a function of sensitivity and magnitude, as specified below. Unless otherwise stated, impacts are considered to be adverse. Mitigation measures have been identified to reduce potential impacts. An assessment of residual impacts of the proposed scheme is also provided, taking into account the identified mitigation measures.

Sensitivity

17.2.11 In recognition of the duties placed on local authorities by the Land Reform (Scotland) Act 2003 (refer to paragraph 17.1.8), sensitivity was determined primarily based on importance (the level of formal recognition of a pathway) rather than numbers of users. However, the sensitivity criteria were refined to take account of the types of main user (e.g. some pedestrian footpaths are considered to be more sensitive than cyclist routes).

17.2.12 Table 17.1 outlines sensitivity criteria applied in this assessment. Where a path could be attributed to more than one category e.g. a core path may also be a claimed right of way, the highest sensitivity rating was applied.

Table 17.1: Sensitivity Criteria

Sensitivity	Characteristics
High	Vindicated rights of way; or Asserted rights of way; or Core paths/proposed core paths.
Medium	Claimed rights of way; or National Cycle Routes.
Low	Local routes/other paths outwith above categories.

Note: a definition of vindicated, asserted and claimed rights of way is provided in paragraph 17.3.8.

17.2.13 DMRB requires that vulnerable groups (i.e. children, elderly and disabled persons) are considered as part of the assessment. Community facilities used by vulnerable groups include schools, elderly care homes and doctors' surgeries. The sensitivity rating of paths which serve these types of community facilities and paths which are known to be used by vulnerable groups were reviewed.

Where applicable, the sensitivity was adjusted using professional judgement to take into consideration vulnerability of the users.

Potential Impacts (Paths)

17.2.14 The potential impact on paths (pedestrian, cyclist and equestrian) was determined taking into consideration changes in both journey length and amenity value using the approach detailed below.

Changes in Journey Length

17.2.15 Changes in journey length can result from direct impacts e.g. closure of paths/ cycleways and/or diversion routes as a result of the proposed scheme; or indirect impacts e.g. as a result of increases in traffic flows, which would potentially result in NMUs deciding to use an alternative route.

17.2.16 Paths identified as being directly affected by the proposed scheme are shown as potential 'conflict areas' on Figure 17.3. These figures illustrate where existing paths are crossed by the proposed scheme, and could therefore be directly impacted by the new bridge and road infrastructure i.e. paths which could be severed or lose sections of their length. The existing journey lengths for these paths were calculated in metres using GIS. Where possible, alternative routes for the affected paths were defined in order to maintain a link between origin and destination (refer to Figure 17.3) and a comparative journey length calculated in metres using GIS.

17.2.17 NMUs may be deterred from making trips along or across existing roads which are likely to be more heavily used by traffic in the year of opening (2017) and therefore alternative routes may be taken. In accordance with DMRB, where roads are predicted to experience an increase of 30% or more in traffic flow in 2017 with the proposed scheme (compared with 2017 without the proposed scheme), alternative routes have been suggested and the impact on the journey length assessed using GIS.

17.2.18 Taking into account guidance provided in DMRB, criteria were developed to determine magnitude of impact resulting from changes to journey length as shown is in Table 17.2.

Table 17.2: Magnitude of Impact Criteria for Changes to Journey Length

Magnitude	Characteristics
High	Change to journey length ≥ 500m or greater.
Medium	Change to journey length from 250 to < 500m.
Low	Change to journey length from 100 to < 250m.
Negligible	Change to journey length <100m.

17.2.19 The significance of impact on paths was subsequently determined using the matrix illustrated in Table 17.3.

Table 17.3: Significance of Impact on Journey Length

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

17.2.20 The EIA Scotland Regulations (1999, as amended) require consideration of the 'likely significant effects'. However the regulations do not provide a definition of what constitutes a significant environmental effect as this is determined according to the environmental parameter under consideration, and in the context in which the relevant assessment is made. For the purposes of this assessment, effects were considered to be 'significant' where the assessment results indicated impacts of Moderate or higher significance.

Changes in Amenity

17.2.21 The amenity of a journey is defined in DMRB as 'the relative pleasantness of a journey'. This relates in particular to the exposure of pedestrians and others to traffic, and associated factors of noise, air quality and safety. Visual impacts and the width of the paths/cycleways are also considerations. Amenity value is a subjective issue and it is acknowledged that any changes in amenity value resulting from the proposed scheme would therefore also be subjective. However, for the purposes of assessment it has been assumed that where pedestrians and others 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.

17.2.22 Changes in amenity value were therefore considered where existing paths would be crossed by the proposed scheme, where traffic flows would potentially affect paths along a route or at a crossing point, on existing paths where noise and air quality would be predicted to significantly increase or decrease, or where the proposed scheme would be visible from existing paths.

17.2.23 For the purposes of this assessment, where the Main Crossing would be significantly visible from paths, it has been assumed that the change in amenity value would result in a beneficial impact on the path users. The design of the Main Crossing has been informed by detailed input from specialist aesthetic advisors, aesthetics and design team workshops and consultation with Architecture and Design Scotland. Many of the paths in the vicinity of the Main Crossing afford views of the Forth Road Bridge and Forth Rail Bridge, and usage can be linked with the intention to view the bridges and the wider Firth of Forth. Consequently, the ability to view the Main Crossing is considered to be a positive change in terms of path amenity value.

17.2.24 In line with DMRB guidance, the assessment of change to amenity value does not make use of sensitivity criteria and an assessment matrix to determine significance of impacts. Impact significance is determined qualitatively, using professional judgement and taking into account the magnitude of change with respect to existing views, air quality, traffic flows and noise levels.

17.2.25 Full visual, air quality and noise assessments are reported in Chapters 13 (Visual), 15 (Air Quality) and 16 (Traffic Noise and Vibration). Traffic data were obtained from the strategic traffic model for the proposed scheme and Average Annual Daily Traffic (AADT) reported for the year of opening (2017) with and without the proposed scheme. It is important to note that traffic flows provided in this chapter only relate to sections of the selected road where paths intersect that road, and are therefore not necessarily representative of the full length of the road.

17.2.26 The significance of impact criteria for change in amenity is described in Table 17.4.

Table 17.4: Significance of Impact on Amenity Value

Significance	Characteristics
Substantial	Where there is a substantial change in the existing view and/or air quality and/or a major change in noise levels and/or substantial change in traffic flows resulting in change in safety.
Moderate	Where there is moderate or noticeable change in the existing view and/or air quality and/or a moderate change in noise levels and/or moderate change in traffic flows resulting in change in safety.
Slight	Where there is slight or barely perceptible change in the existing view and/or air quality and/or a slight change in noise levels and/or slight change in traffic flows resulting in change in safety.
Negligible	Very little or no discernable change from baseline conditions equating to a no-change situation.

Overall Impacts on Paths (journey length and amenity)

17.2.27 To determine overall significance of impacts on paths, the significance for changes in journey length and amenity were considered together using professional judgement. Overall significance was determined based on these two factors (impacts on journey length and amenity value) having an equal weighting of importance. Where an impact is only identified for one factor, the degree of overall significance was reduced accordingly.

Potential Impacts (Community Severance)

17.2.28 Community severance is defined in DMRB 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 flows'. The construction of new roads, or even relatively minor changes to existing roads, can result in significant changes to travel patterns within a community. A road may act as a barrier deterring people from using certain community facilities, or conversely, a diversion of road traffic away from a busy road may make an existing road easier to cross, thereby reducing community severance. A reduction in traffic levels is referred to as severance relief as community facilities are more accessible to NMUs.

17.2.29 The assessment on communities assesses the degree of potential severance experienced by the community i.e. the degree to which communities are separated from facilities and services they use within their community. It should be noted that the DMRB guidelines on assessing severance are in relation to pedestrians only. However, in this assessment the criteria were applied to all NMUs and based upon movements along the paths used to access community facilities, although vehicular movements on local roads were also considered since all users may still be deterred from making journeys which require them to negotiate additional roads and/or junctions. Community catchment areas (the areas served by the local facilities) are illustrated on Figure 17.1, and are based on non-denominational primary school catchment boundaries.

Existing Severance

17.2.30 Existing severance is considered to be the severance of communities from their facilities, as caused by the existing road network. The assessment of the significance of potential impacts arising from severance relief was made in accordance with DMRB guidelines, using the criteria shown in Table 17.5. AADT for year of proposed scheme opening (2017) was compared for with and without the proposed scheme, in order to assess relief from existing severance. Note that the assessment of relief from existing severance was not conducted on roads with an existing AADT flow of less than 8,000 vehicles, as there is unlikely to be any significant existing severance.

Table 17.5: Significance Criteria for Relief from Existing Severance

Significance	Criteria	
	Built-Up/Urban Area	**Rural Area**
Substantial (beneficial)	When existing traffic levels are reduced by more than 60%.	When existing traffic levels are reduced by more than 90%. However, if the existing road substantially bisects a village or small town, 60% was used.
Moderate (beneficial)	When existing traffic levels are reduced from > 30% to 60%.	When existing traffic levels are reduced from > 75% to 90%. However, if the existing road substantially bisects a village or small town, the above figures are halved.
Slight (beneficial)	When existing traffic levels are reduced by approximately 30%.	When existing traffic levels are reduced from 60 to 75%. However, if the existing road passes through a village or on the perimeter of a built-up area, 30% was used.

New Severance

17.2.31 New severance is severance of pedestrians and others from community facilities resulting from the proposed scheme.

17.2.32 New severance is assessed using a three point scale as shown in Table 17.6.

Table 17.6 Significance Criteria for New Severance

Significance	Description
Substantial	NMUs are likely to experience considerable hindrance or be deterred from making trips to the extent that routes are changed, for example: • pedestrian at-grade crossing of a new road carrying >16,000 vehicles AADT in the opening year; or • an increase in journey distance of over 500m; or • three or more of the hindrances set out under 'Slight' or two or more set out under 'Moderate'.
Moderate	When some NMUs (particularly elderly or children) are likely to be dissuaded from making trips or where trips would become longer or less attractive, for example: • pedestrian at-grade crossing of a new road carrying between 8,000-16,000 vehicles AADT in the opening year; or • journey distance would be increased by 250-500m; or • two or more of the hindrances set out under 'Slight' applying to single trips.
Slight	When some NMUs (particularly elderly or children) may be dissuaded from making trips or where trips would become longer or less attractive, for example: • pedestrian at-grade crossing of a new road carrying <8,000 vehicles AADT in the opening year; or • an increase in journey distance by up to 250m; or • one hindrance e.g. a new bridge or subway would need to be negotiated.

Potential Impacts (Access to the Outdoors)

17.2.33 The objective of the outdoor access impact assessment (SNH, 2006) is to determine any likely significant effects on access to the outdoors. This includes the ability to make use of a facility or path and the ease with which access can be taken to it. The impact assessment was undertaken using the changes and significance on linear and area based facilities identified in the DMRB assessment as outlined above.

Mitigation

17.2.34 Where impacts on paths are identified as significant (refer to paragraph 17.2.19), mitigation to reduce the impact has been sought. The development of mitigation is based on the approach as described in PAN 58 Chapter 5 (Overview of Assessment Process) and to meet the legislation requirements of the Disability Discrimination Act (1995) (refer to paragraph 17.2.36) and the Land Reform (Scotland) Act 2003 (refer to paragraphs 17.1.7 to 17.1.9). Mitigation measures include

NMU provision on new overbridges and underbridges to maintain existing path links across the proposed scheme, and the creation of new lengths of pathway and safe crossing points to link existing paths and maintain access.

17.2.35 In addition to the mitigation proposed specifically for pedestrians and others, mitigation proposed for other environmental impacts in some cases would have the additional benefit of ameliorating impacts on NMUs e.g. proposed planting mitigation (refer to Chapters 12: Landscape and 13: Visual). Where this is the case the relevant mitigation measures are noted and cross-references provided.

Disability Discrimination Act (1995)

17.2.36 Under the Disability Discrimination Act (DDA) (1995), it is unlawful for service providers to treat disabled people less favourably than they would treat other people for a reason related to their disability, when offering public services and facilities (including paths and trails). Therefore, where any new path, overbridge, underbridge or access point forms part of the proposed scheme, the requirements of the DDA were taken into account and potential barriers to disabled people such as gradient, verge width, radius of bends and surfacing were considered.

Residual Impact Assessment

17.2.37 Residual impacts were identified following the same methodology as described above for the identification of potential impacts taking into account the mitigation proposals as described in Section 17.5.

Limitations to Assessment

17.2.38 It should be noted that the rights of way baseline data provided by ScotWays/SNH was compiled in 1995 and was digitised at a scale of 1:50,000, which is less accurate than the scales used in this assessment (1:10,000 and 1:25,000). ScotWays relies on members of the public and organisations to provide any information on possible amendments to their database. Updates are therefore infrequent and do not necessarily include all rights of way which are sometimes only locally known. In some instances rights of way are identified which are no longer usable paths e.g. restricted by security fences or routed through buildings. However as they have not been formally extinguished or diverted, ScotWays has requested these are still included within the assessment (J. Doake, ScotWays, pers.comm. 15 May 2008). For the rights of way to be shown as accurately as possible on the larger scale maps used in this assessment, some of the digitised path lines have been re-positioned to match with the OS base mapping in consultation with ScotWays and using, where available, descriptions of the rights of way. Due to the restricted scale of the digital data and infrequent updates the accuracy of the location of rights of way cannot be guaranteed.

17.2.39 Indicative community catchment areas have been identified using non-denominational primary school catchment boundaries (denominational primary school catchments are less clearly defined than non-denominational catchments, since distance from the school is not a constraint on enrolment) and confirmed as appropriate during consultation with the local authorities and Community Councils. While the areas are considered to be representative catchments for NMU movements within a community, it is acknowledged that some users may travel outwith their catchment boundary to access other facilities.

17.2.40 Journey lengths are calculated on discrete sections of the NMU routes affected rather than the entire length, and are therefore not intended to be representative of the entire NMU route.

17.3 Baseline Conditions

17.3.1 Figures 17.1 and 17.2 illustrate the existing path network within the study area. These paths are listed in Table 17.7 and include those used by pedestrians (vulnerable and non-vulnerable), cyclists and equestrians. Whilst Table 17.7 and the legend of Figure 17.2 identify the predominant path

usage for assessment purposes, it should be noted that this use is not exclusive and all paths could be available for any user.

Core Path Network

17.3.2 The local authorities responsible for access within the study area are Fife Council, City of Edinburgh Council, and West Lothian Council. The City of Edinburgh Council Core Path Plan was adopted in June 2008. The West Lothian and Fife Council's core path plans are currently in draft and undergoing consultation, and therefore may be subject to change. The core paths are referred to together as the 'proposed/adopted core path network'. Local authorities have a duty to make the core paths plan publicly available for inspection under the Land Reform (Scotland) Act 2003 (refer to paragraphs 17.1.7 to 17.1.9).

17.3.3 Core paths may include:

- 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 Sections 20 and 21;
- waterways; or
- other means by which persons may cross land.

17.3.4 Core path plans take into consideration the likely usage and desirability of paths balanced with landowner interests. The majority of core paths are existing well-established paths, and the core paths system represents a basic 'backbone' of key paths throughout the local authority boundaries.

17.3.5 Aspirational core paths are identified in the core path plans where routes could be upgraded or created in the future. The two aspirational core paths identified in City of Edinburgh Council's Core Path Plan (2008), which fall within the study area, are identified in Table 17.7 and shown on Figure 17.2. It should be noted that West Lothian and Fife have not identified any aspirational core paths to date as their plans are still in draft.

17.3.6 Table 17.7 lists 26 paths which are designated as core paths (10 adopted; 15 proposed; 1 part adopted/part proposed) and located in part or fully within the study area. These are illustrated on Figures 17.1 to 17.2. In the core path plans, the local authorities have assigned the proposed and adopted core paths reference numbers as identified in Table 17.7.

Rights of Way

17.3.7 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). Rights of way have been recognised in Scots Law for centuries i.e. in common law. The time period of 20 years stems from the Prescription and Limitation (Scotland) Act 1973 Section 3). Rights of way vary from long hill routes (often historical drove or kirk roads) to local routes used for dog walking or as short cuts to shops, schools and other local amenities.

17.3.8 ScotWays maintains the National Catalogue of Rights of Way (CROW), in partnership with SNH. Local authorities hold copies of their local CROW records. CROW classifies rights of way into three status categories:

- vindicated – routes declared to be rights of way by the courts or through another legal process;

- asserted – routes which have been accepted as rights of way by the landowner or where local authorities have indicated that they would take legal action to protect them if necessary; and
- claimed – other routes which appear to meet the common law conditions necessary to be regarded as rights of way, but which have not been formally vindicated or asserted.

17.3.9 Access along rights of way are protected by the Countryside (Scotland) Act 1967 requiring the local authority to 'assert, protect and keep open and free from obstruction or encroachment any public rights of way', although diversions can be considered if the proposed diversion is deemed suitable by the planning authority.

17.3.10 Table 17.7 lists 29 paths which are designated as rights of way (1 vindicated; 7 asserted; 21 claimed) located in part or fully within the study area. These are illustrated on Figures 17.1 to 17.2.

National Cycle Network

17.3.11 The National Cycle Network is a network of cycle routes in the UK, created by the charity SUSTRANS. The cycle routes are a combination of pedestrian routes, disused railways, minor roads, canal towpaths and traffic calmed routes; therefore, routes can also be designated as core paths or rights of way (Table 17.7). Sections of both National Cycle Routes (NCR) 1 and 76 fall within the study area. The routes are described in Table 17.7 and are shown on Figures 17.1 to 17.2.

17.3.12 Through consultation, it has been noted that SPOKES, a Lothian cycle campaign organisation, is involved in promoting plans to upgrade a section of NCR 1 between Barnton, Edinburgh and South Queensferry. SUSTRANS has advised during consultation that this upgrade is essential for maintaining the cycle route and providing a good link from Edinburgh to the Forth Road Bridge. Maintenance and upgrade of NCR 1 is outwith the scope of this assessment, although any plans to enhance the route would improve connectability to the Forth Road Bridge and the proposed cycle/ public transport corridor.

Other Cycle Routes

17.3.13 Many of the proposed and adopted core paths are recognised as being used by cyclists as illustrated on Figure 17.2. Other regional and local cycle routes (segregated cycle paths and on-road routes) have also been identified through information collated from SUSTRANS and site visits. In addition, SPOKES was consulted on the accuracy of the identified cycling routes. All of the paths located in part or fully within the study area, identified to be suitable for use by cyclists, are described in Table 17.7 and are shown on Figure 17.2.

17.3.14 The A90 is also identified as a route used by cyclists commuting between Fife and Edinburgh and the Lothian region. However, the section of the A90 to the south of South Queensferry does not have segregated provision for cyclists and therefore cyclists who choose to use this route travel on the main carriageway, which is prohibited. The safer and recommended route for cyclists travelling between Edinburgh and South Queensferry is via NCR 1 and/or NCR 76 linking to the segregated shared use paths on the Forth Road Bridge, as illustrated on Figure 17.2.

Local Paths

17.3.15 Networks of local paths located within the study area which are not designated rights of way, part of the core path network, or cycleways are also listed in Table 17.7 and shown on Figures 17.1 and 17.2. Many of these paths were identified during consultation and subsequently verified through site visits. These local paths, which include paved footpaths through residential streets, footpaths and tracks through woodlands and fields, tend to create links between core paths and rights of ways, increasing accessibility within the local area. Local paths can be of recreational value or provide access to key community facilities such as schools and doctors surgeries.

