

SEA Environmental Report: PART 1			
To:	SEA.gateway@scotland.gsi.gov.uk		
	Or		
	SEA Gateway Scottish Government Area 2-J (South) Victoria Quay Edinburgh		

SEA Environmental Report: PART 2			
An SEA Scoping Report is attached for:	Active Travel Strategy		
The Responsible Authority is:	East Dunbartonshire Council		

EH6 6QQ

SEA Environmental Report: PART 3					
	Contact Details				
Contact Name	Neil Samson				
Job Title	SEA Technical Officer				
Contact Address	Development and Regeneration  East Dunbartonshire Council  Southbank House  Strathkelvin Place  Kirkintilloch  G66 1XQ				
Contact Telephone Number	0141 578 8615				
Contact Email	Neil.Samson@eastdunbarton.gov.uk				
Signature (electronic signature is acceptable)	2113				
Date	Date 20 <sup>th</sup> August 2015				

STRATEGIC ENVIRONMENTAL ASSESSMENT: ENVIRONMENTAL REPORT

# **Active Travel Strategy**



#### **Active Travel Strategy**

The Active Travel Strategy (ATS) is intended to provide a Framework and evidence base for investment into the active travel network to ensure that projects deliver benefits on multiple policy alternatives and demonstrate value for money in the delivery of projects. The Strategy will ensure that the selection of active travel projects is supported by robust analysis of gaps and issues in the region and ensure a coordinated approach to delivering the active travel projects.

The strategic framework of the Strategy has been fully assessed including all reasonable alternatives in order to incorporate environmental considerations throughout the Strategy. This assessment includes the strategic alternatives to delivering the outcomes of the Strategy, ambition, aims and an action plan. In each case the SEA preferred options were identified in order to inform the decision making process and provide the policy-makers with the best practicable environmental option.

The process of SEA is a systematic method for considering the likely environmental effects of this future Strategy. It aims to:

- integrate environmental factors into the Plan preparation and decision-making
- improve the Plan and enhance environmental protection
- increase public participation in decision making
- facilitate the openness and transparency of decision-making

#### **SEA Key Stages**

The key SEA stages in the preparation of the Culture, Leisure and Sport Strategy are:

#### **Scoping**

This is the process by which details for the Environmental Report are determined. Through the Scoping Report the level of detail and the consultation period were determined for the Environmental Report. For the Culture, leisure and Sport Strategy, the Scoping Report was produced and the consultation was undertaken with the appropriate Consultation Authorities: Scottish Natural Heritage, Historic Scotland and the Scottish Environmental Protection Agency.

#### **Environmental Assessment**

The Environmental Report documents the environmental assessment of the Culture, Leisure and Sport Strategy. Through assessing the Strategy as it is written, it allows the plan-makers to refine the Strategy in order to avoid or mitigate the negative environmental impacts and to further enhance the positive environmental impacts.

#### **Post-Adoption Statement**

The Post-Adoption Statement demonstrates how the findings of the SEA have been taken into account in the adopted Plan. In accordance with the Environmental Assessment (Scotland) Act 2005, the Post-Adoption Statement will demonstrate:

- The integration of environmental considerations into the Strategy
- How the findings of the Environmental Report have been taken into account
- How opinions expressed, from both the Community and Consultation Authorities during the consultation of the Environmental Report have been taken into account
- The reasons for choosing the Strategy as adopted in light of other reasonable alternatives
- The measures to be taken to monitor the significant effects of the implementation of the Strategy

The purpose of Strategic Environmental Assessment is to inform the development process for the Active Travel Strategy in order to reduce, avoid or mitigate any potential adverse environmental impacts and further enhance any potential positive impacts. This Environmental Report presents the results of the Strategic Environmental Assessment (SEA) for the Active Travel Strategy. It also establishes a monitoring framework and measures to mitigate any adverse impacts that may occur as a result of the strategic document.

## **Contents**

1.1 1.2	Policy Context Key Facts Relationship with other PPS & Objectives Environmental Protection Objectives
2.1 2.2	Environmental Context Environmental Baseline Data Environmental Issues for the Active Travel Strategy Evolution of the Environmental Baseline without the Active Travel Strategy
3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9	Assessment Framework Assessment Methodology Alternatives Assessment Findings Assessment: Strategic Direction Assessment: Ambition Assessment: Aims and Objectives Assessment: Actions Cumulative Impacts Influence of SEA on the Active Travel Strategy
4.1	Mitigation Measures and Monitoring Mitigation Measures Monitoring
	Statutory Consultation and SEA Timetable Statutory Consultation SEA Timetable
Appendix B Appendix C	International, European Community, and National Environmental Protection Objectives; Regional and Local Objectives  Ambition and Aims – Options and Reasonable Alternatives Assessment Actions – Options and Reasonable Alternatives Assessment  Consultation Authority Scoping Responses and Council Actions

## **List of Tables**

Table 1	Environmental Baseline Data
Table 2	Environmental Issues Relevant to the Active Travel Strategy
Table 3	Assessment Framework
Table 4	SEA Objectives
Table 5	Alternatives: Strategic Direction
Table 6	Assessment of the Strategic Direction and alternatives for the Active
	Travel Strategy
Table 7	Assessment of the Ambition and Alternatives for the Active Travel
	Strategy
Table 8	Assessment of Aims and Alternatives for the Active Travel Strategy
Table 9	Summary Assessments of the Actions for the Active Travel Strategy
Table 10	Mitigation examples incorporated into the assessments
Table 11	SEA Monitoring Programme for the Active Travel Strategy
Table 12	SEA Timescale and Milestones

## **List of Figures**

Figure 1	Interrelationship of the Active Strategy with other Plans, Programmes and Strategies
Figure 2	Map 1 of Natural and Historic Environment Assets and Constraints
Figure 3	Map 2 of Natural and Historic Environment Assets and Constraints
Figure 4	Map 3 of Natural and Historic Environment Assets and Constraints
Figure 5	Map 4 of Natural and Historic Environment Assets and Constraints
Figure 6	Map 5 of Natural and Historic Environment Assets and Constraints

## Section 1: Policy Context

## 1.1. Key Facts

	Section 1: Key Facts				
Responsible Authority	East Dunbartonshire Council				
Title of PPS	Active Travel Strategy				
Purpose of PPS	The purpose of the Active Travel Strategy is to:  Produce a Strategy for increasing participation in Active Travel in East Dunbartonshire spanning 5 years which will complement and deliver on transport objectives and interventions within the current Local Transport Strategy and feed into LTS2.  To set out an action plan for active travel in East Dunbartonshire outlining a range of coordinated projects which deliver multiple benefits and value for money for the region. This action programme of interventions and approaches should be derived from a robust evidence base and should include comprehensive maps of walking and cycling networks in the region.  Deliver a comprehensive strategy document for East Dunbartonshire within a national and regional context that will set out how active travel for commuting, leisure and tourism purposes will be facilitated.  Establishes East Dunbartonshire's vision for active travel in the region and sets challenging but realistic targets for participation in active travel based on rigorous review of evidence. Clearly outlines what success looks like.  Produce a strategy that is consistent with the Council, Government and transport bodies' (SPT, Sustrans) objectives and guidance for active travel.  Deliver a Monitoring Plan that determines baseline levels of walking and cycling and reports on changes in participation rates of active travel.				
What prompted the PPS (e.g. legislative, regulatory or administrative provision)	Administrative provision: The framework of an Active Travel Strategy would integrate and deliver actions set out through the adopted Local Transport Strategy 2013-17, with particular reference to:  Development and implementation of a Cycling Strategy.  Identify opportunities and develop the active travel network across East Dunbartonshire and incorporating existing local, regional and national routes, which will be undertaken in line with high environmental and design standards.  Undertake an audit of active travel routes and existing infrastructure across East Dunbartonshire through a technical appraisal.  Identify and develop the appropriate infrastructure such as improved off road surfacing, routing and on road/junction priority				

	measures to encourage cycling in rural areas of east Dunbartonshire.			
Subject (e.g. transport)	Active travel provision, availability and enhancement.			
Period covered by PPS	2015-2020			
Frequency of updates	Reviewed and monitored annually until a replacement strategy is progressed.			
Area covered by PPS  (e.g. geographical area – it is good practice to attach a map)	The geographical area of East Dunbartonshire Council plus Mugdock Country Park (geographically contained within Stirling Council but managed by EDC), and potential linkages, where appropriate, to surrounding Council areas namely: Glasgow, West Dunbartonshire, Stirling and North Lanarkshire.			
Summary of nature/ Content of the PPS				
Are there any proposed PPS objectives?	- and a monitoring framework.  Yes No			

Copy of objectives attached	Yes		No	
Date	20 <sup>th</sup> August 2	015		

#### 1.2. Relationship with other Plans, Programmes and Strategies

This section shows how other plans, programmes and strategies influence, and are influenced by the Active Travel Strategy.

1.2.1. There are a number of other strategies and plans internationally, nationally, regionally and locally that the Active Travel Strategy (ATS) needs to be integrated with. These include:

#### **International**

- Kyoto Protocol (1997)
- Gothenburg Protocol (1999)
- Johannesburg Declaration (2002)

#### European

- Strategic Plan for Biodiversity 2011-2020
- EU Birds Directive
- EU Habitats Directive
- EU Water Framework Directive
- EU 2020 Biodiversity Strategy

#### **National**

- UK Post-2010 Biodiversity Framework
- Nature Conservation (Scotland) Act 2004
- Scottish Forestry Strategy (2006)
- Scottish Planning Policy
- National Planning Framework 3
- Scottish Biodiversity Strategy (Scotland's Biodiversity: It's in Your Hands (2004) and The 2020 Challenge for Scotland's Biodiversity (2013)
- Let's Make Scotland More Active: A Strategy for Physical Activity 2003
- Let's Get Scotland Walking A National Walking Strategy
- Active Travel, Active Scotland: Our Journey to a Sustainable Future 2012
- A Long Term Vision for Active Travel in Scotland 2030 (2014)
- Cycling Action Plan for Scotland

#### Regional

- Glasgow and Clyde Valley Strategic Development Plan
- Antonine Wall Management Plan 2014-2019

#### Local

East Dunbartonshire Single Outcome Agreement

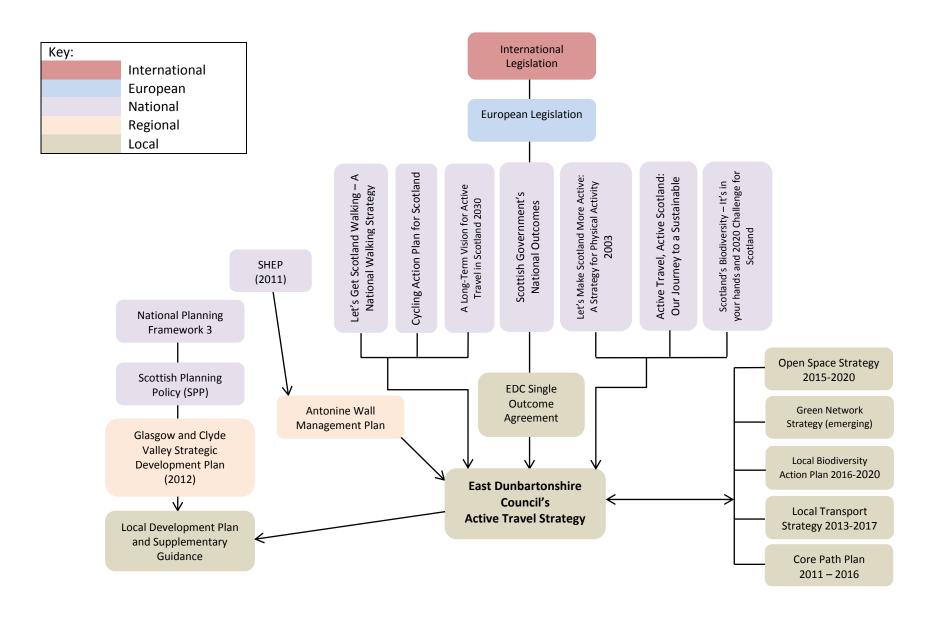
- East Dunbartonshire Local Plan 2 and emerging Local Development Plan
- East Dunbartonshire Open Space Strategy 2015-2020
- East Dunbartonshire Green Network Strategy (emerging)
- East Dunbartonshire Local Biodiversity Action Plan (emerging)
- East Dunbartonshire Core Path Plan
- East Dunbartonshire Local Transport Strategy
- 1.2.2. Cross-boundary effects with neighbouring authorities will be considered, through the integration of the ATS as well as the consideration of plans and strategies produced by the neighbouring authorities. This will be particularly important in relation to Mugdock Country Park, which lies within the Stirling Council area. It may be necessary to work with other neighbouring local authorities in the development of actions that result in strategic, regional and local impacts with potential cross-boundary effects. However it is not expected that the ATS will require consideration of transboundary effects with neighbouring EU Member States.
- 1.2.3. Appendix 1 lists key legislation, plans, programmes, policies and strategies that influence or are influenced by the ATS. This list includes documents that refer to international, european community, and national environmental objectives; regional and local objectives. Their content, where appropriate, has been used to inform the environmental objectives for the SEA of the Strategy.

#### 1.3. Environmental Protection Objectives

1.3.1. The environmental objectives that are contained within International, European, UK and Scottish legislation, as well as national guidance, which are considered to be of the greatest relevance to the ATS, will be taken into account when preparing the Strategy. These are set out in Appendix A.

Figure 1: Interrelationship of the Active Travel Strategy with Other Plans, Programmes and Strategies

This is a diagrammatic representation and as such does not include every one of the plans listed. The template below is useful for demonstrating such relationships.



### Section 2: Environmental Context

#### 2.1 Baseline Environmental Data

2.1.1. Table 1 below summarises the main baseline environmental features, assets and the environmental implications for the preparation and development of the ATS. The table also contains the SEA objectives used to assess the Strategy and further sub-criteria used within the assessment tables.

**Table 1: Environmental Baseline Data** 

Environmental Factor	Summary of baseline Environmental Data	Environmental Implications for the Active Travel Strategy	Sources of baseline Data	Proposed SEA Objectives
Population and Human Health	East Dunbartonshire has a total population of 105,860 (2013); a decrease in population of approximately 3% since 2001. Population	East Dunbartonshire hosts various areas within the top 15% of deprived areas in Scotland and is	General Register Office for Scotland	To improve human health and community wellbeing
	Projections forecast this trend to continue	showing an increase in non-	Census 2001 – for health	
	during the period between 2010 and 2035 with a reduction of 9.8% expected.	economically active population and older people.	data	
	·		Census 2011 data	
	East Dunbartonshire has a decreasing and ageing population. This is highlighted through the population projections in 2010 that by	The ATS will present opportunities for communities in East Dunbartonshire to become	National Records of Scotland, October 2014	
	2035 East Dunbartonshire's population will be 94,343 with a large increase in the 75+ age group and a projected decline of 22.8% of the	involved in projects related to the active travel network. This can result in improved quality of	Scottish Government	
	under 16 age group in comparison to the 2010	environment and will have a	Scottish Government SIMD	
	population statistics. The number of people aged over 65 years old is forecast to increase by 11,000 people between 2010 and 2035.	potentially positive impact on their wellbeing.	data for East Dunbartonshire Council	
		By raising awareness of the active	Scottish Neighbourhood	
	Areas of Hillhead and Lennoxtown are within the top 15% most deprived SIMD data zones	travel network, the ATS will provide an opportunity for health	Statistics	
	in Scotland.	and wellbeing to be improved through the upgrading and	NOMIS (Economically active population & Average weekly	
	Generally the health of the residents of East	enhancements of the areas active	wage)	
	Dunbartonshire is good with nearly 73% of the residents being generally healthy, in	travel network, improving sustainable access and links for	Scottish Household Survey	
	comparison to the average of Scotland (68%)	local residents, visitors and	(walking/ cycling to work)	
	according to the 2001 census. The level of	workers throughout East	2012/13	
	residents found to be in general health status	Dunbartonshire.		
	of 'not good' within East Dunbartonshire and Scotland was 8% and 10% respectively.	There is scope to improve the	Glasgow Centre for Population Health 2011.	

		1	1	T
		number of people partaking in	(Briefing Paper 28)	
Population and	In terms of walking and cycling to work in	walking and cycling through active		
Human Health	2012/13, East Dunbartonshire had low rates	encouragement of the natural		
(continued)	of walking (5.1%) when compared with the	environment and outdoor		
	Scottish national average (13.2%). Walking to	activities. This includes potential		
	work rates in East Dunbartonshire represent	improvements to access both		
	the 2 <sup>nd</sup> lowest rates in Scotland against all	within the EDC boundary and to		
	other Council areas. There are similarly low	other neighbouring authorities.		
	levels of cycling to the Scottish national			
	average (2.3%).	Enhancements to promote cycling		
		and core path routes in East		
	The percentage of economically active people	Dunbartonshire will potentially		
	living in East Dunbartonshire has decreased	lead to supplementary positive		
	over recent years; however, this percentage is	outcomes in reducing car travel.		
	still higher than both the Scottish and British			
	national averages.	The associated conflicts between		
		the rights for public access to the		
		environment as part of		
		improvements to the active travel		
		network and potential biodiversity		
		impacts will need to be		
		considered.		
		Enhancing the active travel		
		networks will improve connectivity		
		for those residing in urban and		
		rural areas.		

- ( 11	ITIIra	Heri	τοσο
Cu	ıtura		lage

East Dunbartonshire has: -

- 1 UNESCO World Heritage Site; Antonine Wall. A buffer zone has been identified around the Wall to help protect its setting. This is set out within the Antonine Wall Management Plan 2014-19 which was developed by Historic Scotland in partnership with East Dunbartonshire Council, Falkirk Council, North Lanarkshire Council, West Dunbartonshire Council and Glasgow Council.
- 43 Scheduled Monuments. In particular the Forth & Clyde Canal is made up of a series of Scheduled Monuments.
- 181 Listed Building, including five bridges, five mileposts, one horse trough and Milngavie Railway Station. The Luggie Water Aqueduct and Bridge, Kirkintilloch, is Category A.
- 15 Conservation Areas (4 of which are designated as outstanding)
- 21 Townscape Protection Areas
- 3 sites recommended as having the potential for meeting national inventory standards as Gardens and Designed Landscapes. 30 such sites have also been identified as having local value.
- A number of registered Buildings at Risk:

Listed Buildings and Conservation Areas contribute to the character of the streets in East Dunbartonshire. Through appropriate management and enhancement, where necessary, the character of these assets can be further promoted.

The varied and rich historic built and natural environment in East Dunbartonshire should be a vital consideration for the ATS.

The ATS should consider the role and impacts of the active travel network to the setting and value of the Antonine Wall as well as consider how improvements to the active travel network will impact on its value.

The requirements to protect Forth and Clyde Canal, as a main water body, a Scheduled Ancient Monument and a route corridor, will be influential to the ATS.

The ATS should consider how it can integrate the different historical and natural environment as part of the wider travel network in East Dunbartonshire.

Historic Scotland

Sites and Monuments Record (SMR)

East Dunbartonshire Council

United Nations Educational, Scientific and Cultural Organisation – World Heritage Site Designation

Scottish Natural Heritage

Scottish Canals Heritage Strategy 2013-38 To protect, conserve and, where appropriate, enhance the historic environment

Cultural Heritage (continued)	Baldernock  ➤ Outbuilding Bearsden  ➤ Colquhouns of Garscadden Burial Enclosure Bishopbriggs  ➤ Cawder House Stables  ➤ Huntershill House Cadder  ➤ Cadder Smithy Kirkintilloch  ➤ Broomhill Hospital, Outbuildings, Lodge and Cottages  ➤ Old Aisle Cemetery Gatelodge  ➤ 18A West High Street  ➤ Former Kirkintilloch Town Hall Lenzie  ➤ Woodilee Hospital Administration Block Lennoxtown  ➤ Lennox Castle  ➤ High Kirk of Campsie			
Biodiversity, Flora and Fauna	East Dunbartonshire has: -	Biodiversity, Flora and Fauna are important considerations for the	Dunbartonshire Biodiversity Action Plan	To protect, enhance, create and, where necessary,
and Fauna	<ul> <li>6 Sites of Special Scientific Interest (SSSI)</li> <li>2 Regional Scenic Areas</li> </ul>	ATS. The implementation of the ATS will have a direct influence on species and habitats throughout	Scottish Natural Heritage	restore biodiversity and encourage habitat connectivity
	<ul><li>66 Local Nature Conservation Sites</li></ul>	East Dunbartonshire through active travel network	East Dunbartonshire Council	,

Biodiversity, Flora
and Fauna
(continued)

#### (LNCS)

- There are networks of Local Nature Conservation Sites (LNCS) in East Dunbartonshire. There are 80 LNCS designated for their biodiversity value. These include the Forth & Clyde Canal, The John Muir & Thomas Muir Way from Kirkintilloch to Clachan of Campsie, the Main Line Railway and disused railway lines such as Balmore to Torrance to Kirkintilloch.
- Important Wildlife Corridors will be reviewed 2015/2016 so these designations along with LNCS are subject to alteration.
- 485 Tree Preservation Orders (1 other in Bearsden currently pending)
- 3 Local Nature Reserves (LNR) which include Merkland LNR, Lenzie Moss LNR and Kilmardinny Loch.

There are a number of Protected Species identified in East Dunbartonshire (including those with former Species Action Plans, priority species and lesser priority species). This includes a number of European Protected Species such as Otters, Badgers and Water Vole.

Several Invasive Non-Native Species (INNS) have been identified in East Dunbartonshire such as Japanese Knotweed.

The local habitats in East Dunbartonshire that

improvements and enhancements. The impacts on of such improvements will need to be assessed and impacts avoided, reduced or mitigated where necessary. This will be particularly significant to those the species and habitats that are priorities, vulnerable and/or protected.

The different needs for green hubs, green corridors, green links or green stepping stones should be considered and potentially addressed through the ATS.

Native species should be considered in order to enhance natural resources that are specific to the local area.

The variety of biodiversity, flora and fauna in East Dunbartonshire contributes to its scenic value. This possesses a valued interest for economic benefits in terms of increased tourism to the area.

Woodland resources in East Dunbartonshire have the potential to be integrated with opportunities in the ATS to enhance the active travel network.

It is important that native woodland is managed and protected.

Native Woodland Survey of Scotland report for East Dunbartonshire, October 2010

East Dunbartonshire Council Local Development Plan Main Issues Report, 2013

Biodiversity, Flora and Fauna (continued)	have been prioritised under the previous iteration of the LBAP are:  > Urban  > Rural  > Woodland  > Wetland  Woodland in East Dunbartonshire:  > Native woodland in East Dunbartonshire comprises 22.1% of the total woodland area (4.8% of the total land area).  > 95ha of woodland is present on ancient woodlands, which makes up 34% of native woodland  > The main native woodland types in East Dunbartonshire are lowland mixed deciduous woodland (34%), wet woodland (25%) and upland birchwoods (21%).			
Soil and Geology	Despite three quarters of the land in East Dunbartonshire being utilised for agricultural processes, the district has a small percentage (5%) of prime agricultural soil.  Currently East Dunbartonshire has not designated any areas of land as contaminated land as defined in the Environmental Protection Act 1990. However, a list of potential contaminated sites has been created based on previous land use. On this list 626 potentially contaminated sites (to varying degrees of contamination) have been identified.  There are currently 25 sites of Vacant and	The quality and level of soil in East Dunbartonshire will need to be considered as part of the ATS to ensure that opportunities to increase active travel and access to the natural environment does not result in soil exposure to elements, causing erosion and potential soil acidification.  Disturbance to peatland can result in the release of carbon into the atmosphere. Enhancements to the active travel network should consider the location of peatland in order to reduce this risk.	East Dunbartonshire Council  EDC Local Plan 2  EDC Local Development Plan  Scottish Vacant and Derelict Land Register 2013  James Hutton Institute  Scottish Natural Heritage  British Geological Survey  UKRIGS (Regionally	To protect and, where appropriate, use high quality and sensitive soils in a sustainable manner and conserve recognised geodiversity assets

Soil and Geology (continued)	Derelict Land within East Dunbartonshire with a total area of 62 hectares. These and other Brownfield land locations within East Dunbartonshire may have potentially contaminated land, depending on their historic uses.  East Dunbartonshire also has 1 RIGS (Regionally Important Geological or Geomorphological Site) at Clachan of Campsie. It also has 34 sites designated as Local Nature Conservation Sites for their geodiversity value.  A number of different sites in East Dunbartonshire have been identified as having varying levels of soil carbon richness and peatland including the Campsie Fells and the Kilpatrick Hills.		Important Geological or Geomorphological Site)  SNH Information Notice No.38 – Identification of carbon-rich soil mapping units (2012) – Scotland's Soils	
Landscape	East Dunbartonshire's landscape is diverse in terms of character and land uses. The district is characterised by five main types of landscape character: Drumlin Foothills; Rolling Farmland; Broad Valley Lowland; Rugged Moorland Hills; and urban areas.  The topography of East Dunbartonshire is generally low lying, undulating land with the exception of two of the Local Landscape Areas; the Campsie Fells and the Kilpatrick Hills to the North and West of the district respectively.  East Dunbartonshire has a total of 973.46	The ATS will consider possibilities that could potentially improve and / or fragment habitat connectivity in East Dunbartonshire, resulting in potential positive / negative effects to landscape setting and visual amenity.  Any significant actions discussed to deliver the ATS will need to consider any natural and historical designations within East Dunbartonshire in order to prevent negative effects to the landscape.	EDC Local Plan 2  British Geological Survey  UKRIGS (Regionally Important Geological or Geomorphological Site)  Glasgow & Clyde Valley Landscape Character Assessment, 1999	To protect, enhance and where appropriate, restore landscape character, loca distinctiveness and scenic value

Landscape
(continued)

hectares of urban open space; the greatest proportion of which is classified as seminatural greenspace and Regional Greenspace.

The green belt is defined in the Development Plan and covers the entire area of East Dunbartonshire, with the exception of the upland and urban areas; its objectives include maintaining the character and distinctiveness of the area's settlements.

There is a number of Local Landscape Areas (LLA) within the East Dunbartonshire Council boundary area including the Campsie Fells and Kilpatrick Hills. All of the LLA are shown on the maps within the Environmental Report.

There is scope to integrate opportunities related to the active travel routes and access to, from and through such assets as the Campsie Fells and the Kilpatrick Hills.

East Dunbartonshire has a strong local distinctiveness that has the potential to be impacted without the interventions of the ATS to improve and enhance the active travel network throughout the area.

Although an active travel network will improve community accessibility to the natural environment, it should consider the effect of this on the green belt through appropriate mitigation and management.

There is potential for the ATS to connect local, East Dunbartonshire Council wide and regional networks across the landscape of East Dunbartonshire. The scale of each of these should be considered.

The different landscape typologies, including LLA designations, will need to be considered as part of the consideration of enhancement and improvement opportunities within the ATS.

Water Quality	The main watercourses within East	The water in East Dunbartonshire	SEPA – RBMP Data	To prevent deterioration and,
	Dunbartonshire are the River Kelvin, Glazert	is a vital resource. The		where possible, enhance the
	Water, Allander Water, Luggie Water, Forth	management and control we have	East Dunbartonshire Council	ecological status of water
	and Clyde Canal and Bothlin Burn. East	over this resource has major		bodies
	Dunbartonshire also has two reservoirs in	implications on a number of	Dunbartonshire Biodiversity	
	Milngavie and a number of other small dams	factors, including, water quality,	Action Plan	
	in various locations throughout East	biodiversity and human health.		
	Dunbartonshire, which are of significant value	These are important		
	to the surrounding area.	considerations for the ATS.		
	From the 2009-2015 River Basin Management	The impact of increased footfall		
	Plan cycle, East Dunbartonshire had:	across various different networks		
		should be considered in order to		
	5.52 km of good quality watercourses	prevent a decline in water quality.		
		This is particularly vital to main		
	33.82 km of watercourses with good	waterbodies in East		
	ecological potential	Dunbartonshire such as the Forth		
		and Clyde Canal and the River		
	> 16.01 km of moderate quality watercourses	Kelvin.		
		Enhancements to the active travel		
	> 19.88 km of watercourses with	networks in close proximity to		
	moderate ecological potential	river networks have the potential		
		to deliver improvements to water		
	48.19 km of watercourses with poor	quality and morphology, with		
	ecological potential	added benefits of creating new or		
		improved habitats.		
	> 17.32 km of poor quality watercourses			
		The requirements of the Water		
	28.31 km of watercourses with bad	Framework Directive should be		
	ecological potential	taken into account.		
	All groundwater resources were also assessed	In terms of biodiversity, the ATS		
	in 2008 and found to be of good ecological	should consider impacts to		
	status.	wetland quality.		

Water Quality (continued)	*Flooding is discussed in <i>Climatic Factors</i>			
Air Quality	Emissions from transport has been identified	Contributing factors that can lead	East Dunbartonshire Council	To prevent deterioration and,
	as the main contributor of NO <sub>2</sub> and PM10	to increased emissions and result		where possible, enhance air
	(particulates) pollution, specifically, in East	in air pollution, include, transport	National Air Emissions	quality
	Dunbartonshire. Domestic emissions are the main contributor of CO₂ emissions.	(both private and public) and developments which generate	Inventory	
	main contributor of Co <sub>2</sub> chilissions.	traffic flows and general	Scottish Government	
	The busiest routes that are of concern in	movement to and from areas.	Jestisii Government	
	relation to air quality within East		DEFRA	
	Dunbartonshire are the A803 and B812 in	The ATS has the opportunity to		
	Bishopbriggs; the A81 through Milngavie; and	increase active travel in East	Scottish Transport Bus and	
	the A809 and A739 through Bearsden.	Dunbartonshire. This will help to	Coach Statistics No. 32, 2013	
		reduce traffic emissions, which will		
	There are currently two Air Quality	be particularly important in	Local Transport Strategy	
	Management Areas (AQMA) declared within	AQMAs.	2013 – 2017	
	East Dunbartonshire, Bishopbriggs (2005) and			
	Bearsden Cross (2011), both of which were	There are possible transboundary	Scottish Census 2011	
	declared an AQMA after several years of	effects of air pollution to		
	exceeding national NO <sub>2</sub> and PM10 objective	neighbouring Local Authorities	Department for Transport-	
	levels.	such as Glasgow, West	Traffic Counts	
		Dunbartonshire, North Lanarkshire		
	Whilst traffic levels across the Council area	and Stirling that should be taken		
	have been shown to be decreasing since 2009	into account in the development		
	from 125,356 (per 1000 vehicle miles) to	of the ATS.		
	118,830 (per 1000 vehicle miles) in 2013,			
	which can be attributable to a number of	The ATS will demonstrate		
	factors including the promotion of sustainable	capabilities for linking active travel		
	travel and influencing economic factors, levels	routes within the Council		
	still remain relatively high.	boundary and between East  Dunbartonshire and other local		
	Of the number of people in East			
	Of the number of people in East  Dunbartonshire who are of an economically-	authorities which can encourage cycling and walking to work or		

	active age:	their place of study.		
Air Quality (continued)	<ul> <li>6,454 people (9.5%) work or study at home</li> <li>12,422 people (18.25%) use public transport (train, underground, metro, light rail, tram, bus, minibus or coach) to access work or place of study of distances of 5km to 30km+</li> <li>26,884 people (39.5%) drive a car or van to access work or place of study of distances of 5km to 30km+</li> <li>18,156 people (26.7%) access work or place of study by other means of transport of distances of 5km to</li> </ul>	their place of study.		
	30km+  The number of people travelling to work by car or van is approximately 4% more than those in the rest of Scotland. Many people living in East Dunbartonshire travel to their workplace in neighbouring authorities such as Glasgow.			
limatic Factors	A significant source of carbon dioxide in East Dunbartonshire is attributable to vehicular transport emissions, which contributes towards climate change, although the largest	There are many areas within East Dunbartonshire that are currently within Flood Risk Areas. Climate	Scottish Government SEPA	To contribute towards reduction of Scottish greenhouse gas outpu

proportion of CO<sub>2</sub> emissions is attributable to domestic emissions.

#### Travel:

> The level of public transport access varies across the area. Kirkintilloch is served by bus services that provide access to towns and villages in East Dunbartonshire and

of flash flooding events in Scotland which is having an adverse effect on habitats, biodiversity, flora and fauna as well as an impact on leisure and recreational activities.

Enhancing the active travel network may be achieved through East Dunbartonshire Council

**UK Climate Impacts** Programme

Online Handbook of Climate Trends across Scotland 2006 (as updated) (SNIFFER

s the uts in nt targets

To reduce overall flood risk by ensuring new development is not at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk secure management measures

## Climatic Factors (continued)

- adjacent local authorities such as Glasgow. However, there are areas that do not have services that are frequent or operate out-with peak travel periods and daytime hours.
- Although rail patronage has increased by approximately 10% from the period 2012/13 to 2013/14, accessibility to such services means there is a significant reliance on car-based travel in the area.
- The number of bus passenger journeys in Strathclyde and South West Scotland has decreased since 2007/08 to 2012/13, which equates to a decrease of 21%. The total distance travelled by buses 2007/08 to 2012/13 decreased by 17%. This can be attributable to a reduction in the number of services that operate or alterations to routes. This trend is reflected in trends across Scotland which has seen a decrease in 4% in bus and coach journeys between 2012 and 2013.
- Traffic levels have decreased during recent years from the particularly high volumes experienced during the mid-2000s. This may be a result of the economic downturn.
- In 2013, 86% of households in East Dunbartonshire had access to at least 1 car.
- Glasgow is a key attraction for both employment and high education opportunities for the population of East Dunbartonshire which increases the need for travel.
- See Air Quality for number of people who travel by car or van to access their place of work or study.

improved planting, landscaping along routes and protection of existing habitats. This can be beneficial in terms of adaptation to flooding.

Increased active travel and accessibility of networks in East Dunbartonshire will encourage people to travel sustainability and cut down on vehicle usage and related emissions which will contribute to climate change adaptation.

In developing opportunities for the enhancement of the active travel network, areas of flooding particularly along rivers, will need to be considered for mitigation, management and viability.

Guidance)

Scottish Household Survey 2013 (access to cars per household)

Office of Rail Regulation (rail patronage by region, 2013/14)

Scottish Transport Bus and Coach Statistics No. 32, 2013

SEPA Flood map

Scotland's Climate Change Declaration 2013-14 Report (SSN; Keep Scotland Beautiful; EDC)

'Local and Regional CO2 Emissions Estimates for 2005-2012', Department of Energy and Climate Change

Climatic Factors	s
(continued)	

CO2 emissions associated with the expenditure of energy from industrial/commercial (including agriculture) and domestic buildings accounts for 142.7 ktCO2 and 271.6 ktCO2 respectively in 2012. Such energy use has a significant impact on air quality.

Flooding has been an issue in the Kelvin Valley for many years with the most recent flood events occurring in 1994 and 2005. The main areas of concern for potential flooding are the River Kelvin and its tributaries – the Allander, Glazert and Luggie Waters.

East Dunbartonshire only has one operating landfill (Inchbelle Quarry, Kirkintilloch) but is only used for the disposal of inert materials, mainly construction materials. All household and commercial municipal waste is transferred to landfills in North Lanarkshire. Therefore, there is minimal methane produced from landfill within East Dunbartonshire to impact on climate change.

#### Material Assets

East Dunbartonshire is supplied by various levels of transport infrastructure, through well serviced rail networks, bus routes encompassing the whole district and the various road networks that link settlements within East Dunbartonshire together with providing routes out with the district.

There are 54km of A class roads, 47 km of B class roads and 34km of C class roads. This

The ATS will explicitly encourage the enhancement active travel routes with connections to the wider natural and historic environment throughout East Dunbartonshire.

Where the active travel network encourages more access to the wider environment, either by Core

**Scottish Government** 

East Dunbartonshire Council

Transport Scotland

SPT

Local Development Plan for large scale development

To promote the sustainable use of community assets and natural resources in East Dunbartonshire

## Material Assets (continued)

amounts to 27% of the road network. There are 369 km of unclassified roads.

East Dunbartonshire has a network of Core Paths and public open spaces which provide opportunities for recreation. Some of these also provide active travel routes from residential areas to services and businesses.

Studies into housing requirements have indicated that East Dunbartonshire has one of the highest net needs for affordable housing, compared to other Scottish Local Authorities. The Local Plan and emerging Local Development Plan identifies the location of new development proposals with potential for changes to transport infrastructure/routes.

There are 99 Right of Way paths in East Dunbartonshire of the highest classification. There are also 82 'other' Rights of Way which are classified as paths that have seized use, have been partially built on or overgrown.

East Dunbartonshire has 8 'Scotways' Heritage Paths and 2 other Heritage Paths have been designated by East Dunbartonshire Council.

Through the East Dunbartonshire Council area, there are a number of different cycleways including traffic-free routes, both off and on the National Cycle Network, and on-road routes that are not on the National Cycle Network. Many of these routes are regional/cross-boundary and provide links to Loch Lomond, Glasgow, Stirling and Edinburgh.

Path Networks, Rights of Way or cycleways, consideration should be given to the effects on all types of land including for example, the urban built environment, rural communities and agricultural land.

Natural resources in East
Dunbartonshire should be used
sustainability and at a limited rate
to reduce pressures on
biodiversity and resources. Use of
such resources has the potential to
negatively impact on biodiversity,
either by reducing the assets or
restricting resources that will help
manage biodiversity.

The local open spaces identified in the Open Space Strategy will need to be taken into account within the ATS.

The ATS will demonstrate links with the Local Development Plan, LDP Supplementary Guidance and Local Transport Strategy. Each should be considered in the production of the other.

With the emerging Local
Development Plan for East
Dunbartonshire being
implemented, there is likely to be
an increase in developments
(economic and housing over the
life of the Plan. The impact of this
for access and the wider active

proposals.

Scottish Rights of Way and Access Society

East Dunbartonshire Council Transport and Access Officer

Sustrans

	travel network should be taken	
Material Assets	into account as well as guide	
(continued)	developments.	