Table 17.7: All Paths Identified within the Study Area

Path Ref.	Type (including CROW or core path ref. where applicable)	Predominant Users*	Description	Community Link	Local Authority/ Governing Body	Baseline Journey Length (m)	Baseline Amenity**
1	Proposed Core Path (F640)	Pedestrians (incl. vulnerable)	Path through the Wilderness to Burnside Street, roadside path to Park Road Primary School, across the M90/A90 and A921 to Fairy Kirk, linking with 'Inverkeithing Reservoir Links' core path (2).	Rosyth to Inverkeithing	Fife Council	1738	Pathway through parkland then residential streets, crossing the busy A921 (approx. 23,000 AADT) at the Admiralty Junction, before routing through the wooded recreational area at Fairy Kirk. Traffic noise from the A90/M90 and A921 is evident.
2	Proposed Core Path (F633)	Pedestrians (incl. vulnerable), Cyclists, Equestrians	Quiet access 'Inverkeithing Reservoir Links' route from Dunfermline Wynd to Chapel Place, leading to a roadside path along Boreland Road and Hillend Road to Inverkeithing High School.	Inverkeithing	Fife Council	2644	Urban and rural pathway routed around the north-western boundary of Inverkeithing, crossing the B981 at Chapel Place where traffic flows would be approx. 11,500 AADT. Traffic noise evident on the western sections of the route.
3	Proposed Core Path (F629), Claimed Right of Way (FD169)	Pedestrians (incl. vulnerable), Cyclists, Equestrians	Core path and right of way from Hillend Road, Inverkeithing to Letham Hill Way, Hillend; core path continues to Main Street, Hillend.	Inverkeithing to Hillend	Fife Council	939 (315)	From Hillend Road, the pathway crosses the A921 via an underpass, and is then routed alongside the A921 bounded by agricultural fields to an urban roadside pathway in Hillend. No traffic flows are negotiated although noise from traffic is evident.
4	Claimed Right of Way (FD168)	Pedestrians	Path from the A921, alongside the Cast watercourse to the B981, north of Inverkeithing.	n/a	Fife Council	1055	Rural pathway through agricultural land, from the A921 underpass to join B981. There is no vehicular access and traffic noise is only evident close to the road.
5	Cycleway/ Local Path	Pedestrians, Cyclists	Traffic-free shared use roadside path alongside the A921 linking NCR 1 with Parkgate, Rosyth and providing access to the library.	Inverkeithing to Rosyth	Fife Council	1702	Urban cycleway alongside residential streets in Rosyth and the busy A921, (approx. 23,000 AADT) where traffic noise is evident.
6	NCR 1/ Local Path	Cyclists, Pedestrians (incl. vulnerable)	On road cycleway along B981, crossing the A921, to reach Inverkeithing. On road (B981) cycle lane through the centre of Inverkeithing. To the south of Inverkeithing NCR 1 continues on a traffic-free, shared-use roadside path along the east side of the A90 from to the Ferrytoll Junction to the Forth Road Bridge.	North Queensferry/ Forth Road Bridge to Inverkeithing	SUSTRANS / Fife Council	3863	Rural and urban pathway with partial views to both bridges. On road section negotiating the busy A921 crossing (approx. 23,000 AADT), along B981 through Inverkeithing with variable traffic flows between approx. 3,600-11,500 AADT along the High Street (B981), then traffic-free roadside pathway along A90. Traffic noise is evident throughout the route.
6a	NCR 1/ Local Path	Cyclists, Pedestrians (incl. vulnerable)	Traffic-free, shared-use roadside path along the west side of the A90 from the Forth Road Bridge linking via a ramp to the B981 (22) to Ferrytoll Junction and NCR 76 (10).	North Queensferry/ Forth Road Bridge to Inverkeithing	SUSTRANS / Fife Council	1050	Pathway is segregated from the traffic along A90 and B981. It crosses the B981 where traffic flows would be approx. 4,600 AADT. There are partial views of both bridges and traffic noise is evident throughout the route.

Path Ref.	Type (including CROW or core path ref. where applicable)	Predominant Users*	Description	Community Link	Local Authority/ Governing Body	Baseline Journey Length (m)	Baseline Amenity**
7	Proposed Core Path (F630), Claimed Right of Way (FD170)	Pedestrians	Path from Hillend Road, Inverkeithing, past Spencerfield House to Prestonhill Quarry.	n/a	Fife Council	1237	Rural pathway with partial view of Forth Rail Bridge and no vehicular access. Minimal traffic noise is evident.
8	Proposed Core Path (F634), Claimed Right of Way (FD172)	Pedestrians	Path from Main Street, Hillend, across A921, through Letham Hill Wood to Prestonhill Quarry.	n/a	Fife Council	1765	From urban roadside pathway in Hillend across the busy A921 (approx. 17,500 AADT) leading to a woodland pathway heading south to the coast. Minimal traffic noise is evident.
9	Proposed Core Path (F707); part Claimed Right of Way (FD173)	Pedestrians (incl. vulnerable), Cyclists, Equestrians	Path from Commercial Road, Inverkeithing, via Ballast Bank, to the south of Prestonhill Quarry to St. David's Harbour, Dalgety Bay. The right of way starts at East Ness following the route of the core path to The Moorings, Dalgety Bay.	Inverkeithing to Dalgety Bay	Fife Council	2312 (1270)	Rural coastal pathway with partial views of Forth Rail Bridge and no vehicular access. Minimal traffic noise is evident.
10	NCR 76	Cyclists	NCR 76 from Admiralty Road through Rosyth Europarc on roadside paths alongside Milne Road and Ferry Toll Road, to Ferrytoll Junction, under the A90, linking with NCR 1 on the B981, through Inverkeithing to the junction with King Street.	Rosyth to Inverkeithing	SUSTRANS / Fife Council	6081	Roadside cycleway through urban and industrial Rosyth with full and partial views of both bridges. Ferry Toll Road has low traffic flows (approx. 5,700 AADT) and therefore users are unlikely to experience much traffic noise. The Ferrytoll Junction is negotiated on road (up to approx. 6,400 AADT) where cyclists are exposed to much higher traffic noise levels from the A90.
10a	NCR 76	Cyclists	NCR 76 spur from Hilton Road, along Ferry Toll Road.	n/a	SUSTRANS / Fife Council	1086	On road section of cycleway with full and partial views of both bridges. Traffic flows on this section of Ferry Toll Road are low (approx. 200 AADT) and therefore users unlikely to be exposed to much traffic noise.
10b	NCR 76	Cyclists	NCR 76 from Inverkeithing High Street, along King Street and Commercial Road, linking with core path 9 to the south of Ballast Bank, leading to Dalgety Bay.	Inverkeithing to Dalgety Bay	SUSTRANS / Fife Council	3489	Urban section of cycleway on minor road leading to rural coastal pathway along estuary towards Dalgety Bay. No traffic data available although flows are likely to be low with little noise from traffic produced.
11	Cycleway	Pedestrians, Cyclists	Regional cycle route 65 from Golfdrum Street, Dunfermline along Maitland Street, through Pittencrieff Park, to Elgin Street, Grange Road, Admiralty Road (A985), to Ferry Toll Road.	Dunfermline to Rosyth	SUSTRANS / Fife Council	5605	Urban roadside cycleway with partial views of the bridges. Exposure to moderate traffic flows on Admiralty Road (A985) experiencing approx. 2,400 AADT at crossing points with associated low traffic noise levels.
12	Cycleway	Pedestrians (incl.	Local roadside cycle path along King's Road linking Primrose Lane, Rosyth to regional cycle	Rosyth	Fife Council	931	Urban roadside cycle path with one crossing of Park Road (approx. 6,050 AADT) and partial views of

Path Ref.	Type (including CROW or core path ref. where applicable)	Predominant Users*	Description	Community Link	Local Authority/ Governing Body	Baseline Journey Length (m)	Baseline Amenity**
		vulnerable), Cyclists	route 65 (11). Provides access to Camdean and King's Road Primary Schools.				both bridges. Some traffic noise evident.
13	Claimed Right of Way (FD86)	Pedestrians	Path from Admiralty Road, Rosyth, through fields to Wilson Way and Cunningham Road.	Rosyth	Fife Council	659	Rural quiet parkland pathway to urban Rosyth streets with partial views of both bridges. No traffic flows experienced.
14	Proposed Core Path (F636), Claimed Right of Way (FD87)	Pedestrians, Cyclists, Equestrians	Path through Castlandhill, from Ferry Toll Road, Rosyth to the B980 (Castlandhill Road), linking to path 15 into Inverkeithing.	Rosyth to Inverkeithing	Fife Council	1319	Rural road with views of both bridges. At the B980 (Castlandhill Road) crossing point low traffic flows are experienced (approx. 2,100 AADT) with some traffic noise.
15	Proposed Core Path (F635)	Pedestrians, Cyclists	Path from Castlandhill Road (B980) crosses the A90 on an overbridge footpath, segregated from the road by a barrier. The path continues along Dunfermline Wynd, Manse Road and Forth View, cuts through an open space to Inverkeithing High Street (B981), linking to path 17.	Castlandhill to Inverkeithing	Fife Council	1163	Traffic noise from the A90 is evident at the start of the path. Path is then routed through urban streets and parkland with partial views of both bridges. NMUs negotiate the B981 (High Street) crossing point where traffic flows are approx. 3,800 AADT.
16	Claimed Right of Way (FD88)	Pedestrians	Track from Ferry Toll Place, running west to east, to the north of Castlandhill Woods, to link with the B980 (Castlandhill Road).	n/a	Fife Council	916	Rural pathway through woodland with partial views of the bridges. No vehicular access although some traffic noise from A90 is evident at the B980 (Castlandhill Road) entrance to the woodland.
17	Proposed Core Path (F706); Claimed Right of Way (FD179)	Pedestrians, Cyclists	Core path known as Caldwells Mill route from Boreland Road/Alma Street junction, along Commercial Road and Harbour Place to off-road pathway linking to the coastal path (18). The right of way follows part of this route from Harbour Place to coastal path (18).	Inverkeithing to path 18 leading to North Queensferry	Fife Council	1392 (878)	Pathway through residential and industrial area from Inverkeithing to the coast Very low traffic flows (approx. 650 AADT) are experienced at start of the path along Alma Street in residential Inverkeithing with associated low noise levels from traffic.
18	Proposed Core Path (F704); Claimed Rights of Way (FD180 and FD183)	Pedestrians, Cyclists	Coastal path linking Hope St, Inverkeithing to North Queensferry.	Inverkeithing to North Queensferry	Fife Council	2896	Rural, quiet coastal pathway with a partial view of the Forth Rail Bridge. No vehicular access.
19	Proposed Core Path (F705)	Pedestrians	Ferry Loch core path splits off from the right of way (20) and follows a track, from the community centre, past Ferry Loch to Ferryhills Road joining with the North Queensferry coastal path (18).	n/a	Fife Council	1337	Rural recreational pathway with partial views of both bridges. No vehicular access although some traffic noise is evident from the A90 and Forth Road Bridge.

Path Ref.	Type (including CROW or core path ref. where applicable)	Predominant Users*	Description	Community Link	Local Authority/ Governing Body	Baseline Journey Length (m)	Baseline Amenity**
20	Claimed Right of Way (FD89)	Pedestrians	Path from Brock Street, North Queensferry, past the community centre, following part of the Ferry Loch Route core path (19), to the A90. The path then follows steps down to the B981, under the existing Forth Road Bridge. A path can then be followed under the bridge to the south end of Ferrybarns Court, North Queensferry.	North Queensferry	Fife Council	699	Path on the periphery of North Queensferry links residential areas with the Forth Road Bridge and provides views of both bridges. The path crosses the B981 underneath the Forth Road Bridge where flows would be approx. 4,600 AADT. Traffic noise from the Forth Road Bridge is evident.
21	Network of Local Paths	Pedestrians	Local network of paths in and around Ferry Loch, accessed via core path 19.	n/a	Fife Council	1419 (total)	Rural parkland paths used for recreation provide views of both bridges. No vehicular access although some traffic noise is evident from the A90 and Forth Road Bridge.
22	Proposed Core Path (F703)	Pedestrians, Cyclists	Roadside path along the B981 from North Queensferry, under the Forth Road Bridge, to Ferrytoll Junction, joining the B980 (Castlandhill Road). Along Ferry Toll Road, Milne Road and Castle Road joining core path 25 on Ferry Toll Road, Rosyth. NCR1 joins core path just north of St. Margaret's Hope (Admiralty House), continuing along core path to Ferrytoll Junction.	North Queensferry to Forth Road Bridge and Rosyth	Fife Council	4415	Pathway alongside the B981 (approx. 4,600 AADT) is routed directly underneath the Forth Road Bridge and therefore bridge traffic noise as well as noise from the B981 and A90 is evident. At Ferrytoll Junction the traffic–free path continues west along Ferry Toll Road to Rosyth Europarc where low traffic flows and views of the Forth Road Bridge and Forth Rail Bridge are experienced.
23	Proposed Core Path (F662)	Pedestrians (incl. vulnerable), Cyclists	Path through St. Margaret's Marsh joining with core paths 22 and 24 on Milne Road, Rosyth.	n/a	Fife Council	1496	Rural recreational pathway, partly routed along the coast provides views of the Forth Road Bridge. No vehicular access although some traffic noise is evident from the B981, A90 and Forth Road Bridge.
24	Proposed Core Path (F837)	Pedestrians, Cyclists	Path from core path 22, Milne Road to Rosyth Europarc.	n/a	Fife Council	1017	Industrial roadside pathway provides views of both bridges. No traffic data were available although low flows are likely.
25	Proposed Core Path (F637)	Pedestrians (incl. vulnerable), Cyclists, Equestrians	Path along Ferry Toll Road, Hilton Road leading to Wilson Way to join with the right of way (13).	n/a	Fife Council	1185	Roadside pathway providing views of both bridges. Traffic flows on this section of Ferry Toll Road are low (approx. 200 AADT) with some traffic noise evident.
26	Claimed Right of Way (FD90)	Pedestrians	Path within North Queensferry from Main Street to Ferry Barns Court.	n/a	Fife Council	151	Urban pathway with views of both bridges. No vehicular access although traffic noise from the Forth Road Bridge is evident.
27	Claimed Right of Way (FD183)	Pedestrians	Path within North Queensferry from the coastal path (18) under the Forth Rail Bridge.	n/a	Fife Council	154	Urban pathway with views of both bridges. Very low traffic flows although noise from the Forth Road and Rail Bridges is evident.

Path Ref.	Type (including CROW or core path ref. where applicable)	Predominant Users*	Description	Community Link	Local Authority/ Governing Body	Baseline Journey Length (m)	Baseline Amenity**
28	Claimed Right of Way (FD183)	Pedestrians	Path within North Queensferry from the coastal path (18) to Forthside Terrace.	n/a	Fife Council	198	Urban pathway with views of both bridges. Very low traffic flows although noise from the Forth Road and Rail Bridges is evident.
29	Claimed Right of Way (FD181)	Pedestrians	Path within North Queensferry from the coastal path (18) along Carlingnose View to Carlingnose Way	n/a	Fife Council	250	Urban roadside pathway with partial view of both bridges. Very low traffic flows although noise from the Forth Rail Bridge is evident.
30	Claimed Rights of Way (FD176)	Pedestrians	Paths linking core paths 7, 8 and 9 to the north of the Prestonhill Quarry.	Inverkeithing to Dalgety Bay	Fife Council	758	Quiet, rural parkland paths with no vehicular access.
31	NCR 1/ Local Path	Pedestrians (incl. vulnerable), Cyclists	East and west traffic-free, shared-use roadside paths crossing the Forth Road Bridge, with eastern side utilised as part of NCR 1. FETA may restrict use of the Forth Road Bridge for NMUs to the east side, retaining the west side for maintenance vehicles only. For purposes of this assessment, it is assumed that both sides of the bridge are kept open.	North Queensferry to South Queensferry (Lothian to Fife and beyond)	FETA / SUSTRANS	2659	Segregated pathway used for recreation provides view of Forth Rail Bridge. Traffic flows on the Forth Road Bridge are very high (approx. 89,150 AADT) with associated high noise levels.
32	Adopted Core Path (Part of CEC10); NCR 1	Pedestrians (incl. vulnerable), Cyclists	Part of Newbridge to South Queensferry and Kirkliston core path. Traffic-free, shared-use roadside path along the A90 from the Forth Road Bridge, via subway to Ferrymuir Gait, part of NCR 1. From Ferrymuir Gait to Viewforth Road, across Kirkliston Road (B907) to Roseberry Avenue, leading to Queensferry High School. Path leads from the school grounds past the leisure centre to Scotstoun Avenue, and joining with core path 33 on Main Street.	Forth Road Bridge to South Queensferry	City of Edinburgh Council/ SUSTRANS	2073	Traffic-free pathway through parkland and residential areas of South Queensferry. Approx. 6,250 AADT along the B907 (Kirkliston Road) where the path crosses the road. Traffic noise from the Forth Road Bridge and the B907 (Kirkliston Road) is evident.
33	Adopted Core Path (Part of CEC10); NCR 1	Pedestrians (including vulnerable), Cyclists	Part of Newbridge to South Queensferry and Kirkliston core path. On road cycleway along Main Street from South Queensferry to Wester Dalmeny, continuing east to the B924 (core path 52).	South Queensferry to Wester Dalmeny	City of Edinburgh Council/ SUSTRANS	1544	Roadside pathway through the centre of Dalmeny where traffic flows are very low (less than 100 AADT) with low noise levels.
34	Adopted Core Path (Part of CEC 6 and WL34); NCR 76	Pedestrians (incl. vulnerable), Cyclists, Equestrians	On road Firth of Forth route along Society Road and Hopetoun Road, forming part of the NCR 76, from Hopetoun to South Queensferry, linking with the Newbridge to South Queensferry core path (32).	Hopetoun to South Queensferry	City of Edinburgh Council/ West Lothian Council/ SUSTRANS	3056	Roadside pathway from underneath the Forth Road Bridge where traffic noise is evident, through residential area of South Queensferry to Hopetoun House along quiet rural Society Road (approx. 4,100 AADT). Views of both bridges.

Path Ref.	Type (including CROW or core path ref. where applicable)	Predominant Users*	Description	Community Link	Local Authority/ Governing Body	Baseline Journey Length (m)	Baseline Amenity**
35	Adopted Core Path (Part of CEC 6); NCR 76	Pedestrians (incl. vulnerable), Cyclists, Equestrians	On road Firth of Forth route through South Queensferry along Hopetoun Road and the High Street to the coastline path under the Forth Rail Bridge. Path continues along the coastline to Dalmeny House.	South Queensferry	City of Edinburgh Council/ SUSTRANS	6006	Path along the coastline from the centre of South Queensferry (approx. 3,050 AADT on High St) to rural coastal pathway providing views of both bridges. Traffic noise is evident from the Forth Road Bridge.
36	Adopted Core Path (Part of CEC10); Asserted Right of Way (LC118); NCR 76	Pedestrians (incl. vulnerable), Cyclists, Equestrians	Part of Newbridge to South Queensferry and Kirkliston core path. Path from Hopetoun Road, South Queensferry, along Morison Gardens, across The Loan (B907) to an off-road path following a disused railway line through South Queensferry to Dalmeny. This path forms part of NCR 76 to Edinburgh and links core paths 35 and 33. It continues to Kirkliston on core path 37.	South Queensferry to Wester Dalmeny	City of Edinburgh Council/ SUSTRANS	2292	Quiet traffic-free pathway along disused railway line with partial views of both bridges. One crossing of the B907 (The Loan) where low traffic flows exist (approx. 4,300 AADT).
37	Adopted Core Path (Part of CEC10); Asserted Right of Way (Part of LC114)	Pedestrians (incl. vulnerable), Cyclists, Equestrians	Part of Newbridge to South Queensferry and Kirkliston core path. Off-road path follows disused railway line from Dalmeny to Kirkliston, across the River Almond and south to the Newbridge Roundabout. Links core paths 36 to 38 and to 70.	Dalmeny to Kirkliston	City of Edinburgh Council	5397	Quite rural recreational pathway along disused railway line with no vehicular access.
38	Adopted/Proposed Core Path (Part of CEC10 and WL11)	Pedestrians (incl. vulnerable), Cyclists, Equestrians	Part of Newbridge to South Queensferry and Kirkliston and Winchburgh to Kirkliston core paths. Roadside path from the disused railway line to the east of Kirkliston along the B9080 to Winchburgh.	Kirkliston to Winchburgh	City of Edinburgh Council/ West Lothian Council	3742	Roadside pathway through the centre of Kirkliston and alongside the rural B9080 to Winchburgh where traffic flows would be approx. 8,300 AADT. Traffic noise from the M9 is evident.
39	Adopted Core Path (Part of CEC6)	Pedestrians (incl. vulnerable)	Part of Firth of Firth core path. Link between core path 35 and 36 along The Loan (B907), South Queensferry.	South Queensferry	City of Edinburgh Council	216	Urban roadside pathway on The Loan (B907) (approx. 4,300 AADT) with partial views of the bridges. Some traffic noise from Forth Road Bridge.
40	Asserted Right of Way (LW10)	Pedestrians	Footpath from Ashburnham Loan linking Dalmeny train station to core path 35 along the Firth of Forth coastline.	South Queensferry	City of Edinburgh Council	561	Urban pathway crossing road with low traffic flows (approx. 250 AADT) with views of both bridges. Noise from the Forth Rail Bridge is evident.
41	Vindicated Right of Way (LC117)	Pedestrians (incl. vulnerable)	Path from core path 36 along Main Street to Scotstoun Avenue, South Queensferry, through Lovers Lane to Kirkliston Road.	South Queensferry	City of Edinburgh Council	1560	Quiet pathway through residential streets of South Queensferry with no vehicular access.
42	Local Path Network	Pedestrians (incl. vulnerable)	Local paths through Ferry Glen Community Woodland - connect the Loan with Station Rd, and South Queensferry High Street with core path 36, giving access to St. Margaret's Primary School.	South Queensferry	City of Edinburgh Council	1294 (total)	Quiet parkland paths used for recreation with partial views of both bridge and no vehicular access.

Path Ref.	Type (including CROW or core path ref. where applicable)	Predominant Users*	Description	Community Link	Local Authority/ Governing Body	Baseline Journey Length (m)	Baseline Amenity**
43	Local Paths	Pedestrians	Local paths at South Queensferry Harbour.	South Queensferry	City of Edinburgh Council	447	Coastal paths with views of both bridges and no vehicular access. Noise from the Forth Road and Rail Bridges is evident.
44	Local Path Network	Pedestrians (incl. vulnerable)	Local paved paths linking housing in South Queensferry with the Echline Community Woodland.	South Queensferry	City of Edinburgh Council	1021	Parkland paths used for recreation with partial views of both bridges and no vehicular access although traffic noise from the Forth Road Bridge is evident.
45	Local Path Network	Pedestrians (incl. vulnerable)	Local paved paths within and around the South Queensferry/ Echline housing estate area. Two key routes are denoted by path references 45a and 45b.	South Queensferry	City of Edinburgh Council	4283 (total)	Urban paths through South Queensferry linking residential areas and the A904 where traffic flows are approx. 17,000 AADT. Partial views of Forth Road Bridge. Traffic noise is evident from A904 and Forth Road Bridge on some parts of the path network.
			45a – path along north side of A904 and south side of B924 (Bo'ness Road).			1149	
			45b – path along north side of B924 (Bo'ness Road) and A904 connecting South Queensferry to the west leading to Newton.			804	
46	Local Path Network	Pedestrians	Local informal paths within fields at Echline, used mainly by dog walkers. Linking housing areas in South Queensferry with recreational access area and extensive network of paths and tracks to the west. Four key routes which connect South Queensferry with recreational areas and Linn Mill to the west are denoted by path references 46a to 46d.	South Queensferry to Linn Mill	City of Edinburgh Council	3839 (total)	Rural recreational paths with views of both bridges. To access the paths from South Queensferry and to link Linn Mill and South Queensferry communities the B924 (Bo'ness Road) is crossed where traffic flows are approx. 1,600 AADT, with low noise levels.
			(46a) Linn Mill to South Queensferry High Street.			1634	
			(46b) Linn Mill to bus stops on B924, Bo'ness Road, South Queensferry.			840	
			(46c) Clufflat, South Queensferry to Woodland at Linn Mill.			728	
			(46d) Bus stops on B924 Bo'ness Road, South Queensferry to Woodland at Linn Mill.			531	
47	Local Path Network	Pedestrians, Cyclists	Local tracks within woodland area, linking Echline fields with informal network of paths and tracks to the northwest.	n/a	City of Edinburgh Council	236	Quiet parkland recreational paths with partial views of both bridges and no vehicular access.

Path Ref.	Type (including CROW or core path ref. where applicable)	Predominant Users*	Description	Community Link	Local Authority/ Governing Body	Baseline Journey Length (m)	Baseline Amenity**
48	Local Path Network	Pedestrians	Local network of paths and tracks in field to the west of Echline.	n/a	West Lothian Council	2127 (total)	Quiet, rural recreational paths with partial views of both bridges and no vehicular access.
49	Local Path	Pedestrians	Path from Society Road (core path 34) along Linn Mill to the north of Headrig Hill Factory, skirting along the field boundary to the Banks property. This is classified by ScotWays as a 'permissive route'.	n/a	West Lothian Council	1190	Quiet rural pathway with partial views of Forth Road Bridge and no vehicular access.
50	Local Path Network	Pedestrians	Network of local paths in field to the north of Headrig Hill Factory and linking with path 49.	n/a	West Lothian Council	1312 (total)	Quiet rural recreational paths with partial views of Forth Road Bridge and no vehicular access.
51	Local Path Network	Pedestrians	Network of local paths in woodland and under existing Forth Road Bridge linking to Morrison Gardens and core paths 35 and 36.	n/a	City of Edinburgh Council	1375 (total)	Recreational paths underneath Forth Road Bridge with no vehicular access. Traffic noise from bridge is experienced by users.
52	Adopted Core Path (Part of CEC 9); NCR 1	Pedestrians, Cyclists	Part of South Queensferry to Craigleith core path. On road route along the B924 from Hawes Brae, South Queensferry to Barnton, Edinburgh.	South Queensferry or Dalmeny to Craigleith, Edinburgh	City of Edinburgh Council	5738	Quiet rural on road pathway where traffic flows are very low (approx. 250 AADT) with partial views of Forth Rail Bridge.
53	Asserted Right of Way (Part of LC114)	Pedestrians	Rough track from Dolphington Cottages to Easter Dalmeny.	n/a	City of Edinburgh Council	1023	Quiet rural pathway with partial views of both bridges and no vehicular access.
54	Asserted Right of Way (LC116)	Pedestrians	Shared-use rough track from Standingstane Road, past Dolphington Cottages to Dolphington House.	n/a	City of Edinburgh Council	1838	Quiet rural pathway with partial views of both bridges and no vehicular access.
55	Asserted Right of Way (LC115)	Pedestrians	Path from Wellflats Road, Kirkliston to the B9080.	n/a	City of Edinburgh Council	845	Quiet rural pathway with no vehicular access.
56	Adopted Core Path (Part of CEC 11);	Pedestrians	Path alongside the River Almond from the Clifton Trading Estate through Newbridge, alongside the B800, to the south of Kirkliston, joining with core path 37 at Hallyards Road.	n/a	City of Edinburgh Council	5047	Roadside pathway along the B800 with traffic flows of approx. 7,500 AADT. The path continues along the River Almond and through agricultural fields away from any traffic flows and associated noise.
56a	Asserted Right of Way (Part of LC130)	Pedestrians	Right of way follows part of core path 56 from Newliston Road, Kirkliston to Hallyards, and continues south to join the A8, Glasgow Road (core path 70).	n/a	City of Edinburgh Council	2574	Quiet rural pathway with no vehicular access.

Path Ref.	Type (including CROW or core path ref. where applicable)	Predominant Users*	Description	Community Link	Local Authority/ Governing Body	Baseline Journey Length (m)	Baseline Amenity**
56b	Local Path	Pedestrians	Path along the southern boundary of the airport, linking right of way 56a to Ingliston Market.	n/a	City of Edinburgh Council	1780	Quiet rural pathway with no vehicular access.
57	Local Path	Pedestrians	Local path from Almondhill Road to Almondhill Steading and Cottages.	n/a	City of Edinburgh Council	355	Quiet rural pathway with no vehicular access.
58	Local Path Network	Pedestrians	Network of local paths in and around Pikes Pool and community woodland.	n/a	City of Edinburgh Council	1651	Quiet parkland recreational paths with no vehicular access and little traffic noise.
59	Local Path	Pedestrians	Path through woodland at Lindsay's Craigs.	n/a	City of Edinburgh Council	788	Woodland recreational pathway with no vehicular access and some M9 traffic noise.
60	Local Path	Pedestrians	Path from the Union Canal to Overton, runs along the boundary between City of Edinburgh and West Lothian Council.	n/a	City of Edinburgh Council/ West Lothian Council	1329	Quiet rural recreational pathway with no vehicular access.
61	Claimed Right of Way (LW14)	Pedestrians	Path from the south of Hawk Hill Wood to south of Ross's Plantation.	n/a	West Lothian Council	2580	Quiet rural recreational pathway with no vehicular access.
62	Claimed Right of Way (LW15)	Pedestrians	Path from the north of Hawk Hill Wood to the north of Ross's Plantation.	n/a	West Lothian Council	2205	Quiet rural recreational pathway with no vehicular access.
63	Claimed Right of Way (LW12)	Pedestrians, Cyclists	Path from Niddry Mains and core path 38, across the railway line and then running parallel the M9 to Winchburgh Road. Area within woodland used for recreation (biking trails and jumps).	n/a	West Lothian Council	1173	Rural recreational pathway with no vehicular access and some traffic noise form the M9.
64	Claimed Right of Way (LW10)	Pedestrians, Cyclists, Equestrians	Path from Newton to Swineburn Wood and south linking to core path 38.	n/a	West Lothian Council	2907	Rural recreational pathway crossing very quiet minor road (traffic flows approx. 250 AADT), however, traffic noise from the M9 is evident.
65	Local Path	Pedestrians, Equestrians	Local path along the northern boundary of Swineburn Wood linking minor road (66) with right of way 64.	n/a	City of Edinburgh Council	505	Quiet rural recreational pathway with no vehicular access.
65a	Local Path	Pedestrians, Equestrians	Local path to the east of Swineburn Wood linking minor road (66) with right of way 64.	n/a	City of Edinburgh Council	98	Quiet rural track with no vehicular access.

Path Ref.	Type (including CROW or core path ref. where applicable)	Predominant Users*	Description	Community Link	Local Authority/ Governing Body	Baseline Journey Length (m)	Baseline Amenity**
66	Local Path/ Minor Road	Pedestrians, Cyclists, Equestrians	Local path along minor road linking Westmuir Riding Centre with local paths 65, 73 and core path 38 (B9080).	n/a	City of Edinburgh Council	1963	Rural recreational pathway on minor road with very little traffic, however, traffic noise from the M9 and B9080 is evident.
67	Local Path/ Minor Road	Pedestrians, Cyclists, Equestrians	Minor road to the west of Westmuir Riding Centre linking to right of way 64.	n/a	City of Edinburgh Council	779	Rural recreational pathway on very quiet minor road with traffic flows of approx. 250 AADT.
68	Claimed Rights of Way (LW8 and LW9)	Pedestrians, Cyclists	Track from Icehouse Hill to Duddingston, through Newton, crossing the A904 to South Deer Park.	n/a	West Lothian Council	1905	Rural recreational pathway which crosses the A904 where traffic flows are approx. 15,500 AADT and traffic noise is evident.
69	Local Path	Pedestrians, Cyclists	Local path from the Queensferry Hotel to the Forth Road Bridge, providing access to a viewpoint and information boards.	n/a	Fife Council	78	Pathway from hotel with good views of both bridges and no vehicular access. Noise from Forth Road Bridge is evident.
70	Adopted Core Path (CEC12)	Pedestrians, Cyclists	Part of the A8 link core path, from East Mains Industrial Estate to Newbridge, Ratho Station and roundabout leading to Edinburgh Airport.	n/a	City of Edinburgh Council	5902	Paths alongside the very busy A8 link. No traffic data available, however, flows and noise levels are likely to be high.
71	Local Path	Pedestrians	Informal path through woodland running adjacent to Swine Burn.	n/a	City of Edinburgh Council	183	Rural recreational pathway along Swine Burn with no vehicular access although traffic noise from the M9 is evident.
72	Local Path/Aspirational Core Path	Pedestrians	Rough grass and dirt footpath running alongside the south side of the River Almond. Links other paths alongside River Almond to core path 56 and therefore CEC has identified this route as an aspirational core path for future development.	n/a	City of Edinburgh Council	1806	Sections of the path are very overgrown and difficult to negotiate. Noise from the airport is very evident and there are partial views of the Forth Road Bridge towers. There is no vehicular access.
73	Local Path	Pedestrians, Equestrians	Local signed footpath through agricultural fields also used by equestrians. The path is routed from the minor road at Swineburn Wood, alongside field boundaries to the south of Dundas Estate to Humbie Cottages and farm track.	n/a	City of Edinburgh Council	1659	Rural route through agricultural fields with partial views of the bridges. There is no vehicular access although traffic noise from the M9 is evident.
74	Local Path/Cycle Route	Pedestrians Cyclists	Off-road pedestrian and part cycle route along west side of the A8000 from Kirkliston to the A8000 overbridge with a crossing to a footpath on the east side leading to South Queensferry. Likely that cyclists would find the path too narrow on the approach to South Queensferry and would cycle on-road for this section.	Kirkliston to South Queensferry	City of Edinburgh Council	3017	Rural route alongside a busy road (A8000) with traffic flows of approx. 7,500 AADT, associated traffic noise is evident. At-grade crossing point for pedestrians is uncontrolled.

Path Ref.	Type (including CROW or core path ref. where applicable)	Predominant Users*	Description	Community Link	Local Authority/ Governing Body	Baseline Journey Length (m)	Baseline Amenity**
75	Minor Road	Pedestrians, Cyclists	On-road cycle and walking route from A904, South Queensferry, to Westmuir Riding Centre, linking with other cycle and pedestrian routes and core path 38 (B9080) to the south.	n/a	City of Edinburgh Council	1902	Rural route along quiet minor road with very low traffic flows (approx. 250 AADT). View of the Forth Road Bridge. Traffic noise at A904 is evident.
76	Local Path	Pedestrians	Footpath along the harbour wall in North Queensferry.	n/a	Fife Council	456	Coastal path with no vehicular access. Views of both bridges. Traffic noise from the bridges is evident.
77	Local Path	Pedestrians	Short footpath from Main Road, North Queensferry, to the shore.	n/a	Fife Council	63	Path provides access to viewpoint of the bridges. Traffic noised from Forth Road Bridge is evident.
78	Local Path	Pedestrians	Roadside tarmac path along the west side of the B980 (Castlandhill Road) from Castlandhill Wood to the southern periphery of Rosyth.	Castlandhill to Rosyth	Fife Council	786	Rural to urban pathway alongside the B980 (Castlandhill Road) where traffic flows are approx. 3,800-7,100 AADT. Some traffic noise from A90 is evident.
79	Local Path Network	Pedestrians	Network of informal rough paths through Fairy Kirk linking core paths 1 and 15.	n/a	Fife Council	1028 (total)	Paths are situated to the east of the A90/ M90 and therefore experience noise from traffic on the A90/M90. Sections are overgrown and difficult to negotiate. There is no vehicular access.
80	Local Paths	Pedestrians	Tarmac footpaths around the outer rim of Ferrytoll Junction, linking path 6 with core path 22.	Part of Inverkeithing to Rosyth/ North Queensferry link	Fife Council	279 (total)	Paths are located adjacent to traffic flows of up to approx. 6,650 AADT. The A90 slip roads are crossed at uncontrolled crossing points. Traffic noise from A90 is evident.
81	Aspirational Core Path	Pedestrians	This aspirational route identified by CEC through Port Edgar, would link core paths 35 on South Queensferry High Street, to core path 34 along Society Road. This path would be developed as part of the future redevelopment of the site (refer to Chapter 20: Policies and Plans). Currently the route cannot be utilised since the link to Society Road is obstructed by a locked gate.	n/a	City of Edinburgh Council	1265	Path is routed under the Forth Road Bridge and through Port Edgar. Some traffic noise from the Forth Road Bridge is evident. Part of the route is shared with the vehicular access road to Port Edgar.

* Although predominant users of the paths are identified, it should be noted that access is not limited to these user groups.

** Traffic Flows are AADT 18hr, 2017 without the proposed scheme. The 2017 flows are derived from 2005 base year flows.

Note: CEC = City of Edinburgh Council, WL = West Lothian Council; and F - Fife Council.

Community Facilities

17.3.16 The communities to the north and south of the Firth of Forth are defined by the non-denominational primary school catchments (refer to Figure 17.1). Table 17.8 lists the key community facilities within these communities and paths used to access them. All identified community facilities are shown on Figures 17.1 to 17.2.

17.3.17 To the north of the Firth of Forth are the communities of North Queensferry, Rosyth (represented by Camdean, Park Road and Rosyth catchments), and Inverkeithing. There is existing severance between these communities due to the current broadly north-south alignment of the A90/M90 which appears to influence the boundaries of some of these catchment areas with most located either wholly east or west of the road. Only North Queensferry and Park Road primary school catchments have areas located both to the east and west of the M90. Movements across the A90/M90 are possible via the existing Ferrytoll Junction and Dunfermline Wynd overbridge, both of which include footpaths for NMUs. The majority of the local roads in the northern study area have traffic flows of less than 8,000 AADT and no existing severance is identified within these communities.

17.3.18 Dunfermline is a large community situated to the north of the study area, partly shown on Figure 17.1a. It should be noted that many key paths provide links between Inverkeithing and Dunfermline, and Rosyth and Dunfermline, and therefore it is likely that some residents of the smaller communities would travel to facilities within Dunfermline using these links. The community of Dalgety Bay is also situated to the east of the study area with part of its community represented by the Donibristle school catchment area as shown on Figure 17.1a. Movement of NMUs to this community are likely from Rosyth, Inverkeithing and North Queensferry utilising the paths shown on Figure 17.1a. Local vehicular movements are also likely between these communities north of the Firth of Forth.

17.3.19 To the south of the Firth of Forth are the communities of South Queensferry, Echline, Dalmeny, Kirkliston and Winchburgh. Echline is an extension to the community of South Queensferry with its own primary and nursery school, although for other community facilities NMUs are likely to travel into the centre of South Queensferry. South Queensferry is severed by the existing A90, with access routes provided for local vehicular traffic and NMUs along Hopetoun Road underneath the Forth Road Bridge and over the A90 via the Echline Junction. An additional route for NMUs is available via the underpass at the toll plaza. Severance also exists for the community catchment of Echline as the existing A904 has traffic flows of approximately 18,550 AADT. Two bus stops are located on the south side of the A904 (refer to Figure 17.2c), and therefore NMUs have to negotiate the traffic without controlled crossing points. Further west, the village of Newton, which is located within the catchment of Winchburgh community, is also currently severed by the A904 (refer to Figure 17.1b), as a result of the high traffic flows on the A904, which are approximately 17,000 AADT.

17.3.20 South Queensferry provides the greatest number of community facilities and the surrounding rural environment results in large catchment areas. The potential for needing to travel several kilometres from rural areas to the nearest community facility may encourage greater use of vehicles rather than NMU movements. The rural areas themselves are however known to be used extensively by pedestrians and others for recreational activity, and functional routes exist between South Queensferry and Newton, South Queensferry/Dalmeny and Kirkliston, and Kirkliston and Winchburgh.