Figure 2: Map 1 of Natural and Historic Environment Assets and Constraints

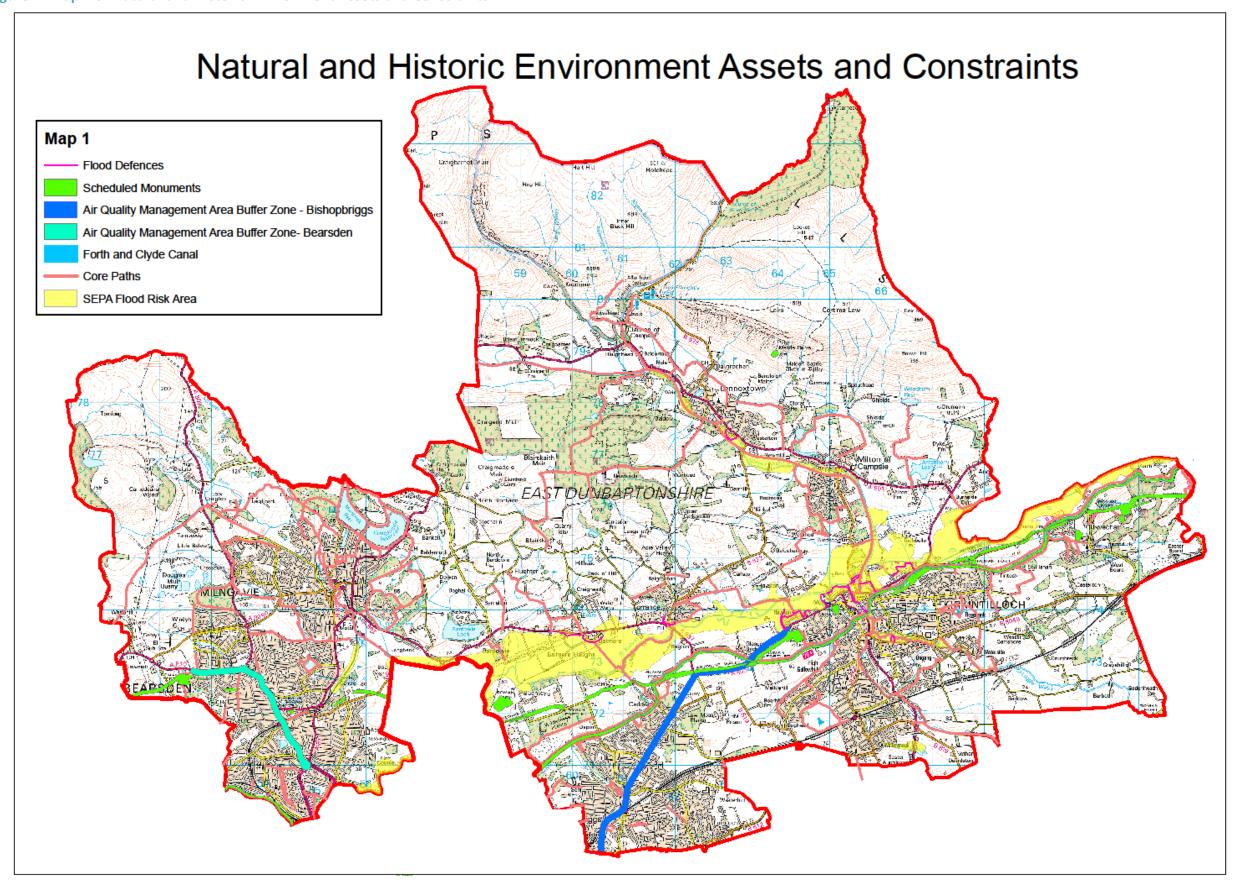


Figure 3: Map 2 of Natural and Historic Environment Assets and Constraints

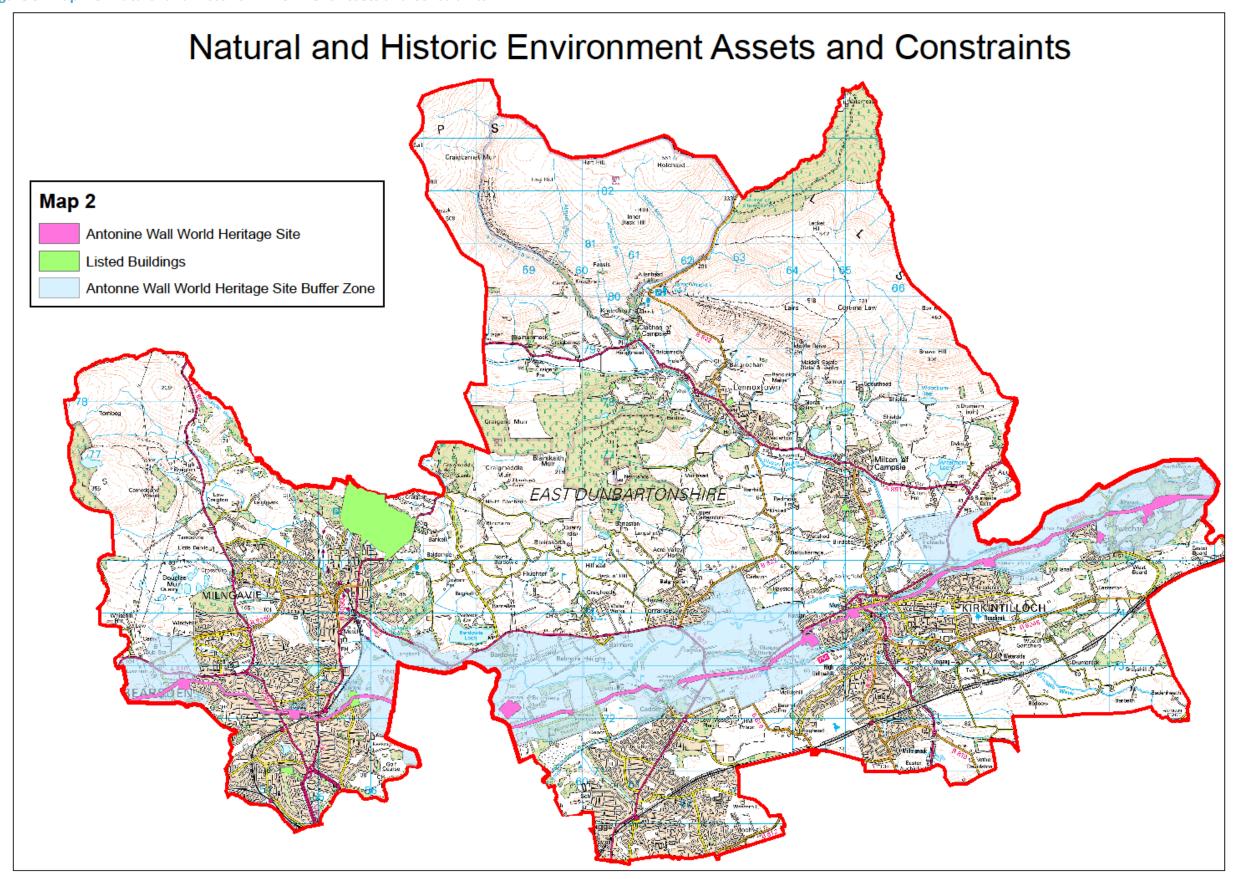


Figure 4: Map 3 of Natural and Historic Environment Assets and Constraints

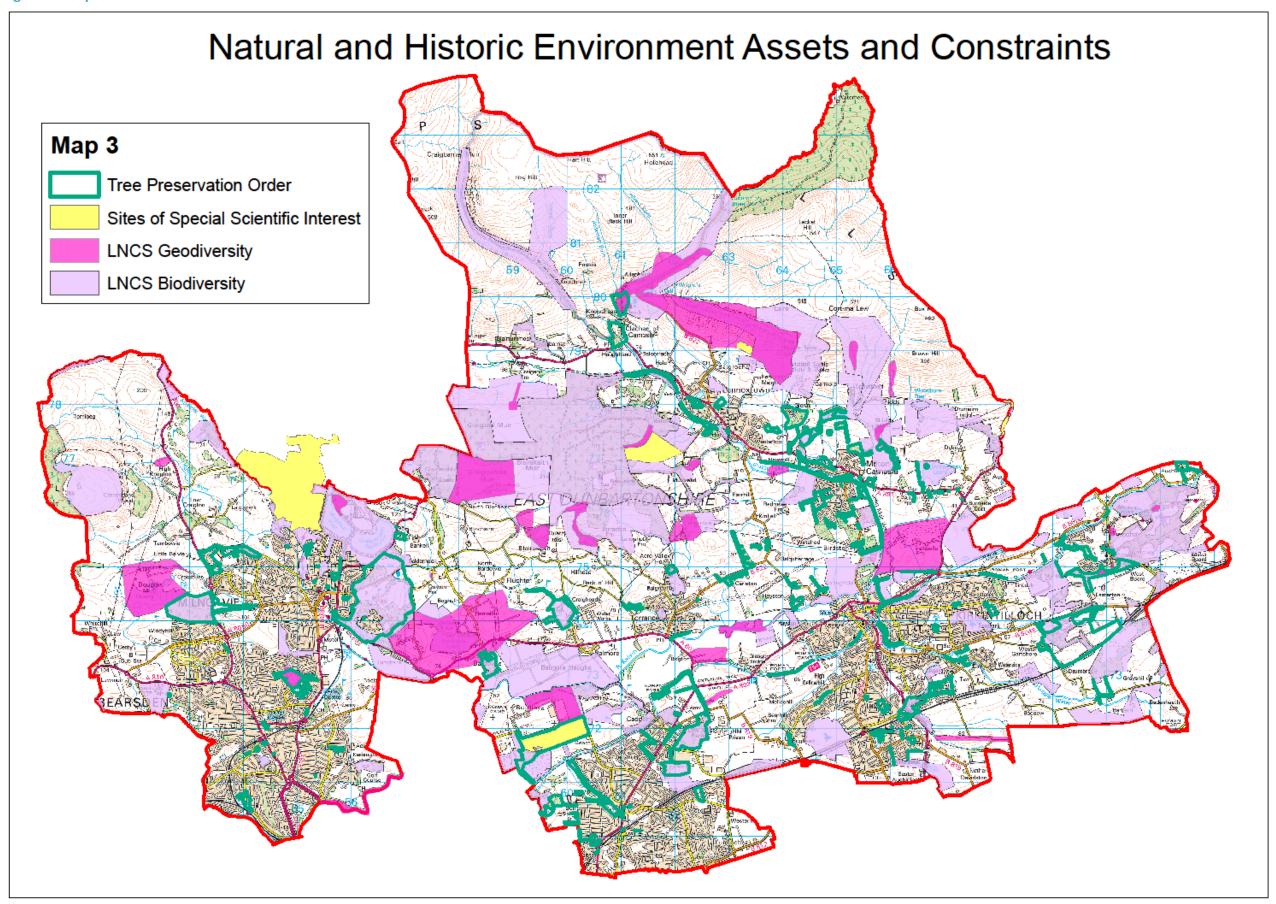


Figure 5: Map 4 of Natural and Historic Environment Assets and Constraints

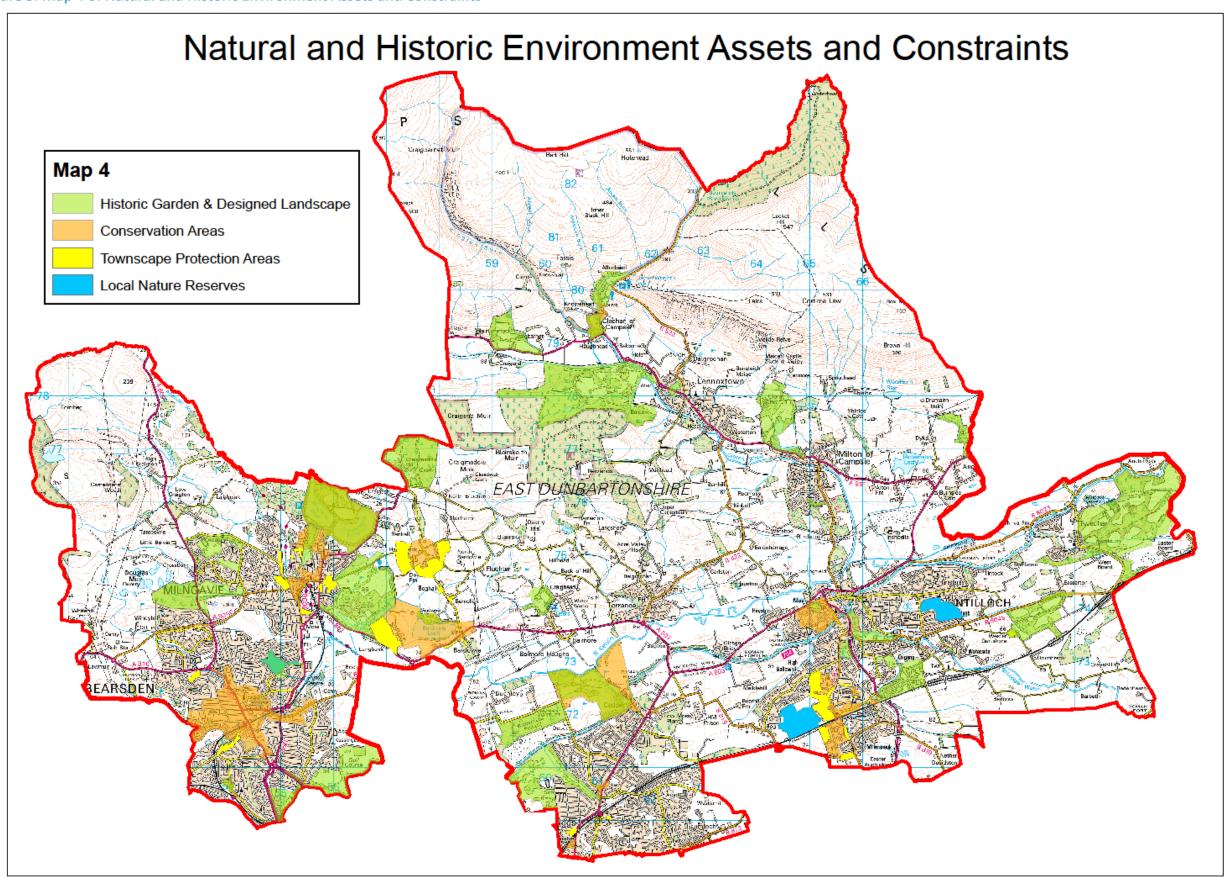
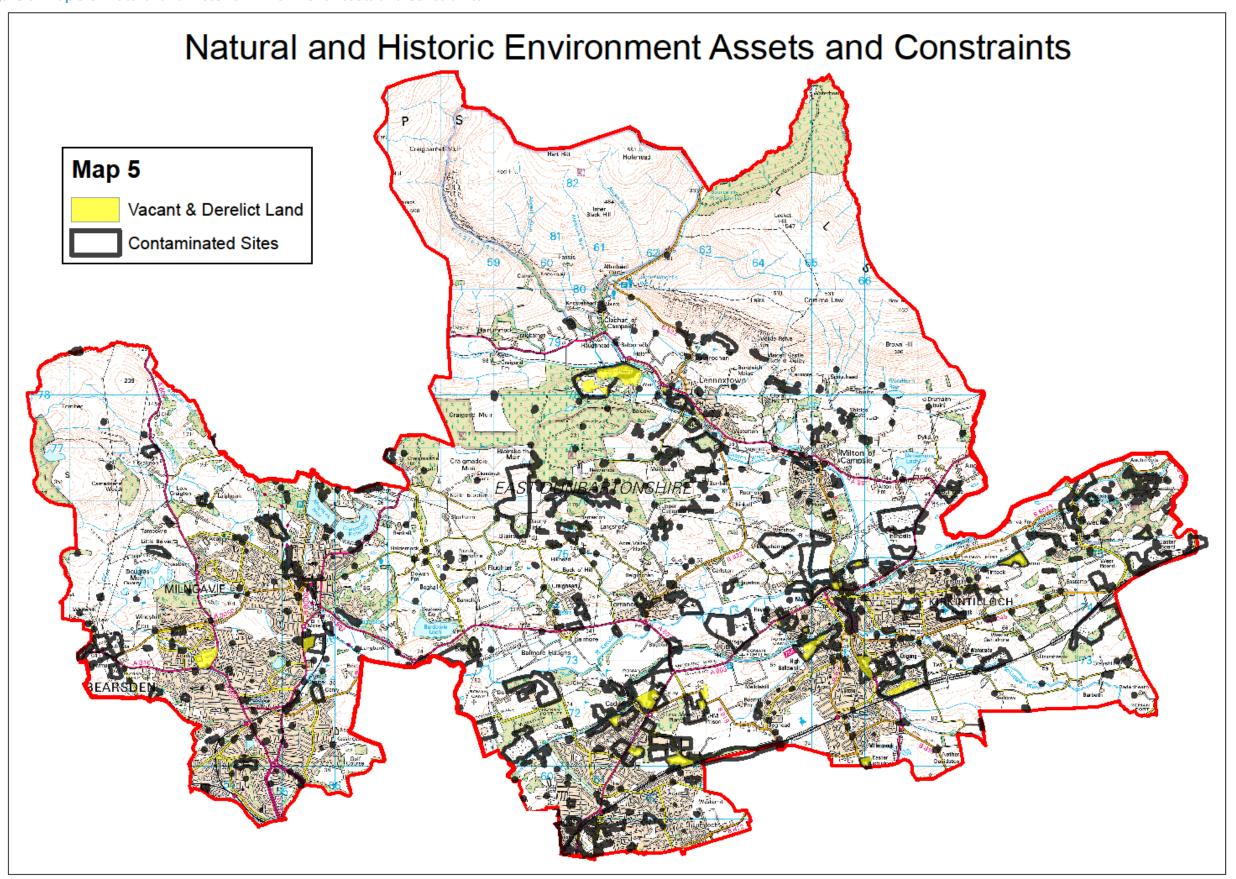


Figure 6: Map 5 of Natural and Historic Environment Assets and Constraints



### 2.2 Environmental Issues<sup>1</sup> for the Active Travel Strategy

2.2.1 The Environmental Report will identify the current environmental issues and problems that affect East Dunbartonshire, utilising the information that has been identified through an analysis of the baseline environmental data and potential implications, which are contained within section 2.2 of this Report. When undertaking the assessment of the Strategy, the Council will be able to predict whether the identified environmental problems and issues will worsen, stabilise or improve through the implementation of the Strategy. The main environmental issues and problems facing East Dunbartonshire which are relevant to the Active Travel Strategy are outlined in Table 2 below.

**Table 2: Environmental Issues Relevant to the Active Travel Strategy** 

SEA Topic	Relevant Environmental Issues
	Eight datazones within East Dunbartonshire fall into the top 25% most deprived areas in Scotland; these are located in Hillhead, Lennoxtown, Auchinairn and Milngavie. In particular, some areas in Hillhead remain within the 5% most deprived areas in Scotland according to the Scottish Index of Multiple Deprivation.  With areas of deprivation in East Dunbartonshire and an increasingly ageing population, there is a significant reliance on public transport and access to primary facilities such as town centres, retail parks, healthcare and leisure. To reduce this need and pressure, there is significant evidence that enhancement and promotion of green and active travel networks can be integrated with interventions and provide further health benefits to deprived or vulnerable members of the community.
Population and Human Health	Conflicts may arise between increasing public access within East Dunbartonshire and the need to conserve the natural environment. This will be a vital consideration for the ATS to address and prevent such conflicts.
	Current use and awareness of East Dunbartonshire's active travel network has scope to be improved. Increasing the awareness, understanding of the role of the active travel alternatives amongst the population of East Dunbartonshire, as well as how local communities can gain benefits from accessing local and regional facilities using the network alongside the upgrade of the network should be a significant factor for consideration in the ATS. This should include the promotion of the active travel network for educational purposes in partnership with local schools.
	Encouraging the involvement of the community in projects linked to the enhancement of East Dunbartonshire's active travel network has the potential to further benefit health and wellbeing. This is likely to improve the appreciation of the environment as awell as achieve the renewal of run down areas, particularly those in urban contexts, and increase economic value and investment to the area. There is scope for this to be promoted through the ATS.
Cultural Heritage	There are a number of cultural heritage assets in East Dunbartonshire including the Antonine Wall (UNESCO World Heritage Site) and the Forth and Clyde Canal which require protection and management.

<sup>&</sup>lt;sup>1</sup> The term "environmental issues" is the name collectively given to air, water, soil, biodiversity, climatic factors, landscape, material assets, population and human health as well as cultural heritage (including architectural and archaeological heritage) in the EU Directive 2001/42/EC. In practice they are referred to as "SEA topics".