Table 17.8: Community Facilities

Community/ Community Facility	Community Facility Name	Population*/ Attendance (where relevant and/or known)	Paths which directly link to the facility**
Dalmeny	**(Figure 17.1b)**	**(included in South Queensferry population)**	
Church	Dalmeny Kirk	Unknown	33
Education Facilities	Dalmeny Primary School	110	n/a
Post Office	Dalmeny Sub Post Office	n/a	33
Train Station	Dalmeny Station	n/a	40
Echline	**(Figure 17.1b)**	**n/a**	
Community Woodland	Echline Community Woodland †	n/a	44
Education Facilities	Echline Primary and Nursery School	320	45
Golf Course	Dundas Golf Course	Unknown	n/a
Inverkeithing	**(Figure 17.1a)**	**5,412**	
Church	Inverkeithing Baptist Church	Unknown	6
	Inverkeithing Parish Church	Unknown	6
	St. Peters Church	Unknown	6
	St. Peter's Episcopal Church	Unknown	6
	St. Peter-in-Chains Catholic Church	Unknown	6, 15
Community Centre and Leisure Facilities	Ballast Bank Community Leisure Centre	n/a	10b
	Inverkeithing Civic Centre	n/a	15,17
	Johnstone Hall	n/a	6
Doctors	Inverkeithing Medical Centre	Unknown	6
Education Facilities	Inverkeithing High School	1500	2
	Inverkeithing Primary School	260	n/a
Library	Inverkeithing Library	n/a	6
Police Station	Inverkeithing Police Station	n/a	6
Post Office	Inverkeithing Post Office	n/a	6, 15
Train Station	Inverkeithing Station	n/a	2, 6
Kirkliston	**(Figures 17.1b & 17.1c)**	**3,043**	
Church	Kirkliston Parish Church	Unknown	n/a
Community Centre and Leisure Facilities	Kirkliston Community Centre	n/a	n/a
	Kirkliston Leisure Centre	n/a	38
Doctors	Kirkliston Medical Practice	Unknown	38
Education Facilities	Kirkliston Nursery School	56	n/a
	Kirkliston Primary School	306	38
Library	Kirkliston Library	n/a	n/a
Post Office	Kirkliston Post Office	n/a	38
Public Park/Community Woodland	Allison Park †	n/a	58
	Pikes Pool Community Woodland †	n/a	58
Riding Centre	Westmuir Riding Centre	n/a	66, 67
North Queensferry	**(Figure 17.1a)**	**1,102**	
Community Centre	North Queensferry Community Centre	n/a	19, 20
Education Facilities	North Queensferry Primary and Nursery School	143	n/a
Recreational area	Ferry Hills †	n/a	21
Train Station	North Queensferry Station	n/a	n/a

Community/ Community Facility	Community Facility Name	Population*/ Attendance (where relevant and/or known)	Paths which directly link to the facility**
Rosyth (including Camdean & Park Road Catchments)	**(Figure 17.1a)**	**12,428**	
Care Home	Meallmore lodge, Hilton Court	23	25
	Orchard Head Residential Care home	34	10a, 25
	Rosyth Day Care Centre	Unknown	11
Church	Rosyth Baptist Church	Unknown	n/a
	Rosyth Methodist Church	Unknown	n/a
	Rosyth Parish Church	Unknown	n/a
	St. Columba's Parish Church	Unknown	11
	St. John's & St Columba RC Church	Unknown	n/a
Community Centre and Leisure Facilities	Camdean Community and Leisure Centre	n/a	n/a
	Parkgate Community and Leisure Centre	n/a	n/a
Doctors	Park Road Surgery Rosyth	Unknown	5
	Primrose Lane Medical Centre	Unknown	n/a
Education Facilities	Brambles Pre School Nursery	Unknown	n/a
	Camdean Primary School and Nursery	340	12
	Kings Road Primary School and Nursery	530	12
	Park Road Primary School and Nursery	329	1
	St. Johns RC Primary	252	n/a
	The Bridges Centre (Special School)	Unknown	10, 25
Fire Station	Rosyth Fire Station	n/a	11
Library	Rosyth Library	n/a	5
Police Station	Rosyth Police Station	n/a	n/a
Post Office	North Rosyth Post Office	n/a	5
	Rosyth Terminus Post office	n/a	10
Public Park	Rosyth Public Park †	n/a	11
Train Station	Rosyth Station	n/a	n/a
South Queensferry	**(Figure 17.1b)**	**9,370**	
Church	Priory Church	Unknown	35
	Queensferry Parish Church	Unknown	36, 42
	St. Margaret's RC Parish Church	Unknown	36
Community Centre and Leisure Facilities	Port Edgar Watersports Centre †	n/a	51, 81
	Queensferry Recreation Centre	n/a	n/a
	South Queensferry and Rosebery Hall Community Learning & Development Centre	n/a	36, 42
Doctors	South Queensferry Medical Practice	Unknown	35
Education Facilities	Nippers Nursery	42	35
	St. Margaret's RC Primary	175	42
	Tom Thumb Nursery	20	39
	Queensferry High School	850	32
	Queensferry Primary and Nursery School	360	n/a
Fire Station	South Queensferry Fire Station	n/a	32
Library	South Queensferry Library	n/a	35
Police Station	Queensferry Police Station	n/a	35
Post Office	South Queensferry Sub Post Office	n/a	39

Community/ Community Facility	Community Facility Name	Population*/ Attendance (where relevant and/or known)	Paths which directly link to the facility**
Public Park/ Community Woodland	Dundas Park †	n/a	32, 41
	Ferry Glen Community Woodland †	n/a	42
	Inchcolm Park †	n/a	32
	King George V Park †	n/a	34
	Kirkliston Rd †	n/a	32
	Station Road Park †	n/a	42
Winchburgh (incl. Newton)	**(Figure 17.1b & 17.1c)**	**2,570**	
Church	St. Philomena's Parish Church	Unknown	n/a
	Winchburgh Parish Church	Unknown	n/a
Community Centre and Leisure Facilities	Newton Community Centre	n/a	n/a
	Niddry Castle Golf Course	Unknown	61, 62
	Winchburgh Community Centre	n/a	n/a
Doctors	Winchburgh Medical Practice	Unknown	n/a
Education Facilities	Winchburgh Primary and Nursery School	180	n/a
Post Office	Newton Post Office	n/a	n/a
	Winchburgh Post Office	n/a	n/a

* Population data are from 2001 Census (SCROL 2008), attendance data has been obtained through consultation with facilities in 2008.

** Paths listed are only those within the study area and described in Table 17.7.

† Included in the outdoor access assessment.

Public Transport

Public Bus Services

17.3.21 Within the study area there are a number of bus services that provide access to the local shops and facilities within the main urban centres as well as to surrounding towns and villages. A summary of the key bus services within the study area are listed in Table 17.9: 15 of these services travel across the Forth Road Bridge on the A90. The key local roads which support bus routes are the A921, B980, B981, A904, B9080, B924 and the B907. These roads either cross and/or provide access to the existing junctions of the M90 and A90.

17.3.22 The A921 provides a key transport link for Inverkeithing, Dalgety Bay and Kirkcaldy. Bus services 53 and 159 travel along this road and provide an important connection to the A90. Bus service 83 also utilises this route and provides a link between Inverkeithing and Dalgety Bay train station.

17.3.23 The B980 and B981 provide links from Dunfermline, Rosyth and Inverkeithing to the Forth Road Bridge and Ferrytoll Park and Ride which serves Edinburgh city centre. Bus services X50, 55 and 154 travel along these routes providing links from the town centres to local supermarkets and colleges on the outskirts of the towns.

17.3.24 In the southern study area, the A904 and B924 provide a key public transport link for the village of Newton and surrounding communities. Bus services X4, 43, X43, 63 and 474 travel along the A904 and B924 roads connecting South Queensferry, Dalmeny, Edinburgh, Linlithgow, and the Gyle Shopping Centre.

17.3.25 Kirkliston and Winchburgh are served by bus services 6, 38, 38A, 44N, 63 which provide important public transport links along the B9080.

Table 17.9: Key Bus Services within the Study Area

Community Link	Bus No.	Route	Service Provider
Dalgety Bay-Edinburgh	53, X53	Via Inverkeithing Square, Forth Road Bridge, Ferrytoll Park and Ride, Barton, Queensferry Road.	Stagecoach
Dalgety Bay/ Dunfermline-Edinburgh	X50	Via Rosyth, Inverkeithing, Ferrytoll Park and Ride, Forth Road Bridge, Barnton Hotel, Telford College.	Stagecoach
Dunfermline-Edinburgh	55	Via Rosyth, Inverkeithing, Ferrytoll Park and Ride, Forth Road Bridge.	Stagecoach
	154	Via Duloch Park (Tesco), Rosyth, Inverkeithing, Forth Road Bridge.	Stagecoach
Dunfermline-Inverkeithing	71	Via Rosyth, Ferrytoll Park & Ride.	Stagecoach
Dunfermline-Leven	7	Via Rosyth, Castlandhill Road, Inverkeithing.	Stagecoach
Edinburgh-Dundee	X54	Via Barnton, Forth Road Bridge, Ferrytoll Park and Ride, Rosyth, Dunfermline.	Stagecoach
Edinburgh-Dunfermline (destination Aberdeen/Inverness)	M90/M91/M 92	Via Forth Road Bridge, Ferry Toll Park and Ride, Dunfermline (Lauder College).	City Link
Edinburgh-Falkirk	44N	Via Kirkliston, Winchburgh, Linlithgow, Bo'ness, Grangemouth.	First
Glenrothes-Edinburgh	X61	Via Kirkcaldy, Ferrytoll Park and Ride, Forth Road Bridge, Barton.	Stagecoach
Inverkeithing-Dalgety Bay	83	Linking Inverkeithing and Dalgety Bay rail stations.	Stagecoach
Inverkeithing-Edinburgh Airport- Gogarburn	747	Ferrytoll Park & Ride, Forth Road Bridge, Airport, Gogarburn.	Stagecoach
Kelty- Dalgety Bay	79/ 79A	Via Dunfermline, Rosyth, Inverkeithing.	Stagecoach
Kirkcaldy- Edinburgh	159	Inverkeithing, Forth Road Bridge.	Stagecoach
South Queensferry-Bathgate	474	Via Newton, Linlithgow.	Davidson Buses
South Queensferry-Edinburgh	43/ X43/ X4	Via Dalmeny, Newton.	First
South Queensferry-Fauldhouse	6	Via Kirkliston, Winchburgh, Broxburn, Livingston.	First
South Queensferry- Gyle Shopping Centre	63	Via Newton, Kirkliston, Newbridge - Ratho.	Waverley Travel
Rosyth- Balingry	19	Via Dunfermline bus depot, Halbeath.	Stagecoach
St Andrews- Edinburgh	X58, X59 X60	Via Barnton Queensferry Road, Ferrytoll Park and Ride, Forth Road Bridge.	Stagecoach
Stirling- Edinburgh	38, 38A, X38	Via Falkirk, Linlithgow, Winchburgh, Kirkliston.	First
Townhill- North Queensferry	D7	Via Duloch Park (Tesco), Calais Muir Estate, Fife Leisure Park, Hillend, Masterton Rd, Castle Brae, Rosyth, Inverkeithing (Rail Station), Ferry Toll, North Queensferry.	Stagecoach

Public Rail Services

17.3.26 Within the study area there are a number of rail services connecting Edinburgh to Fife and beyond:

- The East Coast Main Line provides services between the northeast of Scotland and London, via Edinburgh and Fife.
- The Falkirk – Fife Line passes through the southern part of the study area.
- The Fife Circle Line links the Fife towns within the study area (Dalmeny, North Queensferry, Rosyth and Inverkeithing) to Edinburgh.

17.3.27 The location of the train stations within the study area are shown on Figures 17.1 and 17.2.

17.3.28 There is also a private railway line connecting Rosyth Dockyard with Inverkeithing, although this is not utilised as a passenger service or Network Rail operated.

Access to the Outdoors

17.3.29 The key outdoor access facilities located within the study area and surrounding communities (refer to Figures 17.1 and 17.2) are as follows:

- Area based facilities:
  i. All public parks as identified in Table 17.8.
  ii. Inland waterbodies including Ferry Loch at North Queensferry, Pike's Pool west of Kirkliston and Humbie Reservoir.
  iii. Community Woodlands including Echline, Ferry Glen and Pike's Pool.
  iv. Other Woodlands including Fairy Kirk Wood, Castlandhill Wood, St. Margaret's Wood, Swineburn Wood, Muiriehall Wood, and Ross's Plantation.
  v. Recreational areas and facilities including Ferry Hills, St. Margaret's Marsh, Echline fields and Port Edgar Watersports Centre.
- Linear access facilities:
  i. All rights of way, core paths and local paths as identified in Table 17.7.
  ii. NCRs 1 and 76 as identified in Table 17.7.
  iii. The Forth Road Bridge.
  iv. River Almond.
  v. Union Canal.

17.4 Potential Impacts

17.4.1 Potential impacts of the proposed scheme on pedestrians, cyclists, equestrians and communities are described in this section.

17.4.2 It should be noted that potential impacts identified are prior to the implementation of mitigation. However, the design development to achieve the proposed scheme design assessed within this chapter was an iterative process in which provision for maintaining NMU journeys was taken into account (i.e. the proposed scheme design already has 'incorporated' mitigation such as overbridges, underbridges, and footpaths/cycleways). The potential impacts identified in this section are therefore those that remain and for which specific mitigation measures to further reduce impacts on paths and links to communities (including new sections of paths, surfacing and signage) are identified in Section 17.5 (Mitigation).

Main Crossing

17.4.3 As indicated in the baseline section (refer to Table 17.7), path 31 currently provides a link across the Forth Road Bridge for pedestrians and cyclists on both sides of the bridge, with users segregated from traffic flows. On the east side, this link also forms part of NCR 1. The current proposals for the Main Crossing do not include permanent provision for NMUs, as with the proposed scheme in place, the Forth Road Bridge would become a designated public transport corridor and would maintain access for pedestrians and cyclists, thereby avoiding any new severance on NMUs. The significant decreased traffic flow on the Forth Road Bridge would result in an overall significant beneficial impact experienced by NMUs due to improved amenity (decreased traffic noise levels and improved local air quality, and good views of the Main Crossing).

17.4.4 All bus services which travel between Fife and the Lothians are anticipated to be maintained on the Forth Road Bridge and therefore no significant new severance from any changes to transport links between communities would occur as a result of the Main Crossing. The provision of the public transport corridor would improve travel times, benefiting the public transport network and commuting population.

17.4.5 In the event that high winds close the Forth Road Bridge to buses, diversions would be put in place to redirect them to the Main Crossing. Diversions would likely be via the A904 in order to utilise the existing bus stops for passengers travelling to and from South Queensferry. The provision of the hard shoulder on the Main Crossing would provide a designated lane for public transport in this instance, minimising diversion travel times and interaction with the general traffic.

Associated Road Infrastructure

Paths (Journey Length and Amenity Value)

17.4.6 Figure 17.3 shows 'conflict areas' where existing paths are crossed by the proposed scheme and illustrates potential NMU movements which would occur.

17.4.7 The needs of NMUs have been considered throughout the development of the proposed scheme with various access features incorporated in the design to maintain NMU routes. The proposed scheme design incorporates viaduct structures, underbridges and overbridges which would allow the following paths to be maintained across the mainline of the proposed scheme, and consequently no impact on journey length is predicted for:

- Path 15: improvement works to the M90 carriageway would not affect the existing overbridge maintaining access along this path (refer to conflict area 1: Figure 17.3a).
- Path 34: the proposed core path and NCR 76, which follows Society Road along the Firth of Forth coastline, would be maintained underneath the viaduct structure of the proposed Main Crossing (refer to conflict area 3: Figure 17.3c).
- Path 38: the proposed core path from Kirkliston to Winchburgh along the B9080 currently crosses underneath the M9 Spur via an underbridge, and over the M9 via an overbridge. The proposed scheme would include widening of the M9 Spur underbridge and road improvements to the M9 carriageway. Access would be maintained along the core path without any potential impacts during operation (refer to conflict areas 7 and 8: Figure 17.3d).
- Path 56: improvement works to the M9 carriageway would not affect the existing underbridge maintaining access along this core path (refer to conflict area 9: Figure 17.3d).

17.4.8 No indirect journey length impacts have been identified for the proposed scheme. Several minor roads are predicted to experience increases of 30% or more in traffic flow, however it is considered that users crossing these minor roads would not be affected by these increases, since traffic flows would remain low i.e. less than 1,100 AADT.

17.4.9 Table 17.10 provides details of the potential impacts on journey length directly resulting from the proposed scheme.

17.4.10 Table 17.11 provides details of the assessment of any potential change in amenity value of all the paths where a significant change in perceived safety (determined by changes in traffic flows), and/or noise, and/or air quality, and/or existing view is likely to be experienced.

17.4.11 Table 17.12 provides the overall significance of impact for the paths considered in this assessment, taking into consideration the assessments on journey length and amenity value.

Adverse Impacts

17.4.12 In the absence of mitigation, significant impacts (Moderate or above) are identified at two key areas: Ferrytoll and Echline. The new road infrastructure at these locations requires the realignment and diversion of several key path routes utilised by pedestrians (vulnerable and non-vulnerable) and cyclists, and changes in amenity value would be experienced. Footpaths and cycleways would be incorporated into the proposed scheme design at both of these locations, and wherever possible segregated provision for NMUs would be included, with safe crossing points across the roads to link into the existing network of paths and cycleways.

17.4.13 The realignment of the B981 to the west of the Ferrytoll Junction would result in impacts of Moderate/Substantial significance for those NMUs wishing to travel east to Inverkeithing from North Queensferry and from the Forth Road Bridge, using core path 22 and path 6a (NCR1) respectively. Whilst the new segregated paths with controlled crossing points could be perceived to be safer routes, utilising footpaths and cycleways alongside the A90 slip road, alongside the B981 and across Ferrytoll Junction, the journey length would be increased by 736m from the Forth Road Bridge to Inverkeithing and by 645m from North Queensferry to Inverkeithing. It should be noted that for non-vulnerable pedestrians there is an alternative shorter route available from North Queensferry to Inverkeithing via the steps to the north of the Forth Road Bridge linking to path 6. With the proposed scheme, there would also be the provision of a safe crossing point to the north of the Forth Road Bridge which would enable NMUs to cross over from path 6a to path 6 providing a more direct route to Inverkeithing. This alternative route is assessed in Section 17.6: Residual Impacts. Core path 22 and path 6a are therefore unlikely to be used by NMUs travelling between North Queensferry/ Forth Road Bridge and Inverkeithing, although if they choose to travel via these routes, the impacts on journey length would be significant. For NMUs travelling west from North Queensferry and the Forth Road Bridge to Rosyth, the route along paths 22 and 6a would shorten the journey length by 185m and 84m respectively. This would eliminate the need to negotiate the Ferrytoll Junction and result in a benefit for NMUs making this journey.

17.4.14 The southern approach of the Main Crossing would directly sever the fields at Echline and associated network of informal paths (46) within these fields, resulting in the loss of some sections of the paths (refer to Figure 17.3b). With the proposed scheme in place, in order to maintain the link between South Queensferry and Linn Mill and the recreational area to the west (paths 47 to 50), NMUs would need to divert their route via Society Road. This diversion would add between 359m and 1470m to the journey lengths. Diverting via Society Road would be considered to be a less pleasant journey than using the Echline fields, since traffic would need to be negotiated for part of the route, and the close proximity to the Main Crossing would slightly reduce the air quality and users would experience traffic noise from the Main Crossing. Overall impacts on these paths are considered to be of Moderate significance. However, it should be noted that a housing and recreational development has approved planning permission at the Echline fields (Chapter 20: Polices and Plans). Construction of the development is currently on hold due to the proposed scheme, and therefore without the proposed scheme, there is potential for the informal paths to be lost.

17.4.15 To the south of the proposed Queensferry Junction, Builyeon Road (path 75) would be severed and realigned to join the A904 further west than the existing location. Pedestrians and cyclists accessing the rural area to the south of South Queensferry, via the proposed Queensferry Junction and realigned Builyeon Road would experience a less direct route with an increased journey of over 200m. NMUs would be able to safely divert their journey via either the north or south side of the roundabout on a shared footway/cycleway and using the controlled at-grade crossing points, although, visual, air and noise impacts would be experienced at the junction. Impacts on this route are considered to be of Moderate significance.

Beneficial Impacts

17.4.16 By redirecting the majority of traffic onto the Main Crossing, traffic flows would be substantially reduced on the Forth Road Bridge and sections of the A90 directly north and south of the bridge.

Air pollutants and noise levels associated with the traffic flows would shift with the majority of the traffic, therefore, beneficial impacts are predicted for paths at the north and south ends of the Forth Road Bridge at North Queensferry (20, 26, 69) and South Queensferry (32, 35, 36, 43, 44, 51). A substantial decrease in traffic flow is also predicted along the section of the A904 to the east of the proposed Queensferry Junction from approximately 18,550 to 4,900 AADT. The amenity value of path 45a along this road would be improved and NMUs accessing the bus stops on the south side of the A904 from path 45a may perceive their crossing of the A904 to be safer.

17.4.17 Some paths would also afford good views of the Main Crossing without experiencing adverse changes in noise levels or air quality, and therefore, users of paths to the south of Rosyth (24, 25, 10a), east of Inverkeithing (7, 8, 9, 10b), at Ferry Hills (19, 20), to the southeast of North Queensferry (18, 27), north and west of South Queensferry (35, 44) and minor roads around Westmuir (65, 66, 67) would experience beneficial impacts as a result of improved amenity value.

17.4.18 Where the proposed scheme realigns the A8000 overbridge, path 74 would also be realigned and improved by creating a new section of footpath on the west side of the carriageway, connecting the new A8000 bridge to the existing Ferry Muir roundabout (refer to Figure 17.3c) which would improve the accessibility of the route leading pedestrians to a safe crossing point, and improving the connection with South Queensferry.

Table 17.10: Potential Impacts on Journey Length (without mitigation)

Conflict Area Ref.	Path Ref.	Path Type	Potential Impacts	Key Impact on Path	Baseline Journey Length (m)	Potential New Journey Length (m)	Potential Change (m)	Sensitivity	Potential Impact	
									Magnitude	Significance
1	15	Core Path	No impacts anticipated.	n/a	n/a	n/a	n/a	n/a	n/a	None
2	6	NCR 1/ Local Path	Impacts on cyclists and pedestrians. Path would be affected by the realignment of the slip road from the new Ferrytoll Junction to the Forth Road Bridge. A replacement shared footpath/ cycle route would be created alongside the new slip road as part of the proposed scheme design to maintain this route (refer to Figure 17.3a).	Realignment – negligible change	3863	3864	+ 1	Medium	Negligible	Negligible
	6a + 80	NCR 1/ Local Path	Impacts on cyclists and pedestrians. Current path from the A90 via a ramp to the B981 would be lost. A replacement path (on the west side of the A90 slip road) and ramp to the realigned B981 would be installed. Pedestrians would cross the B981 at-grade to a new footpath on the western side of the realigned road, while cyclists would use a new cycleway on the east side of the B981 joining Ferry Toll Road and NCR 76. For NMUs travelling to Inverkeithing (east of the Ferrytoll Junction), new sections of shared cycleway and footway with controlled at-grade crossings could be used to negotiate the Ferrytoll Junction (refer to Figure 17.3a). Two NMU journeys have been assessed for path 6a: (i) NMU movements west from FRB to Ferry Toll Rd (NCR 76) (ii) NMU movements east from FRB to Inverkeithing.	(i) Realignment – path shortened	1518	1434	- 84	Medium	Negligible	Negligible/ Slight Beneficial
				(ii) Realignment – path lengthened	1351	2087	+ 736	Medium	High	Moderate/ Substantial
	10	NCR 76	Impacts on cyclists. Current route of NCR 76 would be lost. An alternative route on the north side of the new roundabout at Ferrytoll Junction with 6 at-grade crossings to link with NCR 1 east of the A90 would be provided (refer to Figure 17.3a).	Realignment – path shortened	3589	3501	- 88	Medium	Negligible	Negligible/ Slight Beneficial
	22	Core Path	Impacts on pedestrians and cyclists. Current path would be lost due to the realignment of the B981. The realigned B981 would include a footpath on the west side and a cycleway on the east side. These paths would link to Ferry Toll Road and NCR 76 (refer to Figure 17.3a). For NMU movements east to Inverkeithing, this realignment would require a longer journey, including negotiating Ferrytoll Junction.	(i) Realignment – path shortened	4415	4230	- 185	High	Low	Moderate Beneficial
				(ii) Realignment – path	2182	2827	+ 645	High	High	Substantial

Conflict Area Ref.	Path Ref.	Path Type	Potential Impacts	Key Impact on Path	Baseline Journey Length (m)	Potential New Journey Length (m)	Potential Change (m)	Sensitivity	Potential Impact	
									Magnitude	Significance
			Two NMU journeys have been assessed for path 22: (i) NMU movements from North Queensferry west to Rosyth (ii) NMU movements from North Queensferry east to Inverkeithing.	lengthened						
	23	Core Path	Impacts on pedestrians (incl. vulnerable) and cyclists. The eastern section of the recreational path, which currently links with core path 22 on B981, would be lost. The proposed scheme would incorporate a link from path 23 to the new B981 and footpath and cycleway (refer to Figure 17.3a).	Severance – path shortened	1496	1370	- 126	High	Low	Moderate Beneficial
3	34	Core Path	No impacts anticipated.	n/a	n/a	n/a	n/a	n/a	n/a	None
4	45	Network of Local Paths	Impacts on pedestrians and cyclists. Paths within South Queensferry would not be affected. Two key routes on the western periphery would be directly affected (refer to routes 45a and 45b on Figure 17.3c):	-	-	-	-	-	-	-
			(45a) Footpath along the north side of the A904, east of the proposed Queensferry Junction, would be realigned alongside the new A904 to B924 link roads.	Realignment – path shortened	1149	1145	- 4	Low	Negligible	Negligible
			(45b) Footpath along north side of the B924 and A904 would be severed. A segregated footpath is proposed on the north side of realigned A904 and at Queensferry Junction (A904 overbridge) to maintain access from South Queensferry in the east towards Newton in the west.	Severance and realignment – path lengthened	804	912	+ 108	Low	Low	Negligible/ Slight
	46	Network of Local Paths	Impacts on pedestrians. The network of paths would be crossed by the proposed scheme in four locations and sections of these paths would be lost. Without mitigation, to maintain links from east to west utilising sections of paths that will not be lost, NMUs would need to divert their journey via Society Road. Four key routes have been assessed to identify the potential impacts:	Severance of 4 paths and 4 key routes – path network connections lost; paths lengthened	-	-	-	-	-	-
			(46a) Route from Linn Mill to South Queensferry High Street via Society Road.		1634	1993	+ 359	Low	Medium	Slight/ Moderate
			(46b) Route from Linn Mill via Society Road to bus stops on B924, Bo'ness Road. Diversion route is measured to the closest bus stops on Bo'ness Road.		840	1731	+ 891	Low	High	Moderate

Conflict Area Ref.	Path Ref.	Path Type	Potential Impacts	Key Impact on Path	Baseline Journey Length (m)	Potential New Journey Length (m)	Potential Change (m)	Sensitivity	Potential Impact	
									Magnitude	Significance
			(46c) Route from Clufflat, South Queensferry, via Society Road to woodland at Linn Mill.		728	1369	+ 641	Low	High	Moderate
			(46d) Route from bus stops on B924 Bo'ness Road, South Queensferry, via Society Road to woodland at Linn Mill.		531	2001	+ 1470	Low	High	Moderate
5	75	Minor Road	Impacts on pedestrians and cyclists. Builyeon Road would be severed and realigned to join the A904 further west than the existing location. This would create a longer and less direct route for NMUs accessing the rural area to the south of South Queensferry, via the proposed Queensferry Junction and realigned Builyeon Road. NMUs would be able to divert their journey via either the north or south side of the roundabout on a footpath or shared footpath/cycleway respectively using the controlled at-grade crossing points.	Severance – path lengthened	1902	2110	+ 208	Low	Medium	Slight/ Moderate
6	74	Local Path/ Cycle Route	Impacts on cyclists. The A8000 would be realigned with associated realignment of the footpath and cycle route.	Realignment – path shortened	3017	3014	- 3	Low	Negligible	Negligible
7	38	Core Path	No impacts anticipated.	n/a	n/a	n/a	n/a	n/a	n/a	None
8	38	Core Path	No impacts anticipated.	n/a	n/a	n/a	n/a	n/a	n/a	None
9	56	Core Path	No impacts anticipated.	n/a	n/a	n/a	n/a	n/a	n/a	None

Table 17.11: Potential Changes in Amenity Value (without mitigation)

Path Ref.	Path Type	Potential Impact on Safety Resulting from Changes in Traffic Flows (Predicted With and Without the Proposed Scheme for 2017)	Potential Change			Impact Significance (Amenity Value)
			Visual	Air Quality	Noise	
1	Core Path	Users of the path may experience a negligible decrease in traffic flows at the A921 crossing point (from approx. 13,050 to 12,850 AADT) for a relatively short duration of their journey. A controlled pedestrian crossing point allows users to cross the A921 safely and therefore perceived safety levels of the path not anticipated to change.	Negligible (view of road)	Not significant	Not significant	Negligible
2	Core Path	The majority of the path is off-road. Slight increases in traffic flow (from approx. 11,500 to 12,850 AADT) are predicted at the B981 crossing point although a controlled pedestrian crossing point allows users to cross the road safely and therefore no change to the perceived route safety is anticipated.	Not significant	Not significant	Not significant	Negligible
3	Core Path/ Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Not significant	Negligible
4	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Not significant	Negligible
5	Cycleway/ Local Path	A negligible decrease in traffic flow is predicted on the A921 (from approx. 13,050 to 12,850 AADT) although the path is segregated from the road, therefore, perceived safety levels not anticipated to change.	Not significant	Not significant	Not significant	Negligible
6	NCR 1/ Local Path	Traffic flow on the B981 is variable with predicted slight increases and decreases along its length. Users already negotiate a busy A921 crossing point (approx. 23,000 AADT) for a very short section of this route. Traffic along Inverkeithing High Street is predicted to increase to approx. 4,200 AADT. This increase is not considered to be significantly different to the traffic flows without the proposed scheme and therefore any change in the user's perceived safety would be unlikely. No traffic would be negotiated further south where the cycle and pedestrian route would remain on an off-road shared-use path from Ferrytoll Junction, alongside A90.	Moderate/ Substantial for section to east of Ferrytoll Junction (view of road)	Not significant on the B981 through Inverkeithing; very slight improvement alongside A90	Not significant on B981 through Inverkeithing; Significant decrease alongside A90	Slight/ Moderate
6a	NCR 1/ Local Path	With the proposed scheme the path would be routed alongside the new slip road from the Forth Road Bridge, where traffic flows of approx. 150 AADT would be substantially lower than existing flows. B981 traffic flows are not predicted to change significantly. The new ramp linking the slip road to the B981 would be a substantial improvement to the existing steep ramp and suitable for disabled use (compliant with DDA, 2005). The separate footpath on the west side and cycleway on the east side of the B981 could be perceived as a safer route than the existing narrow footpath and would direct NMUs away from the busy Ferrytoll Junction. NMU movements east to Inverkeithing would still need to negotiate Ferrytoll Junction although controlled at-grade crossings would provide safe passage across the traffic.	Moderate/ Substantial (view of road)	Very slight improvement alongside A90; Slight reduction for short section of path on B981 directly underneath Main Crossing viaduct	Significant decrease alongside A90; Slight increase for short section of path on B981 directly underneath Main Crossing viaduct	Slight/ Moderate

Path Ref.	Path Type	Potential Impact on Safety Resulting from Changes in Traffic Flows (Predicted With and Without the Proposed Scheme for 2017)	Potential Change			Impact Significance (Amenity Value)
			Visual	Air Quality	Noise	
7	Core Path/ Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Negligible/ Slight Beneficial (view of bridge)	Not significant	Not significant	Negligible/ Slight Beneficial
8	Core Path/ Right of Way	Traffic flows at the A921 crossing point are not predicted to increase from approx. 17,500 AADT), and therefore, perceived safety levels of the path would not be anticipated to change.	Negligible/ Slight Beneficial (view of bridge)	Not significant	Not significant	Negligible/ Slight Beneficial
9	Core Path/ Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Slight Beneficial (view of bridge)	Not significant	Not significant	Slight Beneficial
10	NCR 76	Since the path is routed alongside Milne Road and Ferry Toll Road on an off-road path the predicted slight decreases in traffic flow (to approx. 5,400 AADT) would not directly affect the path. The proposed controlled crossing points and off-road sections of the shared footpath/ cycleway at Ferrytoll Junction would improve the perceived safety of the route for cyclists as they would no longer be on the road.	Moderate Beneficial (view of bridge); Moderate/Substantial (view of road)	Very slight improvements and reductions at Ferrytoll Junction	Slight increase (Ferry Toll Road); very slight increases and decreases (Ferrytoll Junction); not significant on B981 through Inverkeithing.	Slight/ Moderate
10a	NCR 76	Traffic flows on this section of Ferry Toll Road are already low and therefore any negligible increases in traffic which are predicted (remain approx. 200 AADT) on this section would be unlikely to affect the perceived safety of the route.	Slight Beneficial (view of bridge)	Not significant	Not significant	Slight Beneficial
10b	NCR 76	No major traffic flows and therefore no change in perceived safety anticipated.	Slight Beneficial (view of bridge)	Not significant	Not significant	Slight Beneficial
11	Cycleway	Path is routed alongside minor roads and therefore the slight predicted increases in traffic flows (to approx. 3,000 AADT) would be unlikely to affect perceived safety for users of the path.	Not significant	Not significant	Not significant	Negligible
12	Cycleway	The predicted negligible increase in traffic flow (remains at approx. 6,050 AADT) would be unlikely to affect perceived safety for users of this path.	Not significant	Not significant	Not significant	Negligible
13	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Not significant	Negligible
14	Core Path/ Right of Way	Low traffic flows are already experienced at the B980 crossing point. A slight reduction in traffic is predicted (to approx. 1,600 AADT) which may improve the perceived safety of the crossing point.	Moderate Beneficial (view of bridge); Moderate (view of road)	Not significant	Not significant	Slight
15	Core Path	Traffic flows on the M90 overbridge are predicted to increase substantially, although the path is segregated from the road at this location and users would	Not significant	Not significant for majority of path;	Not significant for majority of path; Slight	Slight

Path Ref.	Path Type	Potential Impact on Safety Resulting from Changes in Traffic Flows (Predicted With and Without the Proposed Scheme for 2017)	Potential Change			Impact Significance (Amenity Value)
			Visual	Air Quality	Noise	
		only be crossing a flow of approx. 1,200 AADT on Dunfermline Wynd to reach Manse Road. Where the path crosses Inverkeithing High Street (B981) a slight increase in traffic flow (from approx. 3,750 to 4,200 AADT) is predicted. Increase unlikely to affect the perceived route safety as experienced for a relatively short duration of the journey. There is a 30mph speed limit and two pedestrian crossing points located on the High Street (refer to Figure 17.2a).		Very slight reduction at Dunfermline Wynd	increase at Dunfermline Wynd	
16	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Slight/ Moderate Beneficial (view of bridge); Slight/ Moderate (view of road)	Not significant	Not significant for majority of path; Slight increase towards Ferry Toll Road	Slight
17	Core Path/ Right of Way	Only a small section of this path is routed via King Street where traffic flows are predicted to increase to approx. 800 AADT. This low flow would be unlikely to affect the perceived safety of the route.	Negligible (view of bridge)	Not significant	Not significant	Negligible
18	Core Path/ Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Negligible for majority of path; Slight/Moderate Beneficial (view of bridge) at southern end of path	Not significant	Not significant	Negligible/ Slight Beneficial
19	Core Path	No traffic flows and therefore no change in perceived safety anticipated.	Moderate Beneficial (view of bridge)	Very slight improvement near A90	Slight increase	Negligible/ Slight Beneficial
20	Right of Way	Traffic flows to/from North Queensferry are unlikely to change with the proposed scheme and therefore no change in perceived safety at the B981 crossing point is predicted.	Moderate Beneficial (view of bridge)	Very slight improvement	Significant decrease alongside A90 and directly underneath Forth Road Bridge	Slight Beneficial
21	Local Paths	No traffic flows and therefore no change in perceived safety anticipated.	Moderate Beneficial (view of bridge); Slight (view of road)	Not significant	Significant increase	Slight
22	Core Path	The realigned B981 would avoid NMUs joining directly with Ferrytoll Junction and high traffic flows. NMUs would be routed on a separate footpath on the west side or a cycleway alongside the east side of the B981 to Ferry Toll Road. From here, NMUs could either continue west on segregated core path 22/ NCR 76 or head east to Ferrytoll Junction which would include controlled at-grade crossing points for safe passage across the high traffic flows.	Moderate Beneficial (view of bridge); Moderate/ Substantial to Negligible (view of road)	Slight improvement under Forth Road Bridge; Slight reduction directly underneath Main Crossing viaduct	Significant decrease under Forth Road Bridge; Significant increase underneath Main Crossing viaduct	Slight/ Moderate
23	Core Path	No traffic flows and therefore no change in perceived safety anticipated.	Moderate/ Substantial to Slight Beneficial (view of bridge); Moderate/Substantial to Slight (view of Road)	Very slight reduction towards B981	Not significant for majority of path; Slight increase towards B981	Slight/ Moderate

Path Ref.	Path Type	Potential Impact on Safety Resulting from Changes in Traffic Flows (Predicted With and Without the Proposed Scheme for 2017)	Potential Change			Impact Significance (Amenity Value)
			Visual	Air Quality	Noise	
24	Core Path	No traffic flows and therefore no change in perceived safety anticipated.	Moderate Beneficial (view of bridge)	Not significant	Not significant	Moderate Beneficial
25	Core Path	Traffic flows on Ferry Toll Road are predicted to remain approx. 200 AADT on this section and therefore would be unlikely to affect the perceived safety of the route.	Slight Beneficial (view of bridge)	Not significant	Not significant	Slight Beneficial
26	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Slight Beneficial (view of bridge)	Very slight improvement	Slight decrease	Slight Beneficial
27	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Slight/ Moderate Beneficial (view of bridge)	Not significant	Not significant	Slight/ Moderate Beneficial
28	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Negligible (view of bridge)	Not significant	Not significant	Negligible
29	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Negligible (view of bridge)	Not significant	Not significant	Negligible
30	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Negligible (view of bridge)	Not significant	Not significant	Negligible
31	Local Path/ NCR 1	Traffic flows are predicted to decrease by approx. 99% (to approx. 300 AADT) on the Forth Road Bridge which would consequently result in improved air quality and noise levels on the bridge, however, perceived safety levels would be unlikely to change since the path is segregated from the main carriageway.	Substantial Beneficial (view of bridge from west side of Forth Road Bridge)	Slight improvement	Significant decrease	Substantial Beneficial
32	Core Path/ NCR 1	A slight decrease in traffic flow at the B907 crossing point (to approx. 4,300 AADT) is predicted although the majority of the route is along roadside paths and therefore the perceived safety of the route not anticipated to change.	Negligible/ Slight Beneficial (view of bridge)	Very slight improvement for western section of path	Significant decrease near to A90 for western section of path	Slight Beneficial
33	Core Path/ NCR 1	Traffic flows are predicted to remain very low (approx. 100 AADT) and therefore no significant change in perceived route safety would be anticipated.	Not significant	Not significant	Not significant	Negligible
34	Core Path/ NCR 76	Traffic flows are predicted to remain low (approx. 4,100 AADT). However during construction, traffic flows are expected to be higher. It is proposed that Society Road will be widened for a section of approx. 300m to accommodate construction traffic and a 2.5m shared footpath/cycleway would be provided to maintain access during construction (refer to Chapter 19: Disruption due to Construction). This footpath/cycleway would be maintained for operation and therefore a slight improvement in perceived safety for approx. 300m of path 34 along Society Road would be anticipated.	Substantial to Negligible/ Slight Beneficial (view of bridge)	Slight reduction directly underneath Main Crossing	Significant increase underneath and in the vicinity of Main Crossing	Slight/ Moderate
35	Core Path/ NCR 76	Traffic flows are predicted to decrease by approx. 50% (to approx. 1,550 AADT), however, low traffic flows are already experienced along the South Queensferry High Street therefore perceived safety of the route is not	Negligible/Slight Beneficial (view of bridge)	Very slight improvement on western section of	Slight decrease on western section of South Queensferry	Slight Beneficial