East Dunbartonshire has a varied and valued natural and historic cultural heritage. In the development of the ATS, the opportunities that will be identified should address how they can contribute to enhancing and protecting the historic environment. East Dunbartonshire is host to tourist attractors across the whole of the council-wide area such as the Antonine Wall Heritage Site, the Campsie Fells, West Highland Way and Mugdock Country Park. The ATS is likely to improve access to these assets. However, increased footfall to the main attractors has the potential to result in both positive impacts, such as stimulating the local economy, and negative impacts, such as path erosion and the degradation of sites/buildings and their setting. East Dunbartonshire has a wide range of designated and non-designated sites, including those of ecological importance and protected species. This is seen through a number of Local Nature Conservation Sites and Important Wildlife Corridors, Tree Preservation Orders and Local Nature Reserves. East Dunbartonshire also has 6 Sites of Special Scientific Interest (SSSI). The management and protection of these assets is essential through the ATS. Invasive Non-Native Species in East Dunbartonshire have been identified in East Dunbartonshire. Their location and management should be recognised within the There are a number of protected species and habitats within East Dunbartonshire which Biodiversity, will need to be considered as part of the ATS. The ATS offers the scope to ensure that Flora and Fauna benefits for biodiversity are considered as a vital part of the wider active travel network in East Dunbartonshire and will play a contributing role for continued enhancement and protection of such species to avoid any loss. These concerns should be considered alongside the LBAP and emerging Green Network Strategy. Habitat connectivity within East Dunbartonshire is fragmented. In particularly, river and canal corridors are, to varying extents, below their potential in terms of habitat connectivity as a result of confinement and the presence of Invasive Non-Native Species. There is scope to reduce habitat fragmentation through improvements to access routes across the council area, with additional benefits anticipated in relation to biodiversity. There are several sites in East Dunbartonshire that have been identified as peatland. Any action as part of the Strategy that may result in the disturbance of such sites for the release of carbon should be avoided. This includes conflicts between the active travel access network and peatland protection. There is scope within the ATS to consider the role of enhanced biodiversity in managing **Soil and Geology** ecosystem services including carbon storage, drainage and to alleviate flooding. There are 36 sites identified as being geologically diverse, of which 34 have been assigned as Local Geodiversity Sites (LGS). The area also hosts 1 RIGS (Regionally Important Geological or Geomorphological Site) and 1 SSSI of geological importance. The ATS should consider these designations in the development of the opportunities and actions within the Strategy to ensure their protection and enhancement where possible. East Dunbartonshire has varying degree of landscapes including the green belt, the Campsie Fells/Kilpatrick Hills and agricultural land. Ensuring that the landscapes are well-connected throughout East Dunbartonshire is a vital consideration for the ATS. East Dunbartonshire has a number of Local Landscape Areas with high/moderate scenic value as well as varied landscape character and setting across the Council area, including the Campsie Fells and Kilpatrick Hills. The ATS should take into account the Landscape specific landscape features to ensure that there are no specific conflicts these areas and access issues, and are sensitive to, the local landscape and retain East Dunbartonshire's local distinctiveness.

	The cumulative effects of projects that will enhance or extend the active travel network
	that may be established through the Strategy should be accounted for at a local, EDC-
	wide and regional level.
	There are a number of good/moderate quality watercourses in East Dunbartonshire
Water Quality	including the Forth and Clyde Canal which is also a Scheduled Monument. These assets
	require protection to which the ATS can contribute to in order to reduce, prevent or
	offset any adverse impacts to water quality.
	There are a number of sites within East Dunbartonshire's landscape which are classified
	as wetland. Wetlands provide vital habitats for a number of species and ecosystem
	services but their quality is under pressure from external influences such as flooding,
	developments and access. The Strategy should account for this priority habitat in the
	development of its action plan as well as consider its role in reducing pressures on this
	resource to maintain a high level of water quality.
	Unacceptably high levels of air pollution can be harmful to the environment and human
	health. East Dunbartonshire currently has two designated Air Quality Management
Air Quality	Areas (Bishopbriggs and Bearsden Cross). These are managed through Air Quality
	Management Plans and the emerging Air Quality Strategy, the requirements of which
	should be taken into account within the ATS.
	Changes to air quality can have a significant impact on ecosystem services, which can
	affect biodiversity value and environmental assets.
	Domestic emissions account for the largest proportion of carbon dioxide in East
	Dunbartonshire, although emissions from transport account for the largest proportion
	of NO <sub>2</sub> and PM <sub>10</sub> emissions. This contributes to the effects of climate change which
Climatic Factors	include changing temperatures and rainfall patterns, and increased incidences of
	extreme weather events. Where appropriate, the actions proposed as part of the ATS
	should consider its role in mitigating or adapting to the effects of climate change.
	Climate change has a direct link to flood risk. The SEPA Flood Risk Map has identified
	several locations within the East Dunbartonshire Council area which could have a
	significant impact on habitats and the value of East Dunbartonshire's environment.
	As a result of the spatial strategy of the impending Local Development Plan there is potential for a rise in developments in East Dunbartonshire over the life of the Plan.
	New developments are likely to require infrastructure improvements which have the
	potential to result in further fragmentation of habitats and requirements for access
	routes which should be accounted for within the ATS.
	It is important that natural resources in East Dunbartonshire are managed sustainably.
	There are currently a series of Core Path Networks, Rights of Way and open spaces in
	East Dunbartonshire which create recreational opportunities, promote active travel and
	provide a sense of community. The opportunities that will be identified through the
Material Assets	Strategy should consider its role in enhancing existing networks (including green
	infrastructure opportunities) as well as integrating with the wider green network across
	the council area. The sites identified in the Open Space Strategy and opportunities and
	improvements noted within the emerging Green Network Strategy should also be taken into consideration within the ATS.
	There is currently a lack of good quality active travel routes and options across the
	Council area which link certain towns, villages and community areas. Specific areas
	which could be improved, and additional active travel infrastructure provided include:
	Bishopbriggs to Lenzie
	Bearsden/Milngavie to Kirkintilloch/Lenzie
	Torrance to Kirkintilloch
	Bearsden and Milngavie (local)
	J , ,

The current active travel network has a limited amount of on-road active travel provision. Additional provision of such improvements has the potential to significantly increase the active travel participation throughout East Dunbartonshire.

Integration of our active travel network with public transport will be an essential part of the ATS. Improving the link between these forms of transport has the potential to significantly increase active travel participation by integrating with other sustainable travel options such as train or bus, subsequently reducing car journeys and associated emissions levels throughout East Dunbartonshire.

# 2.3 Evolution of the Environmental Baseline without the Active Travel Strategy

- 2.3.1 As part of the SEA process, it is important to assess the likely impact on the environment if the ATS was not implemented.
- 2.3.2 The ATS will set out a framework for increasing participation in Active Travel in East Dunbartonshire spanning 5 years which will complement and deliver on transport objectives and interventions within the current Local Transport Strategy and feed into LTS2. The strategy will also produce an action plan for active travel in East Dunbartonshire outlining a range of coordinated projects which deliver multiple benefits and value for money for the region. This action programme of interventions and approaches will be derived from a robust evidence base and will include comprehensive maps of walking and cycling networks in the region.
- 2.3.3 As this is the first Active Travel Strategy for East Dunbartonshire it is important that it is implemented with the purpose of taking into account the role of accessibility in the management and enhancement of the active travel network.
- 2.3.4 In the absence of the emerging ATS, it is likely the following would occur:
  - Failure to link projects on the ground with national, regional and local outcomes, including environmental considerations.
  - Failure to demonstrate the cumulative and long-term positive impact active travel has on a number of indicators such as: health and wellbeing, modal shift, air quality, reduced congestion, increased economic competitiveness, increased attractiveness of the walking environment and perception of improved safety.
  - Gaps in the local active travel network remain unaddressed and potential opportunities not being maximised.
  - Obvious connections (easy wins) in the active travel network being overlooked.
  - Selection of projects not informed by robust evidence base and clear rationale based on objective led process.
- 2.3.5 The ATS will be an important vehicle in achieving the overarching vision of East Dunbartonshire's Single Outcome Agreement, which includes commitments relating to health inequalities and economic regeneration. Environmental protection is intrinsically linked to these agendas, and measures such as promoting healthy lifestyles and encouraging leisure related economic activity will contribute towards physical, social and financial wellbeing.

- 2.3.6 The following bullet points set out in more detail the likely implications:
  - Biodiversity: Uncoordinated promotion of access to our natural assets and random delivery of developments to the active travel network could result in adverse effects on biodiversity and vulnerable species and habitats.
  - Landscape: Improving walking and cycling networks and will require enhancement of the existing urban and rural environments to make the choice to walk or cycle for travel purposes more attractive. The ATS is likely to include interventions which will as a by-product of enhancing the active travel network, improve local landscapes. Another benefit as a result of the ATS is the promotion of settlement connectivity in East Dunbartonshire away from the road network. This is likely to reduce the need to build new roads which would remove previously greenbelt/open space assets. Without the ATS, the active travel network of local paths is likely to suffer from lack of maintenance or enhancement which would contribute to perceptions of poor local landscape quality.
  - Cultural Heritage: Uncoordinated promotion of access to our historic environmental assets could result in degradation of East Dunbartonshire's built heritage and inadvertently harm the area's cultural offer and heritage.
  - Air Quality & Climatic Factors: An uncoordinated approach to increasing participation in active travel could result in an increase of car journeys and subsequently add to existing traffic congestion throughout the area and greenhouse gas emissions. Modal shift away from private cars is a major contributor to improved air quality in urban areas, failure to provide a coordinated framework for delivering measures that facilitate this modal shift would result in increased risk of air quality remaining an unacceptably poor level or worsening. Transport emissions from private cars on average equate to approximately 25% of CO2 emissions. Active Travel is a major approach to reducing private car journeys and subsequently reducing the CO2 generated by the transport sector.
  - Water: Although protection of water quality as a result of development would be controlled through other legislation, the cumulative effects of increased unplanned development without a corresponding provision for active travel would likely increase car use which through increased emissions could have adverse effects on hydrological environments and drainage requirements as part of infrastructure improvements.
  - Population & Human Health: Failure to deliver a coordinated approach to facilitating increased proportion of journeys taken by active means carries significant health risks for our population in the future. In order to increase activity levels, provision for active travel to increase the quantity of people walking and cycling for everyday and leisure journeys should be delivered via a clear framework. Failure to provide this coordinated approach it is unlikely adequate investment will be made to the active travel network and levels of participation will stagnate. This would represent a risk to aggregate health levels as a result of inactivity, contributing to already rising obesity levels and corresponding health risks.

Soil & Material Assets: The ATS would present, and have a direct influence, on opportunities to further promote the sustainable use of materials and contribute to improvements to the varying walking and cycling path networks in East Dunbartonshire. This would reduce the need for further road building which could have adverse effects on soil and material assets through losing greenspace. Without the influence of the ATS, these opportunities are less likely to be identified and the benefits to the relevant material assets will be minimal.

# Section 3: Assessment of Environmental Effects

#### 3.1 Assessment Framework

3.1.1 There are a number of key assessment stages that have been identified for the SEA of the ATS. Each of these stages required a tailored assessment method as detailed below:

**Table 3: Assessment Framework** 

Assessment Area	Assessment Method
Ambition	The SEA assessment questions and indicators will be used to establish whether the strategic approach in order to deliver the Ambition of the ATS is compliant with the proposed SEA objectives including the consideration of reasonable alternatives.
Aims	The aims of the Strategy, and alternatives to them, will be tested against the proposed SEA objectives for alignment and compliance. The outcomes of this assessment guided the refinement of the Strategy objectives throughout their development.
Actions	The Actions and all reasonable alternative options were assessed against the SEA assessment questions, including those which are site-specific and / or area-wide.
Cumulative and Synergistic Impacts	Using the assessments of options outlined in the Active Travel Strategy and with the use of GIS mapping, where appropriate, the cumulative effects of the Strategy have been tested. Any impacts for neighbouring authorities have also been considered as part of the assessment process.

# 3.2 Assessment Methodology

- 3.2.1 The SEA legislation requires the environmental effects of 'reasonable alternatives' to the strategic document to be identified, described and assessed.
- 3.2.2 The East Dunbartonshire Active Travel Strategy has been assessed against the list of environmental issues set out in Schedule 3 of the Environmental Assessment (Scotland) Act 2005.
- 3.2.3 The SEA Directive requires environmental assessments to consider the environmental objectives established at International, European Community and national levels that are relevant to the strategic document. During the Scoping stage of SEA, it was determined that all environmental issues have the potential to be significantly impacted by the ATS. The Consultation Authorities were in agreement with this level of scope, as expressed in their views following the consultation at the Scoping stage.

3.2.4 East Dunbartonshire Council has adopted a set of SEA Objectives for the environmental issues that were scoped into the assessment, shown in Table 4, which were derived from other legislation and Strategies (Appendix A).

**Table 4: SEA Objectives** 

Environmental Factor (Annex 1 of EC Directive)	SEA Objective
Population and Human Health	To improve human health and community wellbeing.
Cultural Heritage	To protect, conserve and where appropriate enhance the historic environment.
Biodiversity, Flora and Fauna	To protect, enhance, create and where necessary restore biodiversity and encourage habitat connectivity.
Soil and Geology	To protect and, where appropriate, use high quality and sensitive soils in a sustainable manner and conserve recognised geodiversity assets.
Landscape	To protect, enhance and, where appropriate, restore landscape character, local distinctiveness and scenic value.
Water Quality	To prevent deterioration and, where possible, enhance the ecological status of water bodies.
Air Quality	To prevent deterioration and, where possible, enhance air quality
	To contribute towards the reduction of Scottish greenhouse gas outputs in line with Government targets.
Climatic Factors	To reduce overall flood risk by ensuring new development is not at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk secure management measures.
Material Assets	To promote the sustainable use of community assets and natural resources in East Dunbartonshire.

#### 3.3 Alternatives

3.3.1 Through administrative provision, the framework of an Active Travel Strategy would integrate and deliver actions set out through the adopted Local Transport Strategy 2013-17. Four reasonable alternatives were identified in terms of how the Strategy could be delivered, implemented and the proposed outcomes achieved. An Options Assessment was initially

undertaken by the Councils Sustainability Policy Team in order to highlight the benefits and risks of each Option and to determine the preferred approach the required outcomes of the Strategy.

- 3.3.2 The alternative strategic options assessed include:
  - A stand-alone Active Travel Strategy
  - Integrating the Active Travel Strategy with the emerging Green Network Strategy
  - Addressing EDC's active travel network through individual plans, programmes or strategies
  - Ensuring there is adequate provision for active travel in the next iteration of the Local Transport Strategy (LTS2)
- 3.3.3 Reasonable alternatives within the Strategy have been considered, assessed against the SEA objectives / criteria and SEA preferred options identified. Reasonable alternatives have been identified in terms of the ambition, aims and the actions which form the Active Travel Strategy.
- 3.3.4 The options that have been generated through the preparation of the Strategy take account of stakeholder consultations and research on the content of the Strategy, the current environmental baseline, relevant policy and strategy documents and are intended to represent approaches which are realistic, deliverable, consistent with other aspects of the Strategy, and consistent with higher-level plans, policies and strategies. The assessment of these options and consultation responses has influenced the options taken forward within the Strategy.

# 3.4 Assessment Findings

- 3.4.1 An environmental assessment has been undertaken for each identified Strategy alternative and has been assessed against the SEA Objectives and set criteria, based on their predicted impact on the current environmental baseline. The assessment has been conducted using professional judgement and GIS analysis where appropriate.
- 3.4.2 The environmental assessments have been recorded in the form of a matrix identifying the environmental performance of each alternative against the SEA objectives and criteria. The environmental effects have been recorded according to their nature (positive, neutral, unknown or no significant effect). The significance of these effects are determined using a combination of the magnitude of the impact and the importance or sensitivity of the receiving environment. A full justification of each assessment is provided in the matrix.
- 3.4.3 The cumulative impact of each options proposed in the delivery of the ATS has also been carried out and was an important addition into the overall assessment process in order to identify the overall environmental effects of the Strategy once implemented.
- 3.4.4 Recommendations have been made where necessary so that environmental considerations are incorporated into the ATS. The assessments also seek to enhance the environmental benefits of the ATS and accordingly suggest recommendations to further enhance or protect the environment relevant to each of the environmental factors.

3.4.5 In cases where the assessed SEA Preferred Option has not been carried forward into the Strategy as a Preferred Option the detailed non-environmental reasoning and justification has been expanded upon with the assessment summary.

# 3.5 Assessment: Strategic Direction

3.5.1 The SEA legislation requires the environmental effects of 'reasonable alternatives' to the strategy to be identified, described and assessed. The following alternatives were considered as part of the SEA of the Active Travel Strategy.

**Table 5: Alternatives: Strategic Directions** 

Alternatives	Strategic Direction:
Approaches	Outline and Implications
A stand-alone Active Travel Strategy	Having a stand-alone strategy focussed completely on increasing the proportion of everyday journeys undertaken by active means, (walking or cycling), is the approach most likely to effectively deliver this change. While the stand-alone strategy will take cognisance of other strategies under development and ensure coordination, holding consultation exercises focussed on active travel is more likely to attract informed and relevant stakeholders and generate useful comments and responses. This approach is also more likely to gain input from local interest groups with good local network knowledge, in some cases perhaps superior local knowledge to council staff. An action plan that is focussed on generating options which are aimed specifically at increasing active journeys will provide a framework for selection of relevant projects that will facilitate active travel in the region. This action plan will undoubtedly have other benefits for other areas and objectives more relevant to other strategies, e.g. Provision of off road cycle routes may create increased access opportunities for the green network and open spaces with benefits for habitat creation and subsequent biodiversity gains. The findings and opportunities identified through this Strategy will be integrated and recognised in the emerging Green Network Strategy within the opportunities mapping.
Integrating the Active Travel Strategy with the emerging Green Network Strategy	This strategic alternative requires East Dunbartonshire Council and partners to develop a wide ranging Strategy focussed on the enhancement of access to the green network and urban environment by active means across the whole of the East Dunbartonshire Council area, including notable assets such as Mugdock Country Park and links with neighbouring authorities such as Stirling, North Lanarkshire, Glasgow and West Dunbartonshire. This approach to the Strategy will present opportunities to focus on both of the main components of the green network; biodiversity and access while still ensuring provision for active travel connections to trip attractors such as: rail stations, bus hubs, town centres and other attractions. This will give a more extensive scope to the development of a stand-

	alone Green Network Strategy or Active Travel Strategy and
	potentially wider benefits across the whole of the Council-wide area.
	It may be possible to include provision for active travel within other
Addressing EDC's active	access or open space strategies such as the Local Biodiversity Action
	Plan (LBAP) for East Dunbartonshire which is currently in the
travel network through	development stage, and as such, there is scope to include issues
other plans, programmes,	related to the improvement of East Dunbartonshire's green network
policies and strategies	and active travel network within each of these strategic actions.
policies and strategies	However, this approach to enhancing the active travel network will
	limit the scope for integration between the two factors, and different
	strands of the combined approach may lose focus.
	The current LTS, in terms of interventions, is currently split into three
	sections one of which is active travel. Consequently, actions
	pertaining to enhancement of the active travel network and
Ensuring there is adequate	behavioural change are encompassed within this section. Whilst it
provision for active travel	may be useful to have a separate, focused ATS, it may be possible to
in the next iteration of the	integrate active travel and enhance relevant sections into the next
Local Transport Strategy	LTS and thus ensure greater integration between active travel and
	other forms of sustainable transport to allow for effective
	interchanges between the two (e.g. where journey distances are too
	long for active travel) .

Assessme	nt Table Key		
++	Major Positive		CEA Drafarrad Ontion
+	Minor Positive	V	SEA Preferred Option
0	Neutral		ATC Duefermed Alternative Outlier
Х	No Significant Effect	•	ATS Preferred Alternative Option
-	Minor Negative		
	Major Negative		
?	Uncertain		

Table 6: Assessment of the Strategic Direction and Alternatives for the Active Travel Strategy

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversit y, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternativ e Option	
Strategic Direction Alternative 1 A stand-alone Active Travel Strategy	Significant   These effect which will h	++ +/- ++ ?/- ++ ?/- ++ ++ ++  Assessment Commentary:  Significant positive effects are anticipated through this strategic alternative on population and human health. These effects are predominantly through the promotion and increased provision of the active travel network which will have resulting benefits with regards to the health and wellbeing of residents, workers and visitors to East Dunbartonshire.									
	through var - Incompanded of the control of the co	rious element reased provisces and recreation of the contraction in contraction i	ts of this stra sion of off ro eational oppo f settlement f new active congestion le evements in d Bearsden.	tegic alterna ad cycle rout ortunities wh setting, scen e travel rou vels through air quality	tive, including tes which will ich can benef ic value and tes connecti promotion of particularly i	g: I also enhand fit habitat co local distinct ing commun of viable sus n the vicini	te and climation of the control of t	ith green net d creation. ugh the revie cilities throu matives to re eas existing	ew, upgrade ighout East coad and car		

result in a positive impact on the areas cultural heritage. However this impact will be limited and in certain cases may result in adverse impacts in relation to increased visitor numbers to such sensitive and valuable areas through potential degradation of historic environment assets and their setting. Impacts on the soil and water resources in East Dunbartonshire through the implementation of this alternative are uncertain at this stage, although there is potential for adverse impacts on soil quality, loss of peatland areas, drainage and pollutants entering the water system with the construction and integration of new or updated active travel routes throughout East Dunbartonshire. Through coordinated maintenance, monitoring and enhancement of the active travel the positive impact on material assets is likely to be significant. Active travel infrastructure connections to trip attractors such as rail stations, bus hubs, town centres and between communities will also be a main focus of this strategic alternative and provide a significant positive impact in relation to material assets. ++ ++ **Strategic Direction Assessment Commentary: Alternative 2** The assessment of this strategic alternative is very similar to that of Alternative 1 (above) and the production of **Integrating the Active** a stand-alone Active Travel Strategy. Through this strategic direction it is also anticipated that the **Travel Strategy with the** environmental factors likely to result in significant environmental effects are: emerging Green network **Strategy** Population and Human Health Biodiversity, Flora and Fauna Landscape Air Quality **Climatic Factors** Material Assets This strategic alternative will have a split focus between the identification, creation and protection of green network opportunities and the active travel network. With conflicting priorities between the two district strategy subject areas there is potential for a joint Strategy to limit the scope of each of the two aspects instead of complementing and integrating findings as is proposed within Alternative 1 above. ?/-0/-0/-0/-?/-**Strategic Direction Assessment Commentary: Alternative 3** Through this alternative approach, the positive impacts are likely to be reduced in relation health, community Addressing EDC's active wellbeing, landscape air quality and climatic factors. This is predominantly due to the fact that there will be no travel network through direct focus or coordinated approach to the provision or improvement of active travel infrastructure. other plans, programmes, policies and strategies

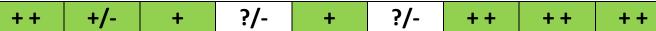
With no single coordinated approach to active travel provision the anticipated effect in relation to cultural

heritage, biodiversity and material assets are likely to be overall neutral. However, with an uncoordinated or managed approach to the overall provision and monitoring of the active travel network adverse effects such as:

- Path erosion and the degradation of cultural heritage sites/buildings and their setting and designated sites for their biodiversity value are also likely.
- A lack of connection and improvement between the active travel network, existing public transport network and local communities.
- A lack of maintenance and required infrastructure improvements together with the loss of enhancement opportunities.

Impacts on the soil and water resources in East Dunbartonshire through the implementation of this alternative are uncertain at this stage, although with an uncoordinated approach there is potential for adverse cumulative impacts on soil quality, loss of peatland areas, drainage and pollutants entering the water system with the construction and integration of new or updated active travel routes throughout East Dunbartonshire.

Alternative 4
Ensuring there is adequate provision for active travel in the next iteration of the Local Transport Strategy



#### **Assessment Commentary:**

Significant positive effects are anticipated through this strategic alternative in relation to community health and wellbeing, air quality, climatic factors and material assets. These effects are predominantly through:

- The promotion and increased provision of the active travel network which will have resulting benefits with regards to the health and wellbeing of residents, workers and visitors to East Dunbartonshire.
- A modal shift away from car based journeys and travel resulting in benefits relating to air quality improvements and reductions in congestion levels with a particular importance in the vicinity of existing AQMAs in Bishopbriggs and Bearsden.
- Monitoring, maintenance and enhancement of the active travel infrastructure and linkages with the public transport network.

Through this strategic alternative the anticipated positive effects on cultural heritage, biodiversity and landscape are likely to be reduced in comparison to Alternatives 1 and 2. Within the next iteration of the LTS there is likely to be conflicting priorities between road based transport interventions, public transport and active travel alternatives which could potentially limit the scope of the active travel agenda. In addition to this, the scope to review, retain and enhance local community distinctiveness and protect and enhance habitat connectivity could also be limited through this strategic direction. Through the next iteration of the LTS increased active travel provision and sustainable access to East Dunbartonshire's historic environment will result in a positive impact on the areas cultural heritage. However this impact will be limited and in certain cases may result in adverse impacts in relation to increased visitor numbers to such sensitive and valuable areas through potential degradation of historic environment assets and their setting.

Impacts on the soil and water resources in East Dunbartonshire through the implementation of this alternative are uncertain at this stage, although through this approach there is potential for adverse cumulative impacts on

soil quality, loss of peatland areas, drainage and pollutants entering the water system with the construction and integration of new or updated active travel routes throughout East Dunbartonshire.

3.5.2 The Strategic Direction for implementing a stand-alone Active Travel Strategy was considered the SEA and Strategy Preferred Option due to the significant positive impacts on the relevant environmental factors noted above; a complete focus of this Strategy on promoting, increasing and improving active travel throughout East Dunbartonshire; and the linkages between the stand-alone Active Travel Strategy and emerging Green Network Strategy (GNS) in terms of integrating the finding of the ATS within the GNS, while also retaining the different strategic focusses and required outcomes.

#### 3.6 Assessment: Ambition

3.6.1 The Ambition and 'reasonable alternatives' have been identified, described and assessed. The full assessments of all reasonable alternatives including assessment commentary, mitigation and SEA suggested alterations are contained within Appendix B. Table 7 outlines the various options identified, the SEA assessment ratings and the SEA and ATS Preferred Options.

Assessmo	ent Table Key		
++	Major Positive		CEA Drafamad Ontion
+	Minor Positive	V	SEA Preferred Option
0	Neutral		ATC Designed Alternative Outlier
Х	No Significant Effect	Y	ATS Preferred Alternative Option
-	Minor Negative		
	Major Negative	1	
?	Uncertain		

Table 7: Assessment of the Ambition and Alternatives for the Active Travel Strategy

$\Rightarrow$	Population & Human Health	Cultural Heritage	Biodiversit y, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	Preferred Option
Proposed Ambition 1	+	?	?	?	?	?	+	+	+/?	
East Dunbartonshire is a w	ralking and c	ycling friend	lly area.							
Proposed Ambition 2	++	+/?	+/?	+/;	++	+/?	++	++	++	
East Dunbartonshire is a place where walking and cycling for everyday journeys is a convenient, viable, safe and attractive choice for residents, commuters and visitors.										
,								_		<b>√</b>
Proposed Ambition 3	0/-	0	0	X	0	X	-	-	0	

- 3.6.2 The SEA and ATS preferred option, illustrated above with SEA mitigation incorporated, was considered to be overall significantly positive in nature. Through this ambition the Strategy will seek to provide an area where active travel is an attractive and natural choice for all and not an inferior alternative to car based journeys and use of the road network. Significant positive impacts are anticipated through increased public participation and physical activity levels, enabling sustainable access to open spaces, leisure and recreational opportunities and essential facilities.
- 3.6.3 Implementation of the SEA and Strategy preferred ambition is likely to result in multiple benefits in relation to the natural and historic environment with a particular emphasis on significant improvements on air quality levels, reductions in traffic congestion and resultant carbon emissions and material asset in the form of new and enhanced active travel infrastructure. In line with East Dunbartonshire's Local Transport Strategy, this ambition will contribute towards a modal shift away from car based journeys and will promote and enhance active travel alternatives throughout East Dunbartonshire.
- 3.6.4 Through the integration of the SEA suggested alteration into the preferred option, the positive and uncertain effects that are anticipated in relation to all environmental factors, in particular population, human health and community wellbeing are likely to be further enhanced. This will be particularly evident in terms of social inclusion and the ambition of the ATS

to provide active travel infrastructure and options which a natural choice which meets the needs of all residents, workers and visitors to East Dunbartonshire.

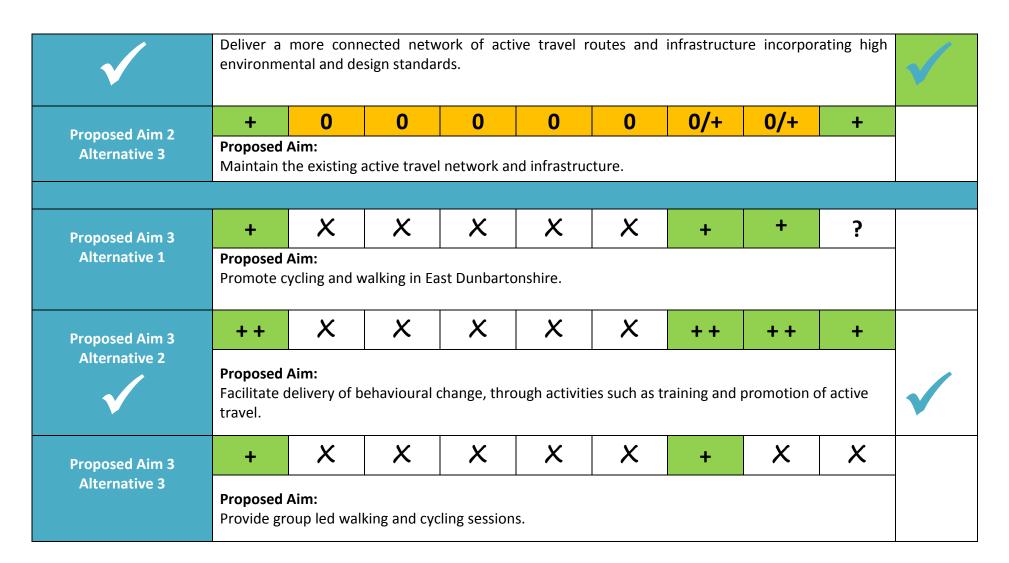
#### 3.7 Assessment: Aims

- 3.7.1 An environmental assessment has been undertaken for the ATS aims and reasonable alternatives against the SEA objectives. The environmental assessments have been recorded in the form of a matrix identifying the environmental performance of the alternative objectives. The full assessment tables including re-assessments incorporating SEA recommendations, reasonable alternatives and SEA assessment commentary are provided within Appendix B.
- 3.7.2 Recommendations have been made where necessary so that greater environmental considerations are incorporated into the ATS. The assessment of the aims and reasonable alternatives identified the need to:
  - > Provide further protection and consideration regarding environmental impacts.
  - Expand the scope of the ATS in a sustainable manner to improve and increase participation in active travel infrastructure opportunities throughout East Dunbartonshire.
  - Incorporate high standards when considering the environment and design of new or upgrading active travel infrastructure.
- 3.7.3 The SEA Preferred Option for each of the aims is illustrated below (Table 8) along with its assessment rating regarding the scoped environmental factors. Each of the SEA Preferred Options in relation to the Strategy aims has also been integrated into the Strategy as the ATS Preferred Option which highlights the influence and success of the SEA process through the integration of environmental considerations fully throughout the Strategy development.

Assessme	Assessment Table Key									
++	Major Positive		CEA Duefermed Ontion							
+	Minor Positive		SEA Preferred Option							
0	Neutral		ATS Drafarrad Alternative Ontion							
Х	No Significant Effect		ATS Preferred Alternative Option							
-	Minor Negative									
	Major Negative									
?	Uncertain									

Table 8: Assessment of Aims and Alternatives for the Active Travel Strategy

Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversit y, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative e Option
Duamagad Aims 1	+	٠.	٠.	?	3	?	+	+	?	
Proposed Aim 1 Alternative 1	Proposed A		of walking ar	nd cycling jo	ourneys in Ea	ast Dunbart	onshire.			
	Mitigation ambition for "Facilitate"	rom an envi an increas	n of an alte ironmental រុ	perspective.	of everyday	journeys I	ne potential			
Proposed Aim 1	++	?/+	?/+	?/+	?/+	?/+	++	++	?/+	
Alternative 2  Proposed Aim: Facilitate an increase in the proportion of everyday journeys made by walking and cycling in East Dunbartonshire.										
Alternative 2	Facilitate a	ın increase i	in the propo	rtion of eve	eryday journ	eys made b	y walking an	d cycling in	East	<b>√</b>
Alternative 2	Facilitate a Dunbarton	in increase i						,		<b>√</b>
Proposed Aim 2 Alternative 1	Facilitate a Dunbarton  ++ Proposed	in increase in inc	+/- vel routes a	?/-	+	eys made b	y walking an	d cycling in	East +/-	
Proposed Aim 2	++ Proposed A Deliver new SEA Sugges Mitigation	+/- Aim: w active trading the form	<b>+/-</b> vel routes and tion: n of an alte	<b>?/-</b> nd infrastru ration to th	+ cture.	?/-		++	+/-	
Proposed Aim 2	++ Proposed A Deliver new SEA Sugge Mitigation ambition fr "Deliver a	+/- Aim: w active transted Alteration the form rom an environmere continuation.	+/- vel routes and tion: n of an alterironmental proceed networks.	?/- nd infrastru ration to the perspective.	+ cture. ne proposed	<b>?/-</b> aim has th	++	++ to benefit	<b>+/-</b> the overall	
Proposed Aim 2	++ Proposed A Deliver new SEA Sugge Mitigation ambition fr "Deliver a	+/- Aim: w active transted Alteration the form rom an environmere continuation.	+/- vel routes an tion: n of an alte ironmental p	?/- nd infrastru ration to the perspective.	+ cture. ne proposed	<b>?/-</b> aim has th	++	++ to benefit	<b>+/-</b> the overall	



#### 3.8 Assessment: Actions

- 3.8.1 An environmental assessment has been undertaken for each of the ATS Actions and all reasonable alternatives against the SEA objectives and criteria, based on their predicted impact on the current environmental baseline. Mitigation measures have also been recommended where necessary and recorded within the assessment commentary section.
- 3.8.2 During the development of the action plan, 12 of the actions were identified as requiring additional feasibility or exploratory studies to determine the required infrastructure improvements and the most appropriate locations. Until such

time as the intended exploration or feasibility studies have been carried out for these actions there is an insufficient level of detailed information available at this stage to carry out an appropriate assessment. In order to ensure that potential environmental implications are taken into consideration the actions have incorporated the identification of likely environmental impacts or implications as part of the study process.

3.8.3 **Table 9** summarises each of the individual assessments carried out for each of the preferred actions carried through into the ATS, highlighting the main environmental implications. The full assessments, all relevant mitigation measures and the reasonable alternatives can be found in **Appendix C.** 

Assessme	Assessment Table Key								
++	Major Positive		CEA Drafarrad Ontion						
+	Minor Positive		SEA Preferred Option						
0	Neutral		ATS Disaformed Alternative Ontion						
Х	No Significant Effect	•	ATS Preferred Alternative Option						
-	Minor Negative								
	Major Negative								
?	Uncertain								

**Table 9: Summary Assessments of the Actions for the Active Travel Strategy** 

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity , Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets
Action 1.3	++	+/-	+/-	?/-	X	?/-	++	++	++
Twechar Towpath and Crossing Improvements	and end to the vand imp  Culturation natural access  Water	courage safe wider enviro proving air quality and environmer resulting in duality and	active travel nment. This vality. nd Biodiversint including for lirect disturbations.	through Two will represen ty, Flora and the Antonine ance to design y – Uncerta	echar and alo t a modal shi l Fauna - This e Wall, as we nated/protec in effects at	ong the Forth ft in transpo saction will e ell as poten cted sites of this stage v	erial Assets — and Clyde Cart to active tr encourage acc tial negative importance e with potential and compact	anal for impravel, reducing tess to the himpacts from g. LNCS.	oved access g emissions storical and n increased apacts from

	and temporary run off in nearby watercourses.								
Action 1.7	++	X			X	X	++	++/-	++
Bishopbriggs Relief Road (BRR)/Westerhill Road – Active Travel Corridor	effects betwee and cor alternat  Biodive Moss P (lowlan)	as this acting the Strath mmuting interior inter	on will impr kelvin Retail o Glasgow a g emissions a and Fauna an oth of which	ove connect Park and de nd encourag and improving d Soil and G are designat rel has the po	ivity between evelopments are a modal segmentity ecology - Westendard to detect to det	en settlemen . It will pron shift in trans particularly in sterhill Road for biodivers listurb habita	Material Assective to a same sport to a same sport to a same sport to a same sity and wook ats and species.	is promote a ravel for leisu fe off-route a ss' AQMA. ear to Low Mo dland and ha	nctive travel ure journeys active travel oss and High ve peatland
	++	-	++/-	-	+/-	-	++	+/-	++
Action 1.8	Summary:				-			-	
Torrance to Birdston via the River Kelvin Railway Path	improve Campsie local co improve positive  Soil and along importa geodive  Air Qua through connect  Cultura potentia  Landsca Birdstoi	e connectivite Fells, and to mmunity or the habitat content and declogy and the Railway ant/protected arights of the Railway and the modal strong the wich and the modal and the notation and the notation and the modal the railways and the r	ty, allowing towns such a forrance a nnectivity be direct link to direct link to direct link to direct link which a species area. It is a factors and the Railway adverse impage this actions actions and this actions and this actions and the Railway adverse impage this actions.	people to head skirkintilloch and Birdston etween Torrathe wider growty, Flora and the has the had habitats, and Material Apport as this awork and con Path is partiact on its setten will help tilloch, the F	nave direct n and presen with poten ance and Bir een network Fauna – No potential especially assets - Poter action will use paths in Ea ally in line wing and historeduce fr Railway Path	access to the access to the access to the access to the acceptance of the acceptance	aterial Assetine wider envisationable activate in the wider of the bunbartonship of the various LN arove air quality vision to encount of the wall and and connect a Special Land connect of the connect	vironment, invertised in will a cation will a cation will a can will a cation will a cation and districts for biodicative effects and Buffer Zon tivity between the cation will be the cation and cation cation cation and cation cation cation cation and cation cat	work for the also help to and have a ased footfall urbance of iversity and the emissions at travel and stole which will an Torrance,