Path Ref.	Path Type	Potential Impact on Safety Resulting from Changes in Traffic Flows (Predicted With and Without the Proposed Scheme for 2017)	Potential Change			Impact Significance (Amenity Value)
			Visual	Air Quality	Noise	
		anticipated to change.		South Queensferry High Street	High Street	
36	Core Path/ Right of Way/ NCR 76	A decrease in traffic flow at the B907 crossing point (to approx. 1,400 AADT) is predicted although the majority of the route is away from residential streets and therefore the perceived safety of the route is not anticipated to change.	Not significant	Very slight improvement on western section of path in South Queensferry	Significant decrease on section of path near Forth Road Bridge	Slight Beneficial
37	Core Path/ Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Not significant	Negligible
38	Core Path	Slight decreases in traffic flow (to approx. 6,100 AADT) are predicted at Kirkliston crossroads (A8000 crossing point) although crossings are controlled and therefore no change to perceived safety is anticipated.	Slight (view of road)	Very slight improvement in Kirkliston	Not significant	Negligible/ Slight
39	Core Path	Path is routed alongside the road which is predicted to experience a decrease in traffic flow (to approx. 1,550 AADT) however, since the path does not cross the road no changes to perceived safety of the path anticipated.	Negligible (view of bridge)	Very slight improvement	Not significant	Negligible
40	Right of Way	Traffic flows at the crossing point would remain low (approx. 250 AADT) and therefore no change to perceived safety is anticipated.	Not significant	Not significant	Not significant	Negligible
41	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Negligible (view of bridge)	Not significant	Not significant	Negligible
42	Local Paths	No traffic flows and therefore no change in perceived safety anticipated.	No views of proposed scheme	Not significant	Not significant for majority of paths, some slight decreases predicted	Negligible/Slight Beneficial
43	Local Paths	No traffic flows and therefore no change in perceived safety anticipated.	Negligible (view of bridge)	Very slight improvement	Slight decrease	Slight Beneficial
44	Local Paths	No traffic flows and therefore no change in perceived safety anticipated.	Slight Beneficial (view of bridge)	Very slight improvement	Significant decrease	Slight Beneficial
45	Local Paths	(45a) A substantial decrease in traffic flows along this section of the A904 is predicted from approx. 17,000 to 5,500 AADT. Consequently NMUs accessing the bus stops on the south side of the A904 from path 45a would possibly perceive their crossing to be safer. A substantial increase in traffic flow along the B924 is predicted (increase from approx. 1,600 to 2,400 AADT) however a NMU crossing point is included in the proposed scheme and would aid safe crossing of the B924 (refer to Figure 17.3b).	Slight/Moderate (view of road)	Very slight improvement	Significant decrease	Slight Beneficial

Path Ref.	Path Type	Potential Impact on Safety Resulting from Changes in Traffic Flows (Predicted With and Without the Proposed Scheme for 2017)	Potential Change			Impact Significance (Amenity Value)
			Visual	Air Quality	Noise	
		(45b) Path 45b would be realigned along the north side of the new roundabout at the proposed Queensferry Junction, which would require two crossings of the slip roads of the Main Crossing (approx. 8,700 – 10,300 AADT on each slip road). NMU crossing points, included as part of the proposed scheme, would aid safe crossing of the roundabout.	Moderate (view of road)	Significant reduction at the proposed Queensferry Junction	Significant increase at proposed Queensferry Junction	Moderate
46	Local Paths	The remaining sections of the path network within the Echline fields would not cross any traffic flows. However with the proposed scheme, NMUs travelling from west to east e.g. between Linn Mill and South Queensferry would need to divert their journey along Society Road (path 34). NMUs would need to share the route with traffic flows of approx. 4,100 AADT and therefore the risk of collision with vehicles would be higher than using the traffic free local paths within the Echline fields.	Upper field: Slight/ Moderate Beneficial (view of bridge); Moderate (view of road) Lower field: Moderate Beneficial (view of bridge); Slight/Moderate (view of road). Society Road: Substantial to Negligible/ Slight Beneficial (view of bridge)	Very slight reduction for remaining sections of paths Using Society Road: Slight reduction directly underneath Main Crossing	Significant increase for remaining sections of paths and part of Society Road	Moderate
47	Local Paths	No traffic flows and therefore no change in perceived safety anticipated.	No change (in woodland)	Not significant	Significant increase	Slight
48	Local Paths	No traffic flows and therefore no change in perceived safety anticipated.	Negligible/Slight Beneficial (view of bridge)	Not significant	Significant increase	Negligible/Slight
49	Local Path	No traffic flows and therefore no change in perceived safety anticipated.	Negligible/Slight Beneficial (view of bridge)	Not significant	Significant increase	Negligible/Slight
50	Local Paths	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Significant increase	Slight
51	Local Paths	No traffic flows and therefore no change in perceived safety anticipated.	No change (in woodland)	Not significant	Negligible/Slight decrease	Negligible/Slight Beneficial
52	Core Path/ NCR 1	A negligible increase in traffic flow (to approx. 250 AADT) predicted although the flows are low and therefore no change is perceived safety is anticipated.	Not significant	Not significant	Not significant	Negligible
53	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Not significant	Negligible
54	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Not significant	Negligible
55	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Not significant	Negligible
56	Core Path	A negligible increase in traffic is predicted along the B800 (to approx. 8300 AADT) however the path is routed alongside the road on pavement and therefore no change in perceived safety is anticipated.	Not significant	Not significant	Not significant	Negligible
56a	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Not significant	Negligible

Path Ref.	Path Type	Potential Impact on Safety Resulting from Changes in Traffic Flows (Predicted With and Without the Proposed Scheme for 2017)	Potential Change			Impact Significance (Amenity Value)
			Visual	Air Quality	Noise	
56b	Local Path	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Not significant	Negligible
57	Local Path	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Not significant	Negligible
58	Local Paths	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Not significant	Negligible
59	Local Path	No traffic flows and therefore no change in perceived safety anticipated.	No change (in woodland)	Not significant	Not significant	Negligible
60	Local Path	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Not significant	Negligible
61	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Not significant	Negligible
62	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Not significant	Negligible
63	Right of Way	No traffic flows and therefore no change in perceived safety anticipated.	Not significant	Not significant	Not significant	Negligible
64	Right of Way	Substantial increase in traffic flow is predicted however the resulting flows are still low (approx. 350 AADT) and unlikely to affect perceived route safety for NMUs.	Negligible (view of road)	Not significant	Not significant	Negligible
65	Local Path	No traffic flows and therefore no change in perceived safety anticipated.	Negligible/Slight Beneficial (view of bridge)	Not significant	Not significant	Negligible/ Slight Beneficial
66	Local Path/ Minor Road	Traffic flows along this route are predicted to be less than 10 AADT which equates to less than 1 vehicle per hour and consequently not anticipated to affect the perceived safety of the NMUs.	Negligible/Slight Beneficial (view of bridge)	Not significant	Not significant	Negligible/ Slight Beneficial
67	Local Path/ Minor Road	A slight increase in traffic flow is predicted however the resulting low flows (approx. 350 AADT) are unlikely to affect the perceived safety of the route for NMUs.	Negligible/Slight Beneficial (view of bridge)	Not significant	Not significant	Negligible/ Slight Beneficial
68	Rights of Way	Users of the path would experience a slight increase in traffic flows (to approx. 18,500 AADT) at the A904 crossing point and perceived safety levels of the path may therefore be considered to be slightly reduced.	Negligible (view of bridge)	Not significant for majority of path; Slight reduction at the A904 crossing	Not significant	Slight/ Moderate
69	Local Path	No traffic flows and therefore no change in perceived safety anticipated.	Moderate/ Substantial Beneficial (view of bridge)	Very slight improvement	Significant decrease	Moderate Beneficial
70	Core Path	No data on changes in traffic flows are available although the path is routed alongside the A8 on a separate footpath and therefore no change to perceived safety of the route is anticipated.	Not significant	Not significant	Not significant	Negligible
71	Local Path	No traffic flows and therefore no change in safety anticipated.	Not significant	Not significant	Not significant	Negligible

Path Ref.	Path Type	Potential Impact on Safety Resulting from Changes in Traffic Flows (Predicted With and Without the Proposed Scheme for 2017)	Potential Change			Impact Significance (Amenity Value)
			Visual	Air Quality	Noise	
72	Local Path/ Aspirational Core Path	No traffic flows and therefore no change in safety anticipated.	Negligible (view of bridge)	Not significant	Not significant	Negligible
73	Local Path	No traffic flows and therefore no change in perceived safety anticipated.	Negligible (view of bridge)	Not significant	Not significant	Negligible
74	Local Path/ Cycle Route	Traffic flows are predicted to slightly decrease (to approx. 5,300 AADT) on the A8000, however, the footpath/cycle route is a separate path alongside the road and therefore no change to perceived safety is anticipated. A new section of path on the west side of the A8000 connecting from the A8000 bridge to the Ferry Muir roundabout would improve the accessibility of the route leading pedestrians to a safe crossing point.	Negligible (view of bridge); Negligible/ Slight (view of road)	Some very slight improvements along path	Not significant for majority of path; slight decrease at overbridge	Slight Beneficial
75	Minor Road	Substantial traffic increases predicted along this route although the resulting flow only equates to approx. 350 AADT and is therefore not anticipated to affect the perceived safety of the route for NMUs. Diversion via the proposed Queensferry Junction would require up to four crossings of the slip roads and approach roads of the Main Crossing (approx. 8,700 – 10,300 AADT on each slip road). Segregated paths and NMU crossing points, included as part of the proposed scheme, would aid safe crossing of roundabout.	Negligible/Slight Beneficial (view of bridge); Moderate (view of road)	Not significant for majority of path; Significant reduction at the proposed Queensferry Junction	Not significant for majority of path; Significant increase at the proposed Queensferry Junction	Moderate
76	Local Path	No traffic flows and therefore no change in perceived safety anticipated.	Moderate Beneficial (view of bridge)	Not significant	Not significant	Moderate Beneficial
77	Local Path	No traffic flows and therefore no change in perceived safety anticipated.	Moderate Beneficial (view of bridge)	Not significant	Not significant	Moderate Beneficial
78	Local Path	Traffic flows predicted to decrease by approx.40% (1,600 from 3,800 AADT) on the B980, however, the footpath is routed alongside the road on a separate pavement and no change to perceived safety of the route is anticipated.	Slight Beneficial (view of bridge); Slight/ Moderate (view of road)	Not significant	Not significant	Negligible/ Slight
79	Local Paths	No traffic flows and therefore no change in perceived safety anticipated.	Negligible (view of road)	Not significant	Not significant	Negligible
80	Local Paths	The traffic flows at the crossing points of the new Ferrytoll Junction are predicted to be approx. 20% less than without the proposed scheme. The proposed scheme also includes controlled crossing points and off-road sections of footpath/ cycle path at the new Ferrytoll Junction which would improve the perceived safety of the route for NMUs.	Moderate/ Substantial (view of road)	Very slight improvements and reductions at Ferrytoll Junction	Slight increases and decreases at Ferrytoll Junction	Slight/ Moderate
81	Aspirational Core Path	Traffic flow data is not available although traffic flows to Port Edgar are unlikely to change and therefore no change in perceived safety is anticipated.	Not significant	Not significant	Significant increase at western end of path; significant decrease at eastern end of path near Forth Road Bridge	Slight

Table 17.12: Summary of Potential Impacts on NMU Paths (without mitigation)

Path Ref.	Path Type	Significance of Potential Impact		
		Journey Length	Amenity Value	Overall
1	Core Path	None	Negligible	Negligible
2	Core Path	None	Negligible	Negligible
3	Core Path/Right of Way	None	Negligible	Negligible
4	Right of Way	None	Negligible	Negligible
5	Cycleway/Local Path	None	Negligible	Negligible
6	NCR 1/ Local Path	Negligible	Slight/Moderate	Slight
6a	NCR 1/ Local Path	(i) Negligible/ Slight Beneficial (west) (ii) Moderate/ Substantial (east)	Slight/Moderate	(i) Negligible/Slight (west) (ii) Moderate/ Substantial (east)
7	Core Path/Right of Way	None	Negligible/Slight Beneficial	Negligible/Slight Beneficial
8	Core Path/Right of Way	None	Negligible/Slight Beneficial	Negligible/Slight Beneficial
9	Core Path/Right of Way	None	Slight Beneficial	Slight Beneficial
10	NCR 76	Negligible/ Slight Beneficial	Slight/Moderate	Negligible/Slight
10a	NCR 76	None	Slight Beneficial	Slight Beneficial
10b	NCR 76	None	Slight Beneficial	Slight Beneficial
11	Cycleway	None	Negligible	Negligible
12	Cycleway	None	Negligible	Negligible
13	Right of Way	None	Negligible	Negligible
14	Core Path/Right of Way	None	Slight	Negligible/Slight
15	Core Path	None	Slight	Negligible/Slight
16	Right of Way	None	Slight	Negligible/Slight
17	Core Path/Right of Way	None	Negligible	Negligible
18	Core Path/Right of Way	None	Negligible/Slight Beneficial	Negligible/Slight Beneficial
19	Core Path	None	Negligible/Slight Beneficial	Negligible/Slight Beneficial
20	Right of Way	None	Slight Beneficial	Slight Beneficial
21	Local Paths	None	Slight	Negligible/ Slight
22	Core Path	(i) Moderate Beneficial (west) (ii) Substantial (east)	Slight/Moderate	(i) Negligible/Slight (ii) Moderate/Substantial
23	Core Path	Moderate Beneficial	Slight/Moderate	Slight
24	Core Path	None	Moderate Beneficial	Moderate Beneficial
25	Core Path	None	Slight Beneficial	Slight Beneficial
26	Right of Way	None	Slight Beneficial	Slight Beneficial
27	Right of Way	None	Slight/Moderate Beneficial	Slight/ Moderate Beneficial
28	Right of Way	None	Negligible	Negligible
29	Right of Way	None	Negligible	Negligible
30	Right of Way	None	Negligible	Negligible
31	Local Path/NCR 1	None	Substantial Beneficial	Substantial Beneficial
32	Core Path/NCR 1	None	Slight Beneficial	Slight Beneficial

Path Ref.	Path Type	Significance of Potential Impact		
		Journey Length	Amenity Value	Overall
33	Core Path/ NCR 1	None	Negligible	Negligible
34	Core Path/NCR 76	None	Slight/ Moderate	Slight
35	Core Path/NCR 76	None	Slight Beneficial	Slight Beneficial
36	Core Path/ Right of Way/NCR 76	None	Slight Beneficial	Slight Beneficial
37	Core Path/ Right of Way	None	Negligible	Negligible
38	Core Path	None	Negligible/Slight	Negligible/Slight
39	Core Path	None	Negligible	Negligible
40	Right of Way	None	Negligible	Negligible
41	Right of Way	None	Negligible	Negligible
42	Local Paths	None	Negligible/Slight Beneficial	Negligible/Slight Beneficial
43	Local Paths	None	Slight Beneficial	Slight Beneficial
44	Local Paths	None	Slight Beneficial	Slight Beneficial
45	Local Paths	(45a) Negligible (45b) Negligible/Slight	(45a) Slight Beneficial (45b) Moderate	(45a) Slight Beneficial (45b) Slight/Moderate
46	Local Paths	(46a) Slight/Moderate (46b)(46c)(46d) Moderate	(All) Moderate	(All) Moderate
47	Local Paths	None	Slight	Negligible/Slight
48	Local Paths	None	Negligible/Slight	Negligible/Slight
49	Local Path	None	Negligible/Slight	Negligible/Slight
50	Local Paths	None	Slight	Negligible/Slight
51	Local Paths	None	Negligible/Slight Beneficial	Negligible/Slight Beneficial
52	Core Path/NCR 1	None	Negligible	Negligible
53	Right of Way	None	Negligible	Negligible
54	Right of Way	None	Negligible	Negligible
55	Right of Way	None	Negligible	Negligible
56	Core Path	None	Negligible	Negligible
56a	Right of Way	None	Negligible	Negligible
56b	Local Path	None	Negligible	Negligible
57	Local Path	None	Negligible	Negligible
58	Local Paths	None	Negligible	Negligible
59	Local Path	None	Negligible	Negligible
60	Local Path	None	Negligible	Negligible
61	Right of Way	None	Negligible	Negligible
62	Right of Way	None	Negligible	Negligible
63	Right of Way	None	Negligible	Negligible
64	Right of Way	None	Negligible	Negligible
65	Local Path	None	Negligible/Slight Beneficial	Negligible/Slight Beneficial
66	Local Path/Minor Road	None	Negligible/Slight Beneficial	Negligible/Slight Beneficial
67	Local Path/Minor Road	None	Negligible/Slight Beneficial	Negligible/Slight Beneficial

Path Ref.	Path Type	Significance of Potential Impact		
		Journey Length	Amenity Value	Overall
68	Rights of Way	None	Slight/Moderate	Slight
69	Local Path	None	Moderate Beneficial	Moderate Beneficial
70	Core Path	None	Negligible	Negligible
71	Local Path	None	Negligible	Negligible
72	Local Path/ Aspirational Core Path	None	Negligible	Negligible
73	Local Path	None	Negligible	Negligible
74	Local Path/Cycle Route	Negligible	Slight Beneficial	Slight Beneficial
75	Minor Road	Slight/Moderate	Moderate	Moderate
76	Local Path	None	Moderate Beneficial	Moderate Beneficial
77	Local Path	None	Moderate Beneficial	Moderate Beneficial
78	Local Path	None	Negligible/Slight	Negligible/Slight
79	Local Paths	None	Negligible	Negligible
80	Local Paths	None	Slight/Moderate	Slight
81	Aspirational Core Path	None	Slight	Negligible/ Slight

Community Severance (Relief from Existing Severance)

17.4.19 To the north of the Firth of Forth, communities are currently separated by the broadly north-south alignment of the A90/M90 carriageway creating an east-west divide. Rosyth and Dunfermline are located to the west, and Inverkeithing and North Queensferry to the east of the road. The proposed scheme is within a similar corridor to the existing A90/M90 (trending broadly north-south) and therefore it is unlikely that any relief from existing severance would result.

17.4.20 The majority of the local roads in this area have existing traffic flows of less than 8,000 AADT, which is the threshold for determining whether severance is significant, and where traffic flows are greater than 8,000 AADT no significant decreases as a result of the proposed scheme have been identified.

17.4.21 To the south of the Firth of Forth, the proposed scheme would divert the majority of vehicular traffic (except public transport which would be retained on the Forth Road Bridge) away from South Queensferry to its western periphery. Traffic volumes are predicted to be reduced on the Forth Road Bridge and A90 south of the bridge by approximately 99% (from approx. 89,200 to 300 AADT). Whilst this substantial reduction would provide significant benefits for pedestrians and cyclists accessing and using the bridge footpaths and NCR 1, it would not specifically encourage greater movements of NMUs between areas of South Queensferry, since there are no existing NMU crossing points provided on the A90.

17.4.22 Substantial severance relief is likely for the A904, south of South Queensferry, east of the proposed Queensferry Junction, where an approximate 75% decrease in traffic flow (from approx. 18,550 to 4,900 AADT) is predicted. Consequently, NMUs using path 45a may perceive the crossing of the A904 from the Echline housing estate to the bus stops on the south side to be a safer journey than the existing situation. It should be noted, however, that severance relief would only apply to NMUs crossing to the south side of the road, since the proposed scheme to the south of the A904 would sever the Echline catchment (refer to paragraph 17.4.25). To the west of the proposed Queensferry Junction, on the section of the A904 which runs through the village of Newton, no relief of existing severance is identified, since the traffic flow is predicted to increase. There are no other local roads within the southern study area that have existing traffic flows of more than 8,000 AADT and are predicted to experience significant decreases in traffic flow.

Community Severance (New Severance)

17.4.23 The proposed scheme would impact on paths which serve community facilities and path linkages between settlements as outlined in Tables 17.10, 17.11 and 17.12. The assessment of community severance considers any potential hindrance to the movements of pedestrians and others as a result of the identified impacts of the proposed scheme on paths.

17.4.24 To the north of the Firth of Forth, the proposed scheme would not directly sever any communities (as illustrated on Figure 17.1) or result in the loss of any community facilities. However, as noted in paragraph 17.4.13, the substantial restructuring of the Ferrytoll Junction and connecting roads to the Main Crossing and Forth Road Bridge would result in significant impacts on NMUs travelling between North Queensferry and Inverkeithing along path 22 and 6a, as a result of the increased distance required to travel along the realigned B981. It should however be noted that with the proposed scheme, two alternative routes are available to NMUs between North Queensferry and Inverkeithing which would provide a shorter journey than using the realigned B981. One of these routes which can be used by all NMUs (including vulnerable users), involves utilising a ramp and a new controlled crossing point north of the Forth Road Bridge (refer to Figure 17.3a). This alternative would result in a severance impact of Slight/Moderate significance. Non-vulnerable users could access Inverkeithing via a second and more direct existing route with no severance impacts, from path 22 to path 6 utilising the steps at the northern end of the Forth Road Bridge. Currently NMUs travel between North Queensferry and Inverkeithing via the uncontrolled Ferrytoll Junction where traffic flows are approx. 6,400 AADT. With the proposed scheme, the off-road alternative route that could be used by all NMUs types (including vulnerable) via a ramp and controlled crossing would cross traffic flows of only 300 AADT and is considered to be preferable.

17.4.25 To the south of the Firth of Forth, the school catchment area for Echline would be severed by the proposed scheme. This would create a divide between houses located at Linn Mill, on the western margin of South Queensferry, the primary school at Echline and the core of South Queensferry where the majority of its community facilities are located. Currently the informal path network (46) within the Echline fields provides a short route between South Queensferry and Linn Mill. With the proposed scheme this 'short-cut' would be lost and residents of Linn Mill would be required to use paths 49 and 34 (Society Road) beneath the proposed viaduct, to access South Queensferry. This alternative route is significantly longer and therefore a severance impact of Moderate/Substantial significance would result. The proposed scheme would create a divide between houses at Dundas Home Farm and Steadings and Echline primary school and facilities of South Queensferry. However with the proposed scheme, a new footpath on the west side of the A8000 would maintain the link for pedestrians to Ferry Muir roundabout and South Queensferry. It is assumed that for movements to Echline Primary School, most children living in this severed area would travel to school by car due to the rural nature of this part of the catchment and distance required to travel e.g. current shortest route from Dundas Home farm to Echline Primary School is approximately 3km. Since all road links would be maintained with the proposed scheme, no significant severance would result.

17.4.26 Movements of pedestrians and others between communities are assessed in Table 17.13. Without mitigation, Slight/Moderate severance is predicted between Inverkeithing and North Queensferry and South Queensferry and Newton, and Moderate/Substantial severance between Linn Mill and South Queensferry. It is anticipated that some of these impacts could be reduced with mitigation as outlined in Section 17.5.

Table 17.13: Potential New Community Severance (without mitigation)

Community Link	Path Links	Community Severance Impact	New Road At-Grade Crossing	Increase in Journey Distance (m) (refer to Table 17.10)	No. of hindrances e.g. new over/under bridge	Significance of Potential Impact
Inverkeithing to North Queensferry	6, 6a, 17, 18, 22, 80	Proposed scheme directly affects paths 6, 6a, 22 and 80 requiring realignment of the routes.	One new controlled crossing point to north of Forth Road Bridge, where traffic flow would be approx. 300 AADT.	+ 361m	None	Slight/ Moderate
North Queensferry to Rosyth	22	Proposed scheme directly affects core path 22 requiring realignment of the route.	None	None – path is shortened	Path would be routed underneath the replacement bridge viaduct.	None
Rosyth to Inverkeithing	1, 5, 10, 15, 80	Proposed scheme directly affects NCR 76 (path 10) and paths 80 requiring realignment of the routes.	None	None – path is shortened	One replacement underbridge crossing with improved crossing points	None
Rosyth to Dunfermline	11	No direct impacts on paths linking the communities as both are located to the west of the proposed scheme.	None	None	None	None
North Queensferry to South Queensferry	31, 32	No direct impacts on paths linking the communities.	None	None	None	None
South Queensferry to Dalmeny	33	No direct impacts on paths linking the communities.	None	None	None	None
South Queensferry to Linn Mill	46, 34/ 49	Proposed scheme directly affects path network 46 resulting in loss of link between communities. Paths 34 and 49 would be maintained.	None	+ 359m	None	Moderate/ Substantial
			None	+ 891m (to reach bus stops)	None	
South Queensferry to Newton	45b	Proposed scheme directly affects path 45b on the A904, requiring realignment of the route.	2 new crossings of the proposed Queensferry Junction (A904 overbridge – maximum of approx. 10,300 AADT)	+ 108m	A904 Overbridge at the proposed Queensferry Junction	Slight/ Moderate
South Queensferry/ Dalmeny to Kirkliston	37	No direct impacts on paths linking the communities.	None	None	None	None
Kirkliston to Winchburgh	38	Proposed scheme directly cuts across the core path.	None	None	None	None

Public Transport

17.4.27 As identified in paragraphs 17.3.21 to 17.3.25 and Table 17.9, a number of bus services cross existing junctions of the A90/M90, and in the south are routed along the A904, B9080 and B924. Vehicle access and bus routes along these roads would be maintained with the proposed scheme and therefore no significant new severance on bus links would be anticipated.

17.4.28 In addition, bus routes between Edinburgh and Fife utilising the A90 would be maintained via the Forth Road Bridge public transport corridor (refer to paragraph 17.4.4). As part of the proposed scheme, new bus links would be provided northbound from the A90 to the A8000, and southbound from the Forth Road Bridge to the A90. These would facilitate public transport movements to and from the Forth Road Bridge and improve travel times, benefiting the public transport network and commuting population.

17.4.29 Figure 17.2 shows the position of existing bus stops in the near vicinity of the proposed scheme. It is not anticipated that the position of the bus stops on the A904 and B924 (refer to Figure 17.2c) would be affected by the proposed scheme. The proposed realigned footpaths would provide continued access to the bus stops. The bus stops located at either end of the Forth Road Bridge would also be unaffected by the proposed scheme.

17.4.30 No passenger rail services would be crossed by the proposed scheme. The proposed scheme would be routed over the railway line for Rosyth Dockyard to the north of the wastewater treatment works however no impacts on the railway line would result.

17.4.31 Access to the railway stations in the vicinity of the proposed scheme would not be affected and therefore no disruption to the railway line or its services would result.

Access to the Outdoors

17.4.32 Table 17.14 provides an assessment of impacts on access to the countryside, drawing on the findings of the impact assessment on paths as outlined in Tables 17.10, 17.11 and 17.12.

17.4.33 As detailed in Table 17.14, in the absence of mitigation, significant impacts (moderate or above) would potentially result on:

- Echline fields and local paths (46);
- Core paths 22 (ii movements east);
- NCR 1 (6a (ii) along the B981 through Inverkeithing); and
- Minor road and cycle route 75.

17.4.34 As detailed in Table 17.14, beneficial impacts on outdoor access would potentially result on:

- Community woodlands: Echline and Ferry Glen;
- Inchcolm Park in South Queensferry;
- Forth Road Bridge and path 31;
- 9 core paths (7-9, 18, 19, 25, 32, 35 and 36);
- 8 rights of way (7-9, 18, 20, 26, 29, 36);
- National Cycle Routes: NCR 1 (path 31 and 32) and NCR 76 (paths 10a, 10b, 35 and 36); and
- 12 local paths and minor roads (42-44, 45a, 51, 65-67, 69, 74, 76, 77).

Table 17.14: Potential Impacts on Access to the Outdoors (without mitigation)

Facility	Facility Name	Potential Impact	Significance of Potential Impact
Area Facilities			
Community Woodlands	Echline	Users of the local paths (44 and 45) accessing the community woodland at Echline are likely to experience a more pleasant environment as a result of the proposed scheme due to decreased noise levels and improved air quality.	Slight Beneficial
	Ferry Glen	Access to the community woodland via paths 42 would not be affected by the proposed scheme although NMUs may experience a slightly more pleasant environment due to decreased noise levels.	Negligible/Slight Beneficial
	Pikes Pool	Access to the community woodland would not be affected by the proposed scheme.	Negligible
Other Woodlands	Fairy Kirk	No direct journey length impacts are predicted for paths 1, 2 and 79 which provide access to the woodland. Users of paths accessing Fairy Kirk Wood may however experience some views of the road.	Negligible
	Castlandhill	No direct journey length impacts are predicted for path 14 which provides access to the woodland although views of the Main Crossing and new road infrastructure would be evident.	Negligible/ Slight
	Swineburn, Muriehall	No direct journey length impacts are predicted for path 64 which provides access to the woodlands. Greater traffic flows predicted on the access roads, however resulting flows are still low and not anticipated to affect the perceived safety of the route for NMUs.	Negligible
Public Parks	Allison Park	No direct journey length impacts or changes to amenity value are predicted for path 58 which provides access to the park.	Negligible
	Dundas Park	No direct journey length impacts are predicted for paths 32 and 41 which provide access to the park. Users of the park may experience minor decreases in noise levels.	Negligible
	Inchcolm Park	No direct journey length impacts are predicted for path 32 which provides access to the park. Users of the park may however experience a more pleasant environment due to a slight decrease in noise levels and improvement in air quality.	Slight Beneficial
	King George V Park	No direct journey length impacts are predicted for path 34 which provides access to the park and users of the park are unlikely to experience a change in amenity.	Negligible
	Kirkliston Road Park	No direct journey length impacts are predicted for path 32 which provides access to the park. Users of the park may experience minor decreases in noise levels.	Negligible
	Rosyth Public Park	Access to the park would not be affected by the proposed scheme.	None
	Station Road Park	Access to the park via paths 42 would not be affected by the proposed scheme. Some decreases in noise levels may be experienced.	Negligible
Recreational Areas/ Facilities	Ferry Hills	The paths which provide access to Ferry Hills would not be severed by the proposed scheme. The area at Ferry Hills is predicted to experience a slight reduction in amenity value.	Negligible/Slight
	St. Margaret's Marsh	A slight change in amenity value is expected for St. Margaret's Marsh due to its proximity to the Main Crossing.	Slight
	Echline fields	The southern approach of the Main Crossing would sever the Echline fields, cutting through the network of informal paths, resulting in the loss of some sections. Informal use of the area to the west of the Main Crossing is anticipated to continue, although, access from South Queensferry to the woodlands at Linn Mill would be via Society Road resulting in a long diversion.	Moderate
	Port Edgar Watersports Centre	Aspirational core path 81 could be used to access this facility although the majority of users would be likely to travel by since the centre, promoted by Edinburgh Leisure, provides the only watersports facility in the Edinburgh area.	Negligible

Facility	Facility Name	Potential Impact	Significance of Potential Impact
Waterbodies	Ferry Loch	The paths which provide access to Ferry Hills would not be severed by the proposed scheme. The area at Ferry Hills is predicted to experience a slight reduction in amenity value although this is not anticipated to be a significant impact.	Negligible/Slight
	Humbie Reservoir	The minor road (66) and path 64 providing access to Humbie Reservoir are expected to experience greater traffic flows with the proposed scheme in place, however, the resulting flows are very low and therefore the perceived safety for NMUs would not be anticipated to change.	Negligible
	Pikes Pool	Users of the local paths (59) at Pikes Pool are unlikely to experience any change as a result of the proposed scheme.	Negligible
Linear Facilities			
Core Paths	22(ii)	The realignment of the B981 would increase journey length for NMUs travelling east as well as result in significant changes to the amenity value of the route.	Moderate/ Substantial
	22(i), 23, 34	Slight reductions in amenity value are predicted for three core paths.	Slight
	14, 15, 38	Minor reductions in amenity value are predicted for three core paths.	Negligible/Slight
	1-3, 17, 33, 37, 39, 52, 56, 70	Although minor changes in amenity value may occur, no significant impacts are predicted on the use of 10 core paths.	Negligible
	7, 8, 18, 19	Minor improvements in amenity value are predicted for four core paths.	Negligible/Slight Beneficial
	9, 25, 32, 35, 36	Slight improvements in amenity value are predicted for five core paths.	Slight Beneficial
	24	Significant views of the Main Crossing would be afforded from this core path.	Moderate Beneficial
Rights of Way	68	A slight reduction in amenity value is predicted for this right of way due to increased traffic flows at the A904 crossing point.	Slight
	14, 16	Minor reductions in amenity value are predicted for two rights of way.	Negligible/Slight
	3, 4, 13, 17, 28-30, 37, 40, 41, 53-55, 56a, 61-64	Although minor changes in amenity value may occur, no significant impacts are predicted on the use of 18 rights of way.	Negligible
	7, 8, 18	Minor improvements in amenity value are predicted for three rights of way.	Negligible/Slight Beneficial
	9, 20, 26, 36	Slight improvements in amenity value are predicted for four rights of way.	Slight Beneficial
	27	Good views of the Main Crossing would be afforded from this right of way.	Slight/Moderate Beneficial
National Cycle Routes	NCR 1	Path 6a(ii): significant increased journey length and changes in amenity value for cyclists travelling from the west side of the Forth Road Bridge, east to Inverkeithing via the B981 and Ferrytoll Junction.	Moderate/ Substantial
		Path 6: very minor changes in journey length would occur for this section of NCR 1 although traffic flows may increase slightly on some sections and views of the new infrastructure would be evident. .	Slight

Facility	Facility Name	Potential Impact	Significance of Potential Impact
		Path 6a(i): cyclists travelling west would experience a reduced journey length, although views of the new infrastructure would be evident.	Negligible/Slight
		Paths 33 and 52: these sections of NCR 1 are unlikely to experience any significant impacts.	Negligible
		Path 32: the section of NCR 1 from the Forth Road Bridge to South Queensferry would experience improved amenity.	Slight Beneficial
		Path 31: this section of NCR 1 over the Forth Road Bridge would experience improved amenity due to decreased noise and improved air quality resulting from substantially reduced traffic flows on the bridge.	Substantial Beneficial
	NCR 76	Path 34: this section of NCR 76 would experience reduced amenity value due to its location directly underneath the Main Crossing.	Slight
		Path 10: this section of NCR 76 would experience changes in journey length and amenity value at Ferrytoll Junction.	Negligible/Slight
		Paths 10a, 10b, 35 and 36: these sections of NCR 76 would experience slight improvements in amenity.	Slight Beneficial
Local Paths, Minor Roads and Cycleways	6a(ii)	Significant increased journey length and changes in amenity value for pedestrians travelling from the west side of the Forth Road Bridge, east to Inverkeithing via the B981 and Ferrytoll Junction.	Moderate/ Substantial
	46, 75	The recreational value of the network of paths at Echline would be significantly affected by the proposed scheme through severance, loss of paths and significant diversions required to access the western recreational area (paths 47 to 50). Users of path 75 would also experience reduced amenity and a longer journey length negotiating the proposed Queensferry Junction.	Moderate
	45b	Users of the path would need to negotiate the proposed Queensferry Junction resulting in increased journey length and reduced amenity.	Slight/Moderate
	6, 80	These paths would experience reduced amenity value.	Slight
	6a(i), 21, 47-50, 78	Minor reductions in amenity value are predicted for seven paths.	Negligible/Slight
	5, 11, 12, 56b, 57-60, 71-73, 79	Although minor changes in amenity value may occur, no significant impacts are predicted on the use of 12 paths.	Negligible
	42, 51, 65-67	Minor improvements in amenity value would occur for five paths.	Negligible/Slight Beneficial
	43, 44, 45a, 74	Slight improvements in amenity value are predicted for four paths.	Slight Beneficial
	69, 76, 77	Good views of the Main Crossing would be afforded from these three paths.	Moderate Beneficial
Forth Road Bridge	Local Path and NCR 1 (path 31)	This path over the Forth Road Bridge would experience improved amenity due to decreased noise and improved air quality resulting from substantially reduced traffic flows on the bridge.	Substantial Beneficial
Watercourses	River Almond	Path 56 runs alongside the River Almond and partly along the B800 but would not be significantly affected by the proposed scheme.	Negligible
	Union Canal	Access to the canal would not be affected by the proposed scheme.	None

17.5 Mitigation

17.5.1 As noted in paragraph 17.4.2, development of the proposed scheme design has taken into account the need to maintain access for NMUs along and across roads and paths directly affected by the new road infrastructure, and the proposed scheme design includes overbridges, underbridges, and new footpaths and cycleways which maintain access along existing NMU routes. This section identifies mitigation measures to avoid or reduce remaining potential impacts, as illustrated on Figure 17.3.

17.5.2 General principles for maintaining and improving access for NMUs are:

- The requirements of the Disability Discrimination Act (1995) should be incorporated into the proposed scheme wherever practicable e.g. any bridges, ramps or footpaths should take into account potential barriers to disabled people such as the gradient or surfacing (refer to paragraph 17.2.36).
- Surfacing of any new paths including alongside roads should be considered with regard to the type of user.
- Safety of paths can be improved by providing barriers to segregate traffic from paths.
- Safety of road crossing points can be improved by providing signalised crossings.
- Cycling provision can be improved by including designated cycle lanes and clear signing.
- Creation of new recreation areas and/or paths/ cycleways linking existing community facilities.

17.5.3 Amenity value of paths can also be improved as a result of the mitigation measures employed to reduce potential visual and noise impacts. These are detailed in Chapter 13, (Visual) and Chapter 16 (Traffic Noise and Vibration) and are taken into account in Section 17.6 (Residual Impacts) where applicable.

17.5.4 Mitigation proposals for NMUs are outlined in Table 17.15 and illustrated on Figure 17.3.

Table 17.15: Proposed Mitigation Measures

Item No.	Proposed Mitigation Description	Location (Path ref.)	Users	Figure Ref.
P1	The realigned footpath/cycleway from the B981, Inverkeithing to A90/Forth Road Bridge is not to be less than 2.5m wide. As a result of physical constraints the path cannot be any wider than 2.5m, although it is noted that this is narrower than recommended for a combined footpath/cycleway.	NCR 1 and local path (6)	Cyclists, Pedestrians	17.3a
P2	Ramp linking paths will be DDA compliant.	Ramp from path 6a to 22 (B981)	Pedestrians (incl. vulnerable), Cyclists	17.3a
P3	Alternative route for NMUs wishing to travel between North Queensferry and Inverkeithing, utilising a new at-grade crossing point to the north of the Forth Road Bridge.	Path 6a to path 6 Path 22 to path 6	Pedestrians, Cyclists	17.3a
P4	Alternative path route proposed west of the mainline to link A904 with Linn Mill and recreational area beyond. In order to utilise this route, an access gate through the mammal fencing to the field to the west of the proposed Queensferry Junction will be provided as part of the proposed scheme design.	Network of local paths (46)	Pedestrians	17.3b
P5	New footpath is to be created on west side of B980 to link to the right of way (16) at Castlandhill Woods.	Castlandhill Road (B980)	Pedestrians	17.3a
P6	New signage is to be installed as appropriate for NCR 1 and NCR 76.	NCR 1 on east side of A90 (6)	Cyclists	17.3a

Item No.	Proposed Mitigation Description	Location (Path ref.)	Users	Figure Ref.
		NCR 1 on B981 (6a)	Cyclists	17.3a
		NCR 76 at Ferrytoll Junction (10)	Cyclists	17.3a
P7	Traffic signals are to be provided to enable safe crossing of roads for all NMUS and crossings are to be DDA compliant. Puffin or Toucan crossings to be chosen ahead of Pelican crossings.	NCR 76 and local paths on roundabout at Ferrytoll Junction (10, 80)	Cyclists, Pedestrians (incl. vulnerable)	17.3a
		North end of Forth Road Bridge	Pedestrians (incl. vulnerable), Cyclists	17.3a
		Local path across the proposed Queensferry Junction (45b)	Pedestrians, Cyclists	17.3b
P8	Ramp linking path on St Margaret's Marsh to the realigned B981 to be provided.	Ramp from path 23 to 22 (B981)	Pedestrians Cyclists	17.3a
P9	Planting proposed as part of the landscape/ecology mitigation measures (refer to Figure 12.4) to reduce impact on amenity value.	NCR1/Local Path (6) NCR 76 (10) Right of Way (16) Local paths (21) Core path (23) Core path (38) Local paths (46) Local paths (78) Recreational areas - Ferry Hills and Echline fields.	Pedestrians (incl. vulnerable), Cyclists	12.4

17.6 Residual Impacts

17.6.1 Residual impacts taking into account proposed mitigation are described below.

Paths

17.6.2 Residual impacts on all paths are outlined in Table 17.16. Paths identified to have significant (Moderate or above) impacts pre-mitigation (refer to Section 17.4: Potential Impacts) or beneficial impacts are discussed in detail in paragraphs 17.6.3 to 17.6.13.