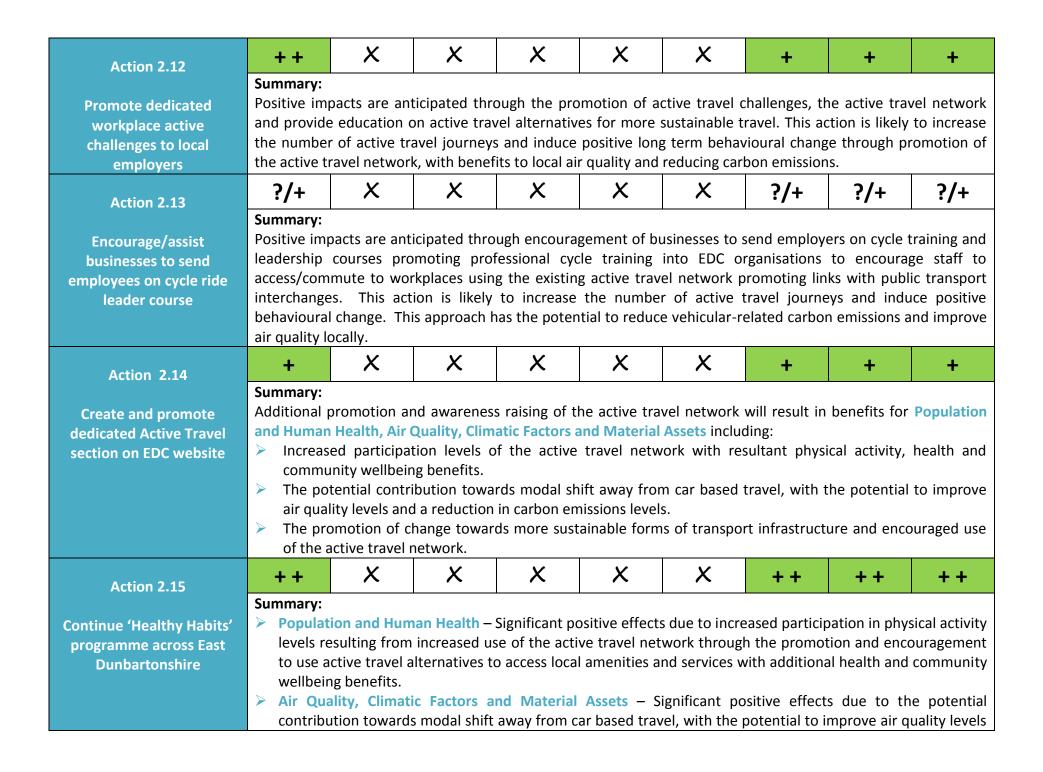
	Water Quality and Climatic Factors – Infrastructure improvements and increased footfall will potentially impact on drainage as well as increase the floor risk in the area from the River Kelvin and Red Burn with impacts to nearby settlements.								
Action 1.9	++	?/-	X	X	X	X	+	+	+
Kirkintilloch Town Centre Masterplan	active t sustains This is I safety, environ Cultura environ	ravel and parable travel nikely to reduair quality, ment.  I Heritage mental assets	man Health, rticipation leve etwork while uce traffic leve noise reduce  There are ts such as the	yels in active also enhance els in the too tion, conges e potential e Antonine W	travel within ing the publ wn centre w tion, reduct negative im 'all and Buffe	Kirkintilloch ic realm to on the could go in carbo in carbo pacts to the Zone, 17 li	town centre create a more enerate position on emissions ne value and	with a change pleasant entive benefits and a mo	ge to a more nvironment. on levels of re pleasant of historic
Action 1.10	++	?/-	/+		+/-	X	++	++	++/-
Kirkintilloch/Lenzie to Bishopbriggs off-road active travel route	Popular connect residen a moda AQMA Biodive vegetat Lenzie I Cultura degrada	Summary:  Population and Human Health, Air Quality, Climatic Factors and Material Assets – This action will improve connectivity between Bishopbriggs and Kirkintilloch/Lenzie through the promotion of active travel for residents, visitors and commuters. This will allow people to access the wider environment and contribute to a modal shift in transport to a more sustainable network, contributing to a reduction in air quality in the AQMA in Bishopbriggs and emissions. However, upgrades to and new infrastructure will be needed.  Biodiversity, Flora and Fauna and Soil and Geology – Negative impacts resulting in the potential removal of vegetation/sensitive soils including disturbance and adverse effects to the value of nearby LNCS and LNR at Lenzie Moss. There are also potential impacts where there are peatland/carbon rich soils present.							
Action 1.13	++	?/	?//+	?/	?/-	?/	+	+/-	++
East Dunbartonshire Loop (Circular Route)	<ul> <li>Summary:</li> <li>Population and Human Health, Air Quality, Climatic Factors and Material Assets – This action will improve and encourage safe off-road active travel throughout East Dunbartonshire with improved access to the wider environment including attractors such as Mugdock Country Park, the Campsie Fells and town centre services. This will represent a modal shift in transport to active travel, reducing emissions and improving air</li> </ul>								

			•			•	o have a neg	ative impact	on flood risk
			-		Glazert Wate		Landscano	ınd Water Qı	uality – The
									-
		Loop has the potential to improve access to the wider natural and historic environment, although there are potential adverse impacts to the setting and value of historically designated sites e.g. the Antonine Wal Gardens and Designed Landscapes and Conservation Areas, sensitive/protected species and habitats e.g.							
	•								
	LNCS, S	SSSI and LNR	R, Local Land	scape Areas	and green b	elt e.g. the	Campsie Fel	ls and sensiti	ve soils e.g
		_	•			•	•	cts for water	quality fron
	drainag	e issues resu	1		fall along rou	ites and char	nges to infras	tructure.	
Action 1.14	++	?/-/+	?/-/+	?/	?/-	?/-	++	++/-	+/-
Improve access by active travel to green network assets/open spaces	<ul> <li>Summary:         <ul> <li>Population and Human Health, Air Quality, Climatic Factors and Material Assets – This action will improve accessibility to the wider environment with health benefits in terms of increased active pursuits, enjoyment of the environment and community wellbeing. This is likely to promote the use of local open spaces by addressing access issues and encouraging active travel. This is likely to facilitate a shift from existing transport infrastructure to a more sustainable network as well as a reduction in poor air quality and emissions from transport.</li> <li>Cultural Heritage, Biodiversity, Flora and Fauna, Soil and Geology, Landscape and Water Quality – This action has the potential to improve access to the wider natural and historic environment including open spaces, although there are potential adverse impacts to the setting and value of historically designated sites, sensitive/protected species and habitats, Local Landscape Areas and green belt and sensitive soils e.g. lowland raised bog peatland at Low Moss. There are also predicted negative impacts for water quality from drainage issues resulting from increased footfall along routes and changes to infrastructure with secondary</li> </ul> </li> </ul>								
	Cultura action I spaces, sites, se lowland drainag	I Heritage, I has the pote although the ensitive/prote draised bog se issues resu	sport.  Biodiversity,  ential to imponere are potected specie  peatland at I	Flora and F rove access ential advers s and habita Low Moss. The	auna, Soil and to the wider se impacts to ts, Local Landhere are also tfall along ro	nd Geology, natural and the setting dscape Areas predicted no	Landscape at historic enverger and value of and green begative impace	nd Water Que ironment income for historically elt and sensite ts for water	uality – Th luding ope designate ive soils e.q quality froi
Action 1 15	Cultura action I spaces, sites, se lowland drainag	I Heritage, I has the pote although the ensitive/prote draised bog se issues resu	sport.  Biodiversity,  ential to imposere are pot ected specie peatland at lulting from in	Flora and F rove access ential advers s and habita Low Moss. The	auna, Soil and to the wider se impacts to ts, Local Landhere are also tfall along ro	nd Geology, natural and the setting dscape Areas predicted no	Landscape at historic enverger and value of and green begative impace	nd Water Que ironment income for historically elt and sensite ts for water	uality – Thi luding ope designate ive soils e.g quality fror
Action 1.15	Cultura action I spaces, sites, se lowland drainag impacts	I Heritage, I has the pote although the ensitive/prote draised bog se issues resu	sport.  Biodiversity,  ential to implere are pot ected specie peatland at lulting from ing in SEPA Floor	Flora and F rove access ential advers s and habita ow Moss. Thereased foo od Risk Areas	auna, Soil and to the wider see impacts to ts, Local Landhere are also tfall along rosi.	nd Geology, natural and the setting dscape Areas predicted ne utes and cha	Landscape at historic enverger and value of and green begative impace	nd Water Que vironment income of historically elt and sensite cts for water structure wit	uality – Thi luding ope designate ive soils e.g quality fror h secondar
Action 1.15 Cycling in EDC parks	Cultura action I spaces, sites, se lowland drainag impacts  ++ Summary: This action connections facilitates in Dunbartons	has the pote although the ensitive/prote raised bog se issues results for flooding + will provide to open spaceased act hire while is	sport.  Biodiversity, ential to implere are pot ected specie peatland at lulting from irg in SEPA Floor  e new additionaces, town tive travel joinstitute.	Flora and Frove access ential adverses and habitations Moss. The creased food Risk Areased X  tions to the centres, public ourneys, as the active tr	to the wider se impacts to the wider se impacts to the re are also there are also tfall along rost.  A capacity transport well as encountered access	nd Geology, natural and the setting dscape Areas predicted ne utes and cha  X  vel networks t interchange ourages conn	Landscape at historic envergence of the historic	nd Water Que vironment income of historically elt and sensite cts for water structure wit	uality — Thi luding ope designate ive soils e.g quality from h secondar  + e enhance This option aths in Eas

Action 1.16	Summary: This action will encourage active travel by providing safe cycle provision and storage at town centres and rail								
Secure cycle storage at rail stations and town centres	train service	stations. This will also encourage commuting to work or further education as people will be able to connect to train services, particularly for longer journeys. This will have a positive influence on improving air quality, reducing congestion and carbon emissions, along with a more sustainable transport network.							
Action 1.20	+	X	X	X	X	X	+	+	+
Signage Review	and the pot		creased activ	•			twork through ternative to v		
Action 1.21	++	+/-	+/-	?/-	X	?/-	++	++	++
Maintenance Review	<ul> <li>Summary:</li> <li>Population and Human Health, Air Quality, Climatic Factors and Material Assets – This action will ensure that poor routes are brought up to a safe and usable standard which will encourage active travel and enable people to connect to the wider environment, services, amenities and transport links for a shift away from vehicular based travel.</li> <li>Cultural Heritage, Biodiversity, Flora and Fauna, Soil and Geology and Water Quality – Although this action will help to connect people to the wider natural and historic environment, this has the potentially to adversely affect natural and historic designated sites in East Dunbartonshire as well as result in soil erosion and damage and drainage issues as a result of increased active travel and upgrades to routes.</li> </ul>								
	adverse	ely affect nat	ural and hist	oric designat	ed sites in E	ast Dunbarto	onshire as we	ll as result in	otentially to
Action 1.22	adverse	ely affect nat	ural and hist	oric designat	ed sites in E	ast Dunbarto	onshire as we	ll as result in	otentially to
Action 1.22 Crossing Improvements	adverse and dar  +  Summary: This action attractive a participation	ely affect nat mage and dra X will remove	ural and hist ainage issues  x  physical ba network an bute toward	oric designat as a result of  X  rriers and pod access to	ed sites in E increased a X rovide appro town centr	ast Dunbarto ctive travel of  X  opriate cross res and serv	onshire as we and upgrades	Il as result in to routes.  +  ss to a safe, Ill increase a	tentially to soil erosion  +  secure and ctive travel
	adverse and dar  +  Summary: This action attractive a participation	ely affect nat mage and dra X will remove active travel n and contri	ural and hist ainage issues  x  physical ba network an bute toward	oric designat as a result of  X  rriers and pod access to	ed sites in E increased a X rovide appro town centr	ast Dunbarto ctive travel of  X  opriate cross res and serv	onshire as we and upgrades  + sing for accesvices. This wi	Il as result in to routes.  +  ss to a safe, Ill increase a	tentially to soil erosion  +  secure and ctive travel

	AQMA's in E	Bearsden and	d Bishopbrigg	gs).					
Action 2.2	++	X	X	X	X	X	++	++	+
Continuation and expanding of Primary Schools in EDC delivering Bikeability Scotland Level 2 Cycle Training	Summary: As above.								
Action 2.3	++	X	X	X	X	X	++	++	+
Encourage Primary and Secondary Schools in East Dunbartonshire to achieve the 'Cycle Friendly School Award'/ support an active travel champion	Summary: As above.								
Action 2.4	++	X	X	X	X	X	++	++	+
Educate the School Community on Active Travel by incorporating into the School Curriculum			•	_			ugh education	•	
Action 2.5	++	X	X	X	X	X	+	+	+
Encourage participation in national events such as Walk to School Week	Summary: As above.								
	?/++	X	X	X	X	X	?/++	?/++	?/++

Action 2.8	_	Although the effects are uncertain at this stage, positive impacts are anticipated through encouragement to							
Provide major employers in East Dunbartonshire with	staff to access/commute to workplaces using the existing active travel network and promoting links with public								
relevant information to	•	transport interchanges. This action is likely to increase the number of active travel journeys and induce long term positive behavioural change, promoting more sustainable forms of transport infrastructure and particularly							
assist with developing	•			_			tentially imp		•
Workplace Travel Plans or						•	s on the exist		•
appointing an Active Travel	•	•		•	•	•	ple for busine	•	
Co-ordinator / Champion		- 00-7			1				
Action 2.9	?/++	X	X	X	X	X	?/++	?/++	?/++
Employer Status for EDC employers  Action 2.10	of transpor	t infrastruct dalso has the	ure, a reduc	tion in carbo contribute t	n emissions	and potent	eys promoting tially improvious I change with ?/+ +	ng local air o	quality. This
Assist employers to support/designate an Active Travel Ambassador or a Workplace Cycling Instructor	measures and cycling with of transportaction could	nd accept as: in EDC privat t infrastructi d also has the	sistance. Ho te organisatio ure, a reduc	wever, positions, an increation in carbo contribute to	ve impacts ar use in active to on emissions	re anticipate travel journe and potent	d with emplo d through the eys promoting cially improvi I change with	e increased p more sustai	romotion on nable formation on the contraction of t
Action 2.11	?/++	X	X	X	X	X	?/++	?/++	?/++
Promote adult and commuter cycle training to businesses	experienced a beneficial term positiv	d cyclists. Thi effect on th ve behaviour nissions. Ho	s assistance of e number of al change if t	could lead to active travel take up was l	employers d journeys. Pro nigh with pot	elivering tra oviding this tential bene	or advice o ining to empl assistance is fits for impro aployers and	oyees which also likely to ving local air	should have induce long quality and



	and a re	duction in ca	rbon emissic	ns as a resul	t of less veh	icular travel.			
Action 2.16	+	X	X	X	X	X	+	+	+
Produce pocket size Active Travel route guides	<ul> <li>Summary:         Additional promotion and awareness raising of the active travel network will result in benefits for Population and Human Health, Air Quality, Climatic Factors and Material Assets including:         Increased participation levels of the active travel network with resultant physical activity, health and community wellbeing benefits.         The potential contribution towards modal shift away from car based travel, with the potential to improve air quality levels and a reduction in carbon emissions levels         The promotion of change towards more sustainable forms of transport infrastructure and encouraged use of the active travel network.     </li> </ul>								
Action 2.17	++	X	X	X	X	X	+	+	+
Develop an annual 'Programme of Active Travel Events' Calendar	Events and which could	Events and campaigns are likely to result in more active travel and the establishment of an active community which could create a supportive network of walkers and cyclists as well as encourage greater active travel participation. A regular programme of events could be an excellent stepping stone for inducing long term active travel choices.							
Action 2.18	++	X	X	X	X	X	++	++	++
Pilot dedicated walking groups to promote short distance routes	Climatic Fa increased u alternatives modal shift	Summary: This action is likely to result in significant positive impacts to Population and Human Health, Air Quality, Climatic Factors and Material Assets due to increased participation in physical activity levels resulting from increased use of the active travel network through the promotion and encouragement to use active travel alternatives to access public transport interchanges, local amenities and services. This will contribute towards modal shift away from car based travel to a more sustainable network and is likely to improve air quality levels, reduce congestion levels and contribute to a reduction in carbon emissions.							
Action 2.19	++	+/-	+/-	?/-	+	?/-	++	++	++
Encourage schools businesses and community groups to '	positive ownersł provide	impacts as nip and prov a safe and	this action vide opportu	will give locanities to many travel netwo	al communit intain and ork whilst c	ties and ene enhance act contributing	elity and Climergetic commicive travel roto a modal sess.	unity groups utes. This	a sense of action could

- ➤ Cultural Heritage and Biodiversity, Flora & Fauna Positive impacts are likely through increased and improved provision of active travel access to natural and historic environmental assets. There is also potential for adverse impacts to the value and setting of sensitive and vulnerable protected/designated sites of importance through maintenance.
- Soil and Geology and Water Quality —Potential adverse impacts particularly in relation to maintenance and resurfacing of the network which could have multiple impacts including soil damage/erosion, land contamination and soil compaction from heavy machinery as well as temporary discharges, run off or drainage issues if necessary works are carried out in close proximity to watercourses.
- 3.8.4 In cases where the assessed SEA Preferred Option has not been carried forward into the Strategy as a Preferred Option the detailed non-environmental reasoning and justification has been expanded upon with the assessment commentary or further information provided below.
  - Action 1.22 Alternative 2 The assessment of this option predicted that there is potential for significant positive impacts for Population and Human Health due to the identification of new locations for suitable crossings which has the potential to benefit a greater number of people and will improve the safety for active travel along busy routes. However, this option was not taken forward into the Active Travel Strategy due to limitations with funding and Alternative 1 was deemed to be a more economical option to meet the aims of the Strategy.
  - Actions 2.8, 2.9, 2.10, 2.11 and 2.13 Alternative 2 The assessment of each of these options highlighted alternative 2 as the SEA preferred option due to their positive impact on the provision of a dedicated officer for Active Travel Planning/Cycling provision as well as training and awareness opportunities. It was predicted that this would drive forward and provide a specific focus on the required behavioural change towards more sustainable forms of transport infrastructure. The provision a dedicated post and training is also likely to increase the uptake or participation levels in private organisations throughout East Dunbartonshire. However, the alternative options for these 5 actions were not taken forward into the Active Travel Strategy due to predicted limitations in participation with behavioural change actions within private organisations as well as funding restrictions.

## 3.9 Cumulative Impacts

- 3.9.1 An environmental assessment has been undertaken for each identified Strategy alternative and has been assessed against the SEA Objectives and set criteria, based on their predicted impact on the current environmental baseline. The assessment has been conducted using professional judgement and GIS spatial analysis where appropriate.
- 3.9.2 The cumulative environmental effects are assessed once each action assessment is completed. Cumulative effects arise, for instance where several developments or actions have insignificant impacts, but when combined result in a significant

environmental effect. The significance of these effects relates to the same matrix point scale as used for the individual assessments. A summary of the justification is provided below on the predicted cumulative effects for each of the environmental factors used to assess the Active Travel Strategy.

- 3.9.3 It should be noted that, with the implementation of the proposed mitigation measures suggested in each of the individual actions assessments (Appendix C), the effects for each of the environmental factors are likely to be neutralised and other effects could potentially become more positive in nature.
- 3.9.4 The cumulative impact on **Population and Human Health** is considered to be overall major positive for the Strategy. The positive nature of the actions on this SEA criteria are due to a number of factors including:
  - Enhanced community wellbeing and promotion of healthy lifestyles through improved provision to encourage active travel and improved access to outdoor recreation opportunities, the wider countryside and cultural heritage sites.
  - Improved provision of education and awareness raising opportunities and facilities, particular for the younger generation and businesses in East Dunbartonshire.
  - The active support for physical activity levels and community health improvements throughout East Dunbartonshire.
  - An increase in active travel participation for both leisure journeys as well as for commuting, including linkages between the active travel network and public transport infrastructure. For example, action 1.16 will provide safe cycle storage in all town centres and train stations which will encourage longer distance journeys including for access to workplaces in neighbouring local authority areas.
- 3.9.5 The overall cumulative environmental impact on **Cultural Heritage** was seen to be potentially significantly negative in nature for the Strategy. The actions promote improved accessibility to East Dunbartonshire's wider environment, including sites of historical or cultural interest. However, several of the actions for Twechar, Kirkintilloch, Bishopbriggs, Torrance and Bearsden, for example 1.3, 1.7, 1.8, 1.9, 1.10 and 1.16, as well as improvements to the East Dunbartonshire Loop (1.13), will require upgrades or changes to existing or new infrastructure in sites that are in the line of the Antonine Wall World Heritage Site and Buffer Zone as well as the Forth and Clyde Canal Scheduled Monument, near Conservation/Townscape Protection Areas and in the vicinity of a Garden and Designed Landscape. Implementation of these actions has the potential to detract from the value and character of these assets without the implementation of appropriate mitigation as suggested.
- 3.9.6 The overall cumulative environmental impact on **Biodiversity**, **Flora and Fauna** was seen to be significant negative in nature for the Strategy. These impacts are predominantly due to the impact of the ATS actions resulting in effects including:

- East Dunbartonshire has a range of designated natural assets including Local Nature Conservation Sites, Local Nature Reserves and SSSI. In particular, actions 1.7, 1.10 and 1.13 have the potential to result in the disturbance to LNCS valued for their high biodiversity and geodiversity value including Kilmardinny Loch LNR near Milngavie and Low/High Moss LNCS in Bishopbriggs. Improvements to existing routes or the creation of new active travel routes have the potential to result in disturbance to protected and designated sites of biodiversity importance.
- Potential temporary and long-term removal of habitats and vegetation.
- 3.1.6. The overall cumulative environmental impact on **Soil and Geology** was seen to be significantly negative for the Strategy. The negative nature of the actions on this SEA criteria are due to a number of factors including:
  - The impact of increased footfall from walking and cycling along routes resulting in soil degradation.
  - Of the 12 'Improving active travel through the delivery of infrastructure' that were subject to assessment 1.3, 1.7, 1.8, 1.10, 1.13, 1.14 and 1.21 would result in the upgrade of existing infrastructure or the creation of new active travel routes. This is likely to require varying levels of construction or maintenance which could result in soil erosion and compaction from the impact of using heavy machinery.
  - Each of the actions that focus on infrastructure changes has the potential to be in the vicinity of peatland and/or carbon rich soils. It is suggested that surveys should be carried out to determine the presence of this soil type as the release of carbon from these stores has the potential to have adverse effects to the wider area.
- 3.1.7. The overall cumulative environmental impact on Landscape was seen to be insignificant for the Strategy. Although some of the individual assessments such as 1.8, 1.10, 1.13 and 1.14 highlighted a potential negative impact on the landscape due to changes in landscape character and encroachment of the green belt, the impact of these for the whole of East Dunbartonshire are not deemed to be significant.
- 3.1.8. The overall cumulative environmental impact on **Water Quality** was seen to be minor negative in nature for the Strategy. The negative nature of the actions on this SEA criteria are due to a number of factors including the impact of maintenance of existing routes and crossings and potential upgrades and construction work that may be required such as resurfacing. There will be potential drainage issues as well as temporary discharge and run off of pollutants into nearby watercourses. This effect will potentially have a negative impact on the quality of the Forth and Clyde Canal of which several of the actions and infrastructure improvements will be near to including 1.3, 1.8, 1.13, 1.14 and 1.21.
- 3.1.9. The overall cumulative environmental impact on Air Quality and Climatic Factors are seen to be significant positive for the Strategy. The positive nature of the actions on this SEA criteria are due to a number of factors including:
  - A modal shift away from vehicular based travel through the promotion of active travel alternatives which in turn will contribute to a reduction in air pollution and carbon emission levels.
  - Several of the 'Behavioural change' actions will raise awareness of and promote the use of more sustainable forms of transport infrastructure for schools and workplaces in East Dunbartonshire with potential long-term benefits.

- Although there are potential minor negative impacts predicted for the individual assessments for actions 1.8, 1.13 and 1.14 in terms of impacts to Flood Risk Areas through increased footfall or infrastructure changes, the effects of these are not likely to be cumulative in nature, especially where the proposed mitigation measures are put in place.
- 3.1.10. The overall cumulative impacts on Material Assets are seen to be significant positive for the Strategy. The positive nature of the actions on this SEA criteria are due to a number of factors including:
  - The improvement and encouragement of safe use of existing core paths and active travel routes in East Dunbartonshire.
  - Promoting positive changes to the current transport infrastructure which is primarily car-based to a more sustainable network that encourages active travel.
  - Enhancing an understanding within schools and workplaces in East Dunbartonshire in support of active travel and a change in behaviour from vehicle journeys to work/school to cycling and walking.

## 3.10 Influence of SEA on the Active Travel Strategy

- 3.10.1 Through each of the assessments for the Strategic Direction, Ambition, Aims and Actions of the Active Travel Strategy, there have been notable examples of the positive influence of SEA on the Active Travel Strategy whereby the SEA Preferred Options and SEA suggested alterations have been incorporated into the Strategy, for example:
  - Strategic Direction The SEA preferred option taken forward as the approach for delivery the ATS.
  - Ambition The SEA preferred option for the ambition was taken forward into the ATS.
  - Aims For Aim 2, the SEA suggested alterations regarding the wording were taken into account and incorporated into the Strategy. The SEA preferred option for Aim 2 and 3 were also taken forward into the ATS.
  - ➤ Actions The majority of SEA preferred options for each of the actions were incorporated into the ATS with the exception of the 6 actions mention in 2.8.4 (see section for justification).
- 3.10.2. Actions 1.1, 1.2, 1.4, 1.5, 1.6, 1.8, 1.10, 1.11, 1.12, 1.15, 1.19, 2.6, and 2.7 were not assessed as part of the Environmental Report as it was deemed that there was an insufficient level of detailed information available at this stage to carry out an appropriate assessment. To account for this, a statement has been included in the Active Travel Strategy indicating that the integration of environmental consideration and assessments of the actions will be determined by additional feasibility or exploratory studies on a case by case basis, including assessments of any potential adverse effects on biodiversity and habitats.
- 3.10.3. Mitigation measures have also been identified in order to avoid adverse impacts, reduce their significance or enhance neutral or positive impacts identified. Mitigation has been integrated in different forms including suggested alterations and construction or project level mitigation for the delivery of infrastructure improvements. A detailed list of mitigation measures can be found in the assessment matrix in Appendix C. Examples of mitigation incorporated into the assessments to inform the Strategy are shown in Table 10.

Table 10: Examples of mitigation incorporated into the assessments

Environmental Factor	Mitigation
Cultural Heritage	Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or their setting.
Biodiversity, Flora and Fauna	<ul> <li>Ensure that removal of topsoil, trees and vegetation is minimal</li> <li>Potential Protected Species Surveys, Licences or mitigation if considered necessary to avoid adverse impacts particularly in sensitive areas</li> <li>Control and treatment of surface runoff</li> </ul>
Soil and Geology	Implement soil erosion prevention measures outlined in good practice guidance

- Control and treatment of surface runoff
- Adoption of best practices to avoid pollution of watercourses

# Section 4: Mitigation Measures and Monitoring

## 4.1 Mitigation Measures

- 4.1.1 Schedule 3 paragraph 7 of the Environmental Assessment (Scotland) Act 2005 require that the Environmental Report includes the measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse effects on the environment of implementing the Active Travel Strategy.
- 4.1.2 Mitigation measures have been proposed and incorporated into each element of the Strategy framework in order to avoid, reduce, mitigate or offset any potential adverse environmental impacts and enhance any neutral or positive environmental impacts identified. The mitigation measures incorporate all environmental factors which were scoped into the assessment and will be the responsibility of East Dunbartonshire Council to implement in conjunction with key agencies and stakeholders. Mitigation measures for each of the proposed Strategy Actions can be reviewed within Appendix C.

## 4.2 Monitoring

- 4.2.1 Through Section 19 of the Environmental Assessment (Scotland) Act 2005, East Dunbartonshire Council is required to monitor significant environmental effects of the implementation of the Active Travel Strategy. The monitoring should be implemented as to enable the identification of any unforeseen adverse effects at an early stage to allow the appropriate remedial action to be implemented.
- 4.2.2 The specific measures that are to be taken to monitor the significant environmental effects of the implementation of the ATS will form part of the Post-Adoption Statement prepared as soon as reasonably practicable after the adoption of the Strategy in accordance with Section 18 of the Act. It is envisaged that the following indicators will be included within the monitoring framework:

**Table 11: SEA Monitoring Programme for the Active Travel Strategy** 

SEA Category	Indicators	Data Source
	Changes in the deprivation levels in 20% SIMD areas?	SCROL
Domilation	% increase in overall walking and cycling rates in east Dunbartonshire?	EDC
Population, Human Health	Number of people in East Dunbartonshire using active travel methods (walking /cycling) to access their place of work/study and for recreation in neighbouring authority boundaries.	EDC
	Number of people in East Dunbartonshire using active travel methods to access their place of work/study and	EDC

	for recreation in East Dunbartonshire	
	Cultural and Behavioural shift towards active travel modes, and furthermore towards sustainable transport.  - Rail and Bus patronage figures  - Cycle stands and secure parking installations  - Number of Children and Adults trained in Bikeability Levels 1-3.	EDC / Transport Scotland / SPT / Bus Operators
Cultural Heritage	Number of cultural heritage assets in or near the vicinity of projects or proposals within the ATS % change in visitor numbers to East Dunbartonshire's cultural heritage assets? Number of people who access heritage sites using active travel alternatives.	EDC / Historic Scotland
Biodiversity, Flora and Fauna	Reported damage to protected sites (International, National, Regional and Local)?  Number of developments incorporating access to the areas green network?  Ecosystem specific indicators, such as area of woodland habitats improved/changes?  Loss/expansion/enhancement of woodland/forestry in East Dunbartonshire?  Reported damage / loss in relation to protected species?  Number of new active travel networks created as a result of the ATS in close proximity to designated or protected sites.  % of new developments linking active and sustainable transport alternatives with the development area?	EDC / SNH
Soil and Geology	Area of potentially contaminated land altered by actions set out within the ATS % of peatland improved or lost through active travel network improvements.	SNH
Landscape	Number of habitat network or connectivity improved or created as a result of the ATS.  ATS actions linked with the Core Path Plan, Local Transport Strategy and emerging Green network	SNH EDC
Lanascape	Strategy.  Number of active travel actions at a cross-boundary level.	EDC
	Changes to the classification of water bodies in line with	SEPA
Water Quality	the requirements of the Water Framework Directive.  Changes to drainage and capacity levels, particularly in relation to active travel improvements and enhancements which are undertaken.	EDC / SEPA

Air Quality	Emissions levels in East Dunbartonshire- % change ( $NO_2$ and PM10 levels are measured continuously within East Dunbartonshire. There are 4 monitoring stations in Bishopbriggs, Kirkintilloch, Bearsden and Milngavie. There are also 43 sites with monitoring tubes for $NO_2$ around the EDC area)	SEPA
	Number of AQMA in East Dunbartonshire / Ensure no new AQMA sites are declared.	EDC & Scottish Government Air Quality Data
Climatic Footname	Greenhouse gas output trends in East Dunbartonshire.	SEPA
Climatic Factors	Changes in the extent to flooding, particularly in areas where active travel improvements and enhancements are undertaken (SEPA Flood Mapping)	SEPA
	% of population which utilise the Core Path networks (change)	EDC
	Monitoring of corridors where active travel routes have been provided to determine an impact to traffic levels.	EDC
Material Assets	Number of new paths to/from public transport interchanges and amount of cycle parking installed at key public transport interchanges?	EDC
	Number of active travel related considerations incorporated into the development proposals and projects.	EDC

# Section 5: Statutory Consultation and SEA Timetable

## **5.1** Statutory Consultation

5.1.1 The statutory consultation for the Environmental Report and corresponding Active Travel Strategy is:

# Wednesday 26<sup>th</sup> August 2015 – Wednesday 7<sup>th</sup> October 2015

5.1.2 Responses to the SEA and Strategy should be submitted through email or post to the following addresses:

Email: development.plan@eastdunbarton.gov.uk

Land Planning Policy
Development and Regeneration
East Dunbartonshire Council
Southbank House
Strathkelvin Place
Kirkintilloch
G66 1XQ

#### 5.2 **SEA Timetable**

5.2.1 It is anticipated that the SEA process will align with the Strategy preparation stages. Table 12 below illustrates this alignment and provides the anticipated timescales for each.

**Table 12: SEA Timescale & Milestones** 

Plan Preparation Stages	SEA Stages	Anticipated Timescale & Consultation Period, if required
Preliminary Assessment and Survey / Research work	Scoping Report  Collate and forecast baseline environmental information  Adopt environmental objectives and criteria	<ul> <li>Research and Develop         Scoping Report –         May/June 2015</li> <li>Scoping Report         submission 12<sup>th</sup> June         2015</li> <li>Consultation with CA's         <ul> <li>5 week period</li> </ul> </li> </ul>
Prepare Draft CLS Strategy	<ul> <li>Environmental Assessment</li> <li>Assess the framework of the</li> <li>Assess all reasonable alternatives to the Strategy</li> <li>Prepare the Draft</li> </ul>	<ul> <li>Draft Environmental         Report alongside the         preparation of the ATS</li> <li>Responses from the         Consultation         Authorities at the</li> </ul>

	Environmental Report	Scoping stage will be taken into account  Drafting will be between July and August 2015  Finalisation of the Environmental Report and Strategy in August 2015
Publish & Consult on Draft CLS Strategy	Publish & Consult on Draft Environmental Report	Consultation with the public and CA's – 26 <sup>th</sup> August 2015 – 7 <sup>th</sup> October 2015.
Adopt CLS Strategy	Publish Post-Adoption Statement along with the adopted Finalised Draft PPS	Adoption of the ATS and publication of the Post-Adoption Statement – Early 2016
Monitor & Review	Monitor and Review	Ongoing / Annual review

#### Appendix A: International, European Community, and National Environmental Protection Objectives; Regional and Local Objectives

Please note that this appendix lists key legislation, plans, programmes, policies and strategies that influence or are influenced by the Active Travel Strategy. Their content, where appropriate, has been used to inform the environmental objectives for the SEA of the Strategy.

Relevant PPS to the Active Travel Strategy	Summary / Objectives or requirements	How objectives and requirements influence the Active Travel Strategy	
International			
Rio Declaration (1992)	The Declaration sets out 27 principles to enable the global community to work towards international agreements that respect the interests of all and protect the integrity of the global environmental and developmental system. The Declaration highlighted the necessity to protect and enhance the environment, economics and social aspects in both developed and developing countries, which includes protecting our biodiversity and nature assets and ensuring that our communities are able to live in harmony with the natural environment.	The outcomes proposed for the Active Travel Strategy should be in line with the principles set out in the Rio Declaration. In doing so, EDC will show its commitment to sustainable development; in particular protecting and enhancing the natural environment.	
Convention on Biological Diversity (1992)	The Convention on Biological Diversity responded to the increasing commitment worldwide for sustainable development. As part of the Convention, a number of objectives and outcomes were highlighted including:  The conservation of biological diversity,  The sustainable use of natural resources, and  Fair and equitable use of biological and natural resources.  The Convention encouraged the development of National Biodiversity Action Plans and, consequently, Local Biodiversity Action Plans.	The ATS will be developed in parallel to the development of EDC's Green Network Strategy Local Biodiversity Action Plan. In line with the purpose of the ATS, the outcomes of the Convention will be reflected and the ATS will show its duty for the conservation of biodiversity and natural resources where possible.	
Kyoto Protocol (1997)	The UK has committed itself to a 12.5% reduction in greenhouse gas emissions from 1990 levels by 2008-2012. It has also set its own domestic target of a 20% reduction in carbon dioxide by 2010.	The ATS will seek to identify potential areas within East Dunbartonshire that will offer a range of benefits, including adaptation to climate change. This aspect of the ATS will contribute to the targets in greenhouse gas emission reductions as set originally by the Kyoto Protocol and demonstrate the Council's duty to reducing emissions.	
Gothenburg Protocol (1999)	The Protocol set emission levels for 2010 with particular focus on four main pollutants considered to have the most significant effects; $NO_x$ , sulphur, VOCs and ammonia. Limits for emissions were set for specific sources (e.g. transport and electricity) with overall aims to protect human health and the environment. The Protocol intends to abate acidification and eutrophication.	The development and implementation of the ATS will help to achieve the targets and aims set by the Gothenburg Protocol. It will also contribute to the reduction of acidification and eutrophication.	
Johannesburg Declaration (2002)	The Johannesburg Declaration on Sustainable Development. The 2002 Declaration built upon the principles established through the Rio Declaration and further developed principles of sustainable development and sought	The outcomes proposed within the ATS should be in line with the principles set out within this Declaration. In doing so, EDC will show its commitment to sustainable development; in particular by supporting and linking with other	

	international commitment to these Sustainable Development Principles.	Policies at both a national and local level in delivering sustainable development in East Dunbartonshire.
Strategic Plan for Biodiversity 2011-2020	This Plan provides an overarching framework on biodiversity for all of the United Nations involved in order to encourage the engagement of biodiversity management and policy development.  This international framework was agreed by Parties to be translated through biodiversity action plans and Strategies. It also outlines the Aichi Biodiversity Targets (see below).	The ATS will support the framework set by the Strategic Plan for Biodiversity through the identification of new and enhancement of existing active travel routes throughout East Dunbartonshire. The content of the Strategy should take cognisance of habitat connectivity and biodiversity designations and value within East Dunbartonshire.
Aichi Biodiversity Targets	The Aichi Biodiversity Targets are outlined within the Strategic Plan for Biodiversity 2011 – 2020 and include 5 Strategic Goals, in which 20 different targets are set. The Strategic Goals include:  Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society  Reduce the direct pressures on biodiversity and promote sustainable use  Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity  Enhance the benefits to all from biodiversity and ecosystem services  Enhance implementation through participatory management and capacity building.  The targets set are intended to be achieved or exceeded by 2020.	The ATS should consider its role in achieving the Aichi Biodiversity Targets by taking account of the needs and priorities at a local level. The Strategy will identify the role of East Dunbartonshire's active travel network, along with links, potential impacts and enhancements for biodiversity value which has the potential to contribute to the targets.

	European		
Directive 2009/147/EC pm the Conservation of Wild Birds (EU Birds Directive)	The Birds Directive protects all wild birds, their nests, eggs and habitats within the European Community. It gives EU member states the power and responsibility to classify Special Protection Areas (SPA's) to protect birds which are rare or vulnerable in Europe as well as all migratory birds which are regular visitors.	The EU Birds Directive outlines the requirement for the protection of specific species, as outlined in the Directive. These species are considered to be the highest priority for protection. The ATS will adhere to these requirements to support the protection of these species and ensure there are no cross-boundary impacts on SPA designated sites within adjacent local authority boundaries.	
Directive 92/43/EEC on	The Habitats Directive builds on the Birds Directive by protecting natural	Although there are currently no designated sites in East Dunbartonshire	
the conservation of	habitats and other species of wild plants and animals. Together with the Birds	under the Directive, The EU Habitats Directive outlines the requirement for	
natural habitats and of	Directive, it underpins a European network of protected areas known as	the protection of specific habitats, as outlined in the Directive. These	
wild fauna and flora	Natura 2000. This network includes SPA's classified under the Birds Directive	habitats are considered to be the highest priority for protection. The ATS	

(EU Habitats Directive)	and a new set of international nature conservation areas introduced by the Habitats Directive, Special Areas of Conservation (SAC's).	should adhere to these requirements. The Strategy proposes to enhance active travel routes as part of the wider active travel network and green network in East Dunbartonshire and so will support the protection of these habitats.
	The Water Framework Directive aims to protect and improve the water environment in order to contribute to achieving sustainable development. It sets out specific objectives and targets for committed parties to work towards and achieve. The main objectives include:	
Directive 92/43/EEC establishing a framework for Community action in the field of water policy (The Water Framework Directive)	<ul> <li>Achieving 'Good' status across all water bodies by 2015.</li> <li>The status achieved should not deteriorate</li> <li>Protected area requirements should be met through the achievement of standards and objectives</li> <li>Any identified increasing trends in pollutants in groundwater, specifically, should be remediated and reversed</li> <li>A continuous and progressive reduction of pollution (particularly priority substances) in order to phase out hazardous substances and ultimately prevent/reduce pollution of groundwater.</li> </ul>	The ATS should ensure that it complies with the requirements of the Directive by ensuring that projects do not increase the risk of flooding. In particular, the ATS should be mindful of protecting waterbodies such as the Forth and Clyde Canal to ensure that opportunities to enhance these networks do not result in the decline of water quality.
	The Directive also sets the requirements for Member States to develop River Basin Districts and River Basin Management Plans for them.	
EU 2020 Biodiversity Strategy	The Strategy seeks to protect Europe's Biodiversity, and the ecosystem services it provides. The vision of the Strategy is 'By 2050, European Union biodiversity and the ecosystem services it provides – its natural capital – are protected, valued and appropriately restored for biodiversity's intrinsic value and for their essential contribution to human wellbeing and economic prosperity, and so that catastrophic changes caused by the loss of biodiversity are avoided'. It establishes a framework for action which includes:  Conserving and Restoring Nature  Maintaining and Enhancing Ecosystems and their Services  Ensuring the sustainability of agriculture, fisheries and forestry  Combating invasive alien species  Addressing the global biodiversity crisis	The ATS will potentially play an important role in connecting habitats and biodiversity in East Dunbartonshire, and will help to contribute to the EU Biodiversity Strategy by showing its commitment to managing and enhancing ecosystems and their services, and conserving and restoring nature. Consideration of biodiversity as part of the ATS will provide further benefits to human health and wellbeing. The objectives of the ATS should consider, where possible, how it will adhere to the framework of actions set in the Biodiversity Strategy.
National		

Climate Change (Scotland) Act (2009)	The Climate Change (Scotland) Act commits the Scottish government to establishing a zero-carbon economy through the reduction of greenhouse gas emissions. Within the Act, a number of targets were set:  A 42% reduction in greenhouse gas emissions by 2020  An 80% reduction in emissions by 2050  The Act intends Local Authorities to adhere to the requirements and targets set in order to contribute to Scotland's emission reduction progress as well as reductions locally.	The proposed ATS will aims to identify and promote active travel opportunities which will contribute to the targets in reducing greenhouse gas emissions at a local level, while also maximising the benefits of climate change adaptation opportunities.
'Climate Ready Scotland'- Scotland's Climate Change Adaptation Programme	The Programme addresses the impacts identified for Scotland in the UK Climate Change Risk Assessment (CCRA). It sets out the Scottish Ministers' objectives in relation to adaptation to climate change, and their proposals and policies for meeting those objectives. Aims include:  Ensuring a productive, healthy and diverse natural environment which is able to adapt to change, including promotion of green infrastructure and development of the ecosystem approach; and implementation of the Scottish Biodiversity Strategy  Ensuring well-managed, resilient infrastructure and buildings providing access to the amenities and services we need;  Ensuring strong, healthy, resilient communities which are well informed and prepared for a changing climate, including increased awareness of the importance of flood risk management	The ATS should consider its role in contributing to achieving the aims set out by Climate Ready Scotland. In particular, the ATS will help achieve the aims related to a 'productive, health and diverse natural environment' and 'ensuring strong, healthy, resilient communities'.
Low Carbon Scotland- Meeting our Emissions Reduction Targets 2013-2027	'Low Carbon Scotland – Meeting our Emissions Reduction Targets 2013-27' is the second report on policies and proposals ('RPP2') that will contribute to reducing greenhouse gas emissions in Scotland. It was designed to address the duty placed on the Scotlish Government by the Climate Change (Scotland) Act 2009 to provide policies and measures for addressing the need to reduce greenhouse gas emissions. In support of targets set to reduce emissions 42% by 2020 and by 80% by 2050 compared to 1990 levels, Low Carbon Scotland focusses its vision on energy supply, homes and communities, business and the public sector, transport, rural land use and waste. Within the document, the benefits of a low carbon society are set out.	The ATS should contribute to Low Carbon Scotland, and the targets set therein, by highlighting the role of the active travel network. The objectives of the Strategy should demonstrate the role of the active travel network and proposed opportunities in terms of promoting a modal shift within East Dunbartonshire away from car-based travel and contribute to achieving the targets set at a local level in line with this national legislation.
Wildlife and Countryside Act 1981	The Wildlife and Countryside Act is the primary legislation for the protection of animals, plants and certain habitats in the UK. It sets out the requirements of protection and associated fines where the Act is not adhered to in relation to the specific species/habitats identified in the legislation. It requires any land	The objectives of the ATS should be compliant with the Wildlife and Countryside Act as they will contribute to the requirements of the Act.

	that is identified as being of special interest by reason of any of its flora, fauna, geological or physiographical features to be classified as a Site of Special Scientific Interest (SSSI) and afforded certain protection against damaging measures.	
Wildlife and Natural Environment (Scotland) Act 2011	The Act amends existing legislation relating to the protection of certain birds, species, habitats and activities, aiming to make law on wildlife and the natural environment more effective and proportionate. Issues covered in the Act include:  Deer management, Species licencing, Protected areas, Game species, Wildlife crime, and Invasive Non-Native species.	The Act highlights the requirements for a focussed effort to protect and manage certain species which should be translated through the ATS to ensure that its actions ensure the protection of species specific to East Dunbartonshire at a local level.
The Protection of Badgers Act (1992)	This Act specifies the requirement for the protection of Badgers in the UK which includes any offences that would disrupt, endanger or kill a badger sett.	The protection of badgers, and their habitats, will need to be considered in the ATS and the actions included in the Strategy and Action Plan should be considerate of the requirements of the Act.
The Conservation (Natural Habitats &c.) Regulations 1994 as amended	The Habitats Regulations require competent authorities to carry out appropriate assessments in certain circumstances where a plan or project affects a Natura (European) site. Habitats Regulations Appraisal (HRA) refers to the whole process, including the appropriate assessment step.	In alignment with the biodiversity duty set by the Regulations, the ATS should ensure that the duty is considered for the protection and enhancement of biodiversity as part of the wider active travel network.
Nature Conservation (Scotland) Act 2004	The Act places duties on public bodies in relation to the conservation of biodiversity, increases protection for Sites of Special Scientific Interest (SSSI), amends legislation on Nature Conservation Orders, provides for Land Management Orders for SSSIs and associated land, strengthens wildlife enforcement legislation, and requires the preparation of a Scottish Fossil Code.	Through the production of the ATS, East Dunbartonshire will contribute towards the requirements set out in the Act, which includes East Dunbartonshire showing its commitment to the duty as a public body. The ATS should demonstrate how it intends to ensure the protection of the sites set out in the Act through its action plan programme.
Scottish Biodiversity List	The Scottish Biodiversity List details the animals, plants and habitats determined to be of principle important for the conservation of biodiversity in Scotland. Its purpose is to guide public bodies in the protection of the species outlined in the List.	Through compliance the ATS will show its commitment to the Biodiversity Duty as full consideration will be given to listed species during the production of the Strategy, in particular the action programme. It is also important that the ATS considers the species in the List as well as showing its compliancy with the appropriate action needed to protect these species.
A Five Year Species Action Framework: Making a difference for Scotland's species	The Species Action Framework identifies certain species where targeted management action in Scotland is required. It highlights requirements for the protection of Scotland's species in order to secure their future through effective management.	The ATS would need to ensure that its objectives are sensitive to the requirements of the Framework to ensure that any actions and projects to improve the active travel network in East Dunbartonshire are mindful to protect and enhance, where possible, biodiversity.

(2007)		
UK Post-2010	The UK Post-2010 Biodiversity Framework succeeds the UK Biodiversity Action Plan 1994 and was developed in response to the Strategic Plan for Biodiversity 2011-2020 and the 20 Aichi Biodiversity Targets. The Framework details the	The ATS should consider how its objectives will be compliant with the objectives and requirements of the UK Post-2010 Biodiversity Framework in
Biodiversity Framework	requirements for the UK to achieve the Aichi Biodiversity Targets. The requirements needed by each of the 4 UK countries are outlined in terms to the activities needed to contribute to international obligations. The Framework reflects a revised direction for nature conservation.	order to show its commitment to achieving the targets and highlight the preferred actions which will contribute towards nature conservation in East Dunbartonshire.
Scottish Biodiversity Strategy 2004 (Scotland's Biodiversity: It's in Your Hands) and The 2020 Challenge for Scotland's Biodiversity (2013)	The Scottish Government's Strategy document, published in 2004: 'Scotland's Biodiversity: It's in Your Hands' has an aim to "conserve biodiversity for the health, enjoyment and wellbeing of the people of Scotland now and in the future." The Strategy represented Scotland's response to the Convention on Biological Diversity and the Scottish commitment to the UK Biodiversity Action Plan. This Strategy was later augmented by The 2020 Challenge in 2013 in response to new international targets and builds upon the original Strategy.  The Vision of the Strategy is to present Scotland as a recognised world leader in biodiversity conservation by 2030 by involving everyone in order to appreciate the benefits and ensure that 'the nation is enriched'.  The Scottish Biodiversity Strategy aims to:  Protect and restore biodiversity on land and in our seas, and to support healthier ecosystems.  Connect people with the natural world, for their health and wellbeing and to involve them more in decisions about their environment.  Maximise the benefits for Scotland of a diverse natural environment and the services it provides, contributing a sustainable economic growth.	The objectives set out within the ATS should consider its role in supporting the targets set within The 2020 Challenge for Scotland's Biodiversity.
Scottish Forestry Strategy (2006)	There are 7 key themes to achieve the vision of the Scottish Forestry Strategy- "By the second half of this century, people are benefiting widely from Scotland's trees, woodlands and forests, actively engaging with and looking after them for the use and enjoyment of generations to come. The forestry	The ATS has a role to play in terms of improving; encouraging and promoting the active travel network access East Dunbartonshire, including woodland assets and outdoor leisure opportunities. The ATS should consider the role of the forestry and woodland within East Dunbartonshire and ensure

	resource has become a central part of our culture, economy and environment"-	alignment with the Scottish Forestry Strategy. The action plan set out in the
	which include:	ATS should demonstrate how the Strategy will contribute to the protection,
	Using forestry, and adapting forestry practices, to help reduce the impact of climate change and help Scotland adapt to its changing climate	enhancement and management of existing forestry assets in East Dunbartonshire.
	<ul> <li>Getting the most from Scotland's increasing and sustainable timber resource</li> <li>Strengthening forestry through business development to underpin sustainable forest management and support economic growth and</li> </ul>	
	<ul> <li>employment across Scotland</li> <li>Improving the quality of life and wellbeing of people by supporting community development across Scotland</li> <li>Making access to, and enjoyment of, woodlands easier for everyone –</li> </ul>	
	to help improve physical and mental health  Protecting the environmental quality of our natural resources (water, soil, air) contributing to and improving our scenery, and helping to make the most of our unique historic environment	
	Helping to restore, maintain and enhance Scotland's biodiversity, and increasing awareness and enjoyment of it.	
	<ol> <li>The outcomes of the Strategy include:         <ol> <li>Improved health and well-being of people and their communities</li> <li>Competitive and innovative businesses contributing to the growth of the Scottish economy</li> </ol> </li> <li>High quality, robust and adaptable environment.</li> </ol>	
Land Reform (Scotland) Act 2003	The Land Reform (Scotland) Act establishes the statutory rights related to access to land in Scotland for recreational, commercial and educational purposes. It also sets the provisions for Right of Way and Core Path Plans. The requirements for a Scottish Outdoor Code to be produced and implemented by SNH and local authorities.	The ATS will need to adhere to the requirements of the Land Reform (Scotland) Act. The requirements related to Rights of Way, Core Path Plans and access rights will be of particular importance for the ATS.
Flood Risk Management (Scotland) Act 2009	The Act provides a more sustainable and modern approach to flood risk management, taking in to account the impact of climate change. The Act will also create a more joined up and coordinated process to manage flood risk at a national and local level. Specific measures within the Flood Risk Management (Scotland) Act 2009 include:	The Act is likely to influence the ATS particularly regarding the action programme for the Strategy by promoting actions to mitigate any identified flooding risks through appropriate management.

	<ul> <li>A framework for coordination and cooperation between all organisations involved in flood risk management;</li> <li>Assessment of flood risk and preparation of flood risk management plans;</li> <li>New responsibilities for SEPA, Scottish Water and Local Authorities in relation to flood risk management;</li> <li>A revised, streamlined process for flood protection schemes;</li> <li>New methods to enable stakeholders and the public to contribute to managing flood risk, and;</li> <li>A single enforcement authority for the safe operation of Scotland's reservoirs.</li> </ul>	
River Basin Management Plan for Scotland	Produced as a result of the requirements of the Water Framework Directive, the River Basin Management Plan for Scotland sets out a Plan for integrating land and water management for effective protection and improvement to the water environment in Scotland. The Plan details the current condition of waterbodies and sets objectives to be achieved by 2015 and beyond to prevent deterioration.	The RBMP is an important consideration in the development of the ATS. The requirements of the RBMP should be taken into account within the Strategy and should express its commitment to meeting the targets for the waterbodies in East Dunbartonshire.
National Planning Framework 3	The National Planning Framework 3 is the Scottish Government's Strategy for the long term development of Scotland's towns, cities and the countryside. The NPF3 supports four main themes: A successful, sustainable place; a low carbon place; a natural, resilient place; and a connect place.	The ATS should recognise and support the requirements of the main themes set out within the Framework. The ATS will show a commitment to the four main aims of the NPF3, particularly a natural, resilient place and a connected place.
Scottish Planning Policy (SPP)	The consolidated SPP provides a shorter, clearer and more focused statement of national planning policy. The SPP and NPPG series has been replaced by a single SPP. As part of the commitment to proportionate and practical planning policies, the Scottish Government has rationalised national planning policy.  The SPP sets out:  the Scottish Government's view of the purpose of planning, the core principles for the operation of the system and the objectives for key parts of the system,	The ATS will need to consider the requirements of SPP throughout its development, including the impact of development of active travel routes and use of the wider network for biodiversity, habitats and path networks within East Dunbartonshire. The Strategy will contribute to and be influenced by a number of subject policies set out within the SPP in relation to:  Valuing the Natural Environment  Maximising the Benefits of Green Infrastructure  Promoting Sustainable Transport and Active Travel

	statutory guidance on sustainable development and planning under	
	Section 3E of the Planning etc. (Scotland) Act 2006,	
	concise subject planning policies, including the implications for	
	development planning and development management, and	
	The Scottish Government's expectations of the intended outcomes of	
	the planning system.	
	Principal policies (sustainability and placemaking)	
	A commitment to the four themes set out in the NPF3.	
	Alongside policy on development plans, development management,	
	community engagement, sustainable development, climate change and	
	sustainable economic growth, the SPP sets out policies related to the delivery	
	of low carbon communities and natural heritage. It also supports the	
	development of green networks for the protection or enhancement of	
	connectivity and habitats.	
	Fifteen National Outcomes were set for the Scottish Government, and were	
	updated in 2011. These include:	
	We live in a Scotland that is the most attractive place for doing	The ATS should contribute towards each of the National Outcomes, where
	business in Europe.	possible. The National Outcomes particularly relevant to the ATS, although
	We realise our full economic potential with more and better	not limited to, include:
	employment opportunities for our people.	Our young people are successful learners, confident individuals,
	We are better educated, more skilled and more successful, renowned	effective contributors and responsible citizens
	for our research and innovation.	We live longer, healthier lives
	Our young people are successful learners, confident individuals,	We have tackled the significant inequalities in Scottish society
Scottish Government	effective contributors and responsible citizens.	We live in well-designed, sustainable places where we are able to
National Outcomes	Our children have the best start in life and are ready to succeed.	access the amenities and services we need
(2007)	We live longer, healthier lives.	We have strong, resilient and supportive communities where
	We have tackled the significant inequalities in Scottish society.	people take responsibility for their own actions and how they affect
	We have improved the life chances for children, young people and	others
	families at risk.	We value and enjoy our built and natural environment and protect
	We live our lives safe from crime, disorder and danger.	it and enhance it for future generations
	We live in well-designed, sustainable places where we are able to	We take pride in a strong, fair and inclusive national identity
	access the amenities and services we need.	We reduce the local and global environmental impact of our
	We have strong, resilient and supportive communities where people	consumption and production
	take responsibility for their own actions and how they affect others.	
	We value and enjoy our built and natural environment and protect it	

	and enhance it for future generations.  We take pride in a strong, fair and inclusive national identity.	
	<ul> <li>We reduce the local and global environmental impact of our consumption and production.</li> </ul>	
	<ul> <li>Our people are able to maintain their independence as they get older and are able to access appropriate support when they need it.</li> </ul>	
	Our public services are high quality, continually improving, efficient and responsive to local people's needs.	
Cycling Action Plan for Scotland (2013)	and responsive to local people's needs.  The Cycling Action Plan for Scotland sets out 19 actions to achieve the vision set by the Scottish Government and Transport Scotland that "by 2020, 10% of everyday journeys taken in Scotland will be by bike". The 19 actions are:  Establish an annual national cycling summit involving the Minister for Scotland and local authority Heads of Transportation and relevant Committee Convenors, to lead delivery and gauge progress.  Develop for each local area the strategic approach to supporting functional cycling (and active travel more broadly), mapping the appropriate infrastructure improvements required along with supporting promotional work to achieve tangible changes in travel choices.  Continue to promote a national training programme on cycling-integration design and best practice to planners, designers and engineers, through the delivery of accredited modules such as Making Cycling Mainstream, and promote the use of planning policy - Designing Streets, Cycling by Design cycle guidance and Smarter Choices, Smarter Places good practice.  Continue to develop and maintain community links – i.e., high quality, local infrastructure to support active travel (routes and public realm improvements) particularly in urban areas where high levels of cycling can be achieved, along with associated infrastructure such as cycle parking facilities at key destinations including schools, bus and rail stations, shopping areas and workplaces.  Continue to develop and maintain the National Cycle Network to provide long distance cycling routes, connecting rural communities	With access forming a considerable focus for the ATS, the objectives of the Strategy should demonstrate links that will complement the actions set by the Cycling Action Plan. In doing so, EDC will show a commitment to increasing bike journeys to meet Scottish Government targets.
	<ul> <li>and promoting tourism.</li> <li>Develop better integration with public transport, through partnership working with interests such as rail and bus/coach operators and RTPs.</li> </ul>	

- Establish the Cycle Hub at Stirling Station as a pilot and evaluate it pilot for potential wider roll-out at other railway stations.
- Promote the implementation of 20 mph schemes in all residential areas and share best practice across the country.
- Develop and deliver a 'Mutual Respect' Campaign for all road users (complementing the 'Give Me Cycle Space' campaign aimed at drivers).
- Continue the roll-out of Bikeability Scotland cycle training through schools, steadily expanding participation, particularly in on-road training (Bikeability level 2). Develop and promote support for this, including volunteer-led delivery and parental involvement.
- Develop Adult Cycle Training resources, building on Bikeability Scotland standards, including an essential skills module as a pilot for potential roll-out nationwide.
- Promote and support community-led cycling initiatives, through signposting resources and providing support for projects that will promote cycling participation in an inclusive, accessible way. Evaluate the delivery of the Cycle Friendly Communities Fund programme to date and promote the learning to further develop approaches to supporting communities.
- Continue to promote projects which encourage primary school pupils to continue cycling when progressing to secondary schools, such as I-Bike and delivery of Bikeability Scotland level 3.
- Promote cycling for young people more broadly, for leisure