Core Paths

17.6.3 For users of core path 22 wishing to travel between North Queensferry and Rosyth along the realigned B981, residual impacts are predicted to be of Negligible/Slight significance. However, the realignment of the B981 would significantly affect the journey length for some NMUs wishing to travel from North Queensferry to Inverkeithing along this path. Non-vulnerable pedestrians could use the existing steps from the B981 in North Queensferry to the Forth Road Bridge and path 6 on to Inverkeithing, which would not add any significant distance to the existing journey, however, this route would only be available for able-bodied users. For all users, it is proposed that an alternative route is taken, utilising a new ramp from path 22 to path 6a and controlled crossing point to path 6 on the east side of the A90 (refer to Figure 17.3a). This alternative route would be 361m longer than the existing route on path 22 on the B981, but is 284m shorter than the route along the realigned B981. Residual impacts would still be significant for users using this alternative route, although, they would be reduced to Moderate significance.

17.6.4 Due to a reduction in traffic flows and associated decreases in noise levels to the south of the Forth Road Bridge, slight beneficial residual impacts would result on users of core paths 32, 35, and 36. Users of core paths 24 and 25, to the south of Rosyth, are also considered to experience residual beneficial impacts due to the views gained of the Main Crossing.

Rights of Way

17.6.5 No significant adverse residual impacts are predicted on the identified rights of way. However, Negligible/Slight to Slight/Moderate beneficial residual impacts would result on users of rights of way east of Inverkeithing (7-9), to the southeast of North Queensferry (18, 27), at the north end of the Forth Road Bridge (20, 26), and in South Queensferry (36) due to improved amenity value.

National Cycle Routes

17.6.6 Both NCR 1 and 76 would be maintained with the proposed scheme. No residual impacts of significance are predicted on the assessed sections of the NCRs.

17.6.7 Cyclists travelling on the section of NCR 1 from the northern end of the Forth Road Bridge, on the paths on the west side of the bridge, to the B981 and Inverkeithing (path 6a), would experience a longer journey due to the realigned B981. An alternative route is proposed across a controlled crossing point to the north of the Forth Road Bridge to enable cyclists to cross to path 6. This alternative route would shorten the journey length by 95m and therefore provide benefit to users of the route. The residual impact is assessed as having Negligible/Slight significance. Impacts on pedestrians using this route are discussed in paragraph 17.6.12.

17.6.8 Sections of NCR 76 to the south of Rosyth and east of Inverkeithing (paths 10a and 10b) would afford views of the Main Crossing and therefore beneficial impacts on amenity value would result.

17.6.9 The significantly lower traffic flows on the Forth Road Bridge would result in a significant benefit to NCR 1 on the southern approach to the Forth Road Bridge (paths 32 and 36) and on the bridge itself (path 31). Part of NCR 76 through the centre of South Queensferry (path 35) would also experience residual beneficial impacts as a result of improved amenity.

17.6.10 Appropriate signing for the realigned sections of NCR 1 and NCR 76 would improve awareness of the national routes.

Local Paths/Minor Roads

17.6.11 Local paths within the study area are considered to be of low sensitivity. However, significant residual impacts would result on the network of local paths within the Echline fields (46) since they would be severed by the proposed scheme. A NMU specific crossing at this location was not considered to be appropriate due to the informal nature of the paths and environmental impacts and economic constraints of constructing a suitable structure. The diversion routes suggested for users of these paths which connect South Queensferry with Linn Mill and the recreational area to the west would be via Society Road or the proposed Queensferry Junction. Residual impacts of Moderate significance would remain at this location for some NMU journeys due to the loss of paths within the Echline fields and direct access route across them. However it should be noted, that due to the approved planning permission for housing in this area there is potential for the local paths to be affected without the presence of the proposed scheme.

17.6.12 As noted in paragraph 17.6.7, path 6a would be substantially realigned along the B981 as part of the proposed scheme, which would add considerable length to the journey between the western side of the Forth Road Bridge and Inverkeithing. The alternative route proposed across a controlled crossing point to the north of the Forth Road Bridge to enable pedestrians to cross to path 6 would shorten the journey length by 95m and therefore provide benefit to users making this journey. The residual impact is assessed as Negligible/Slight significance.

17.6.13 The significant decreased traffic flow on the Forth Road Bridge would result in an overall beneficial impact of Substantial significance for NMUs using path 31 due to improved amenity (decreased noise levels and improved air quality as a consequence of the lower traffic flows, and good views of the Main Crossing). Residual beneficial impacts of Negligible/Slight to Slight significance are identified for local paths throughout the study area, due to improved amenity value resulting from decreased noise levels and/or improved air quality and/or views of the Main Crossing. The key areas where improvements are anticipated are the A904 to the east of the proposed Queensferry Junction (path 45a), A8000 where accessibility of path 74 would be improved, local paths in South Queensferry (42-44, 51), minor roads around Westmuir (65-67) and directly north of the Forth Road Bridge (path 69).

Table 17.16: Summary of Potential and Residual Impacts on Paths

Path Ref.	Path Type	Significance of Potential Impact	Mitigation Measure	Significance of Residual Impact
1	Core Path	Negligible	n/a	Negligible
2	Core Path	Negligible	n/a	Negligible
3	Core Path/ Right of Way	Negligible	n/a	Negligible
4	Right of Way	Negligible	n/a	Negligible
5	Cycleway/ Local Path	Negligible	n/a	Negligible
6	NCR 1/ Local Path	Slight	P1 – 2.5m footpath/cycleway. P6 – new signage would improve awareness of NCR 1. P9 – Planting would reduce impact on amenity value.	Negligible/Slight
6a	NCR 1/ Local Path	(i) Negligible/Slight (west)	P2 – DDA compliant ramp would improve accessibility P6 – new signage would improve awareness of NCR 1.	(i) Negligible/Slight (west)
		(ii) Moderate/ Substantial (east)	(ii) P3 – alternative route would result in journey length impact of Negligible/ Slight beneficial significance; P7 – traffic signals at the pedestrian crossing to the north of the Forth Road Bridge would enable a safe crossing of the A90.	(ii) Negligible/Slight (east)
7	Core Path/ Right of Way	Negligible/Slight Beneficial	n/a	Negligible/Slight Beneficial
8	Core Path/ Right of Way	Negligible/Slight Beneficial	n/a	Negligible/Slight Beneficial
9	Core Path/ Right of Way	Slight Beneficial	n/a	Slight Beneficial
10	NCR 76	Negligible/Slight	P6 – new signage would improve awareness of NCR 76. P7 – traffic signals will be provided to enable safe crossing of Ferrytoll Junction. P9 – Planting may reduce views of the road although no significant improvement in amenity value is anticipated.	Negligible
10a	NCR 76	Slight Beneficial	n/a	Slight Beneficial
10b	NCR 76	Slight Beneficial	n/a	Slight Beneficial
11	Cycleway	Negligible	n/a	Negligible
12	Cycleway	Negligible	n/a	Negligible
13	Right of Way	Negligible	n/a	Negligible
14	Core Path/ Right of Way	Negligible/Slight	n/a	Negligible/Slight
15	Core Path	Negligible/ Slight	n/a	Negligible/Slight

Path Ref.	Path Type	Significance of Potential Impact	Mitigation Measure	Significance of Residual Impact
16	Right of Way	Negligible/Slight	P9 – Planting may reduce views of the road although no significant improvement in amenity value is anticipated.	Negligible/Slight
17	Core Path/ Right of Way	Negligible	n/a	Negligible
18	Core Path/ Right of Way	Negligible/ Slight Beneficial	n/a	Negligible/ Slight Beneficial
19	Core Path	Negligible/ Slight Beneficial	n/a	Negligible/Slight Beneficial
20	Right of Way	Slight Beneficial	n/a	Slight Beneficial
21	Local Paths	Negligible/ Slight	P9 – Planting may reduce views of the road although no significant improvement in amenity value is anticipated.	Negligible/ Slight
22	Core Path	(i) Negligible/ Slight	(i) n/a	(i) Negligible/Slight (west)
		(ii) Moderate/ Substantial	(ii) P2 & P3 – alternative route utilising the ramp connecting to path 6a and the Forth Road Bridge would reduce the journey length impact to Moderate/ Substantial significance for some users. To avoid this diversion, non-vulnerable pedestrians could use the existing steps from the B981 to the Forth Road Bridge and path 6 to Inverkeithing which would provide a route approx. 250m shorter than the existing B981 path. P7 – traffic signals at the pedestrian crossing to the north of the Forth Road Bridge would enable a safe crossing of the A90.	(ii) Moderate (east)
23	Core Path	Slight	P8 – Ramp will connect path 23 to path 22. P9 – Eastern section of path 23 is located directly underneath new road infrastructure although planting would reduce impact on amenity value.	Negligible/Slight
24	Core Path	Moderate Beneficial	n/a	Moderate Beneficial
25	Core Path	Slight Beneficial	n/a	Slight Beneficial
26	Right of Way	Slight Beneficial	n/a	Slight Beneficial
27	Right of Way	Slight/ Moderate Beneficial	n/a	Slight/ Moderate Beneficial
28	Right of Way	Negligible	n/a	Negligible
29	Right of Way	Negligible	n/a	Negligible
30	Right of Way	Negligible	n/a	Negligible
31	Local Path/ NCR 1	Substantial Beneficial	n/a	Substantial Beneficial
32	Core Path/ NCR 1	Slight Beneficial	n/a	Slight Beneficial
33	Core Path/ NCR 1	Negligible	n/a	Negligible
34	Core Path/ NCR 76	Slight	n/a	Slight
35	Core Path/ NCR 76	Slight Beneficial	n/a	Slight Beneficial
36	Core Path/ Right of Way/ NCR 76	Slight Beneficial	n/a	Slight Beneficial
37	Core Path/ Right of Way	Negligible	n/a	Negligible

Path Ref.	Path Type	Significance of Potential Impact	Mitigation Measure	Significance of Residual Impact
38	Core Path	Negligible/Slight	P9 – Planting would reduce impact on amenity value.	Negligible
39	Core Path	Negligible	n/a	Negligible
40	Right of Way	Negligible	n/a	Negligible
41	Right of Way	Negligible	n/a	Negligible
42	Local Paths	Negligible/Slight Beneficial	n/a	Negligible/Slight Beneficial
43	Local Paths	Slight Beneficial	n/a	Slight Beneficial
44	Local Paths	Slight Beneficial	n/a	Slight Beneficial
45	Local Paths	(45a) Slight Beneficial (45b) Slight/ Moderate	P7 – traffic signals will enable safe crossing of the proposed Queensferry Junction.	(45a) Slight Beneficial (45b) Slight
46	Local Paths	(All) Moderate	P4 – alternative route would reduce the journey length impact to Negligible/Slight significance for route 46b and Slight/ Moderate significance for route 46d. P9 – Planting would reduce impact on amenity value for routes through the Echline fields.	(46a, 46c) Moderate (46b, 46d) Slight/ Moderate
47	Local Paths	Negligible/ Slight	n/a	Negligible/Slight
48	Local Paths	Negligible/ Slight	n/a	Negligible/Slight
49	Local Path	Negligible/ Slight	n/a	Negligible/Slight
50	Local Paths	Negligible/ Slight	n/a	Negligible/Slight
51	Local Paths	Negligible/Slight Beneficial	n/a	Negligible/Slight Beneficial
52	Core Path/ NCR 1	Negligible	n/a	Negligible
53	Right of Way	Negligible	n/a	Negligible
54	Right of Way	Negligible	n/a	Negligible
55	Right of Way	Negligible	n/a	Negligible
56	Core Path	Negligible	n/a	Negligible
56a	Right of Way	Negligible	n/a	Negligible
56b	Local Path	Negligible	n/a	Negligible
57	Local Path	Negligible	n/a	Negligible
58	Local Paths	Negligible	n/a	Negligible
59	Local Path	Negligible	n/a	Negligible
60	Local Path	Negligible	n/a	Negligible
61	Right of Way	Negligible	n/a	Negligible
62	Right of Way	Negligible	n/a	Negligible
63	Right of Way	Negligible	n/a	Negligible
64	Right of Way	Negligible	n/a	Negligible
65	Local Path	Negligible/Slight Beneficial	n/a	Negligible/Slight Beneficial
66	Local Path/ Minor Road	Negligible/Slight Beneficial	n/a	Negligible/Slight Beneficial
67	Local Path/ Minor Road	Negligible/Slight Beneficial	n/a	Negligible/Slight Beneficial
68	Rights of Way	Slight	n/a	Slight

Path Ref.	Path Type	Significance of Potential Impact	Mitigation Measure	Significance of Residual Impact
69	Local Path	Moderate Beneficial	n/a	Moderate Beneficial
70	Core Path	Negligible	n/a	Negligible
71	Local Path	Negligible	n/a	Negligible
72	Local Path/Aspirational Core Path	Negligible	n/a	Negligible
73	Local Path	Negligible	n/a	Negligible
74	Local Path/Cycle Route	Slight Beneficial	n/a	Slight Beneficial
75	Minor Road	Moderate	P7 – traffic signals will enable safe crossing of the proposed Queensferry Junction	Slight/Moderate
76	Local Path	Moderate Beneficial	n/a	Moderate Beneficial
77	Local Path	Moderate Beneficial	n/a	Moderate Beneficial
78	Local Path	Negligible/Slight	P9 – Planting would reduce impact on amenity value.	Negligible
79	Local Paths	Negligible	n/a	Negligible
80	Local Paths	Slight	P7 – traffic signals will enable safe negotiation of the Ferrytoll Junction.	Negligible/Slight
81	Aspirational Core Path	Negligible/Slight	n/a	Negligible/Slight

Community Severance

Relief from Existing Severance

17.6.14 Substantial severance relief is predicted for the A904, east of the proposed Queensferry Junction, for NMU movements from the Echline housing estate to the bus stops on the south side of the road.

New Severance

17.6.15 Residual impacts are outlined in Table 17.17.

17.6.16 Residual impacts of Slight/Moderate significance are predicted between Inverkeithing and North Queensferry, South Queensferry and Linn Mill and South Queensferry and Newton due to the negotiation of the proposed Queensferry Junction and the loss of the through-route at the Echline fields.

Table 17.17: Summary of Potential and Residual Impacts on Communities

Community Link	Significance of Potential Impact	Mitigation Measure	Significance of Residual Impact
Inverkeithing to North Queensferry	Slight/Moderate	n/a	Slight/Moderate
North Queensferry to Rosyth	None	n/a	None
Rosyth to Inverkeithing	None	n/a	None
Rosyth to Dunfermline	None	n/a	None
North Queensferry to South Queensferry	None	n/a	None
South Queensferry to Dalmeny	None	n/a	None
South Queensferry to Linn Mill	Moderate/ Substantial	Alternative route would reduce journey length from 891m to 234m, although the proposed Queensferry Junction would need to be negotiated.	Slight/Moderate
South Queensferry to Newton	Slight/Moderate	n/a	Slight/Moderate
South Queensferry/Dalmeny to Kirkliston	None	n/a	None
Kirkliston to Winchburgh	None	n/a	None

Access to the Outdoors

17.6.17 Residual impacts on outdoor access are outlined in Table 17.18.

17.6.18 The recreational value of the Echline fields would be reduced by the proposed scheme as a result of the loss of local paths (refer to Figure 17.3b). Reduced access from South Queensferry to the west of the proposed scheme would result in residual outdoor access impacts of Moderate significance. However, it should be noted that due to the approved planning permission for future development of the area, the potential for loss of local paths is likely without the presence of the proposed scheme.

17.6.19 There would be residual beneficial impacts on the Echline and Ferry Glen community woodlands, associated local paths and Inchcolm Park in South Queensferry.

17.6.20 Pedestrians and cyclists using the Forth Road Bridge would experience beneficial impacts due to improved amenity value.

Table 17.18: Summary of Potential and Residual Impacts on Access to the Outdoors

Outdoor Facility	Facility Name	Significance of Potential Impact	Mitigation Measure	Significance of Residual Impact
Area Facilities				
Community Woodlands	Echline	Slight Beneficial	n/a	Slight Beneficial
	Ferry Glen	Negligible/Slight Beneficial	n/a	Negligible/Slight Beneficial
	Pikes Pool	Negligible	n/a	Negligible
Other Woodlands	Fairy Kirk	Negligible	n/a	Negligible
	Castlandhill	Negligible/Slight	P5 – new link path alongside Castlandhill Road will improve accessibility to the Castlandhill Woods	Negligible
	Swineburn, Muriehall	Negligible	n/a	Negligible

Outdoor Facility	Facility Name	Significance of Potential Impact	Mitigation Measure	Significance of Residual Impact
Public Parks	Allison Park	Negligible	n/a	Negligible
	Dundas Park	Negligible	n/a	Negligible
	Inchcolm Park	Slight Beneficial	n/a	Slight Beneficial
	King George V Park	Negligible	n/a	Negligible
	Kirkliston Road Park	Negligible	n/a	Negligible
	Rosyth Public Park	None	n/a	None
	Station Road Park	Negligible	n/a	Negligible
Recreational Areas	Ferry Hills	Negligible/Slight	P9 – Planting may reduce views of the road although no significant improvement on amenity value is anticipated.	Negligible/Slight
	St. Margaret's Marsh	Slight	Eastern section of path 23 is located directly underneath new road infrastructure and therefore it is unlikely that impacts could be reduced. Access would be maintained to this area.	Slight
	Echline fields	Moderate	P4 – alternative route would reduce the journey length impact to Slight/ Moderate significance for recreational route 46d. P9 – Planting would reduce impact on amenity value for routes through the Echline fields.	Moderate to Slight/ Moderate
	Port Edgar Watersports Centre	Negligible	n/a	Negligible
Waterbodies	Ferry Loch	Negligible/Slight	Planting may reduce views of the road although no significant improvement in amenity value is anticipated.	Negligible/Slight
	Humbie Reservoir	Negligible	n/a	Negligible
	Pikes Pool	Negligible	n/a	Negligible
Linear Facilities				
Core Paths, Rights of Way, National Cycle Routes, Local Paths, Minor Roads and Cycle Routes	All	Range from Moderate/Substantial Adverse to Substantial Beneficial including 4 adverse significant impacts and 28 beneficial impacts (refer to Table 17.16 for further details)	Mitigation measures P1 to P9 (refer to Table 17.16 for further details)	Range from Moderate Adverse to Substantial Beneficial including 2 adverse significant impacts and 28 beneficial impacts (refer to Table 17.16 for further details)
Forth Road Bridge	Local Path and NCR 1 (path 31)	Substantial Beneficial	n/a	Substantial Beneficial
Watercourses	River Almond	Negligible	n/a	Negligible
	Union Canal	None	n/a	None

Summary of Significant Residual Impacts

17.6.21 With the proposed scheme in place, and taking into account mitigation measures as described in Section 17.5 (Mitigation), significant residual impacts remain at Ferrytoll (core path 22) and Echline (use of local path network 46). However, it should be noted that access to the Echline fields and path network 46 would be potentially affected without the proposed scheme, due to the approved planning permission within the fields.

17.6.22 Significant relief from existing severance is identified between the Echline housing estate and bus stops on the A904.

17.6.23 As a result of the significant decreased traffic flow on the Forth Road Bridge overall significant beneficial impacts on pedestrians and others using the bridge and surrounding area, especially paths and public parks in South Queensferry, would be anticipated due to decreased noise levels and improved air quality.

17.7 Ongoing Design Development

Alternative Construction Compound

17.7.1 An addition to the scheme proposals is the inclusion of an alternative location for the construction compound to the west of South Queensferry. This alternative was identified in response to concerns raised by local residents during the ongoing consultation process, and it locates the compound further to the west.

17.7.2 This alternative site would not alter the assessment provided in this chapter, as impacts on pedestrians, cyclists, equestrians and communities during construction are considered separately in Chapter 19 (Disruption Due to Construction).

Ferry Hills Rock Cuts

17.7.3 The proposed scheme design as assessed in this chapter includes significant rock cuts to the north and south of Ferrytoll Junction. Detailed design may allow these rock cuts to be avoided or reduced. Design development indicates that there could be potential for a westward shift of the proposed scheme alignment of up to approximately 15m between approximate chainage ch7500-7800 (southwest of Jamestown) and ch8150-8500 (west of Hope Street Cemetery) to allow the rock cuts to be avoided.

17.7.4 Environmental review of this refinement indicates that this could reduce adverse impacts associated with the rock cuts without materially increasing other environmental effects. If this option were taken forward it would still maintain the National Cycle Route 1 which links the A90 and Forth Bridge with Inverkeithing and the footpath along the A90 (shown on the Draft Fife Core Path Plan). There would therefore be no change to the significance of impacts reported in this chapter.

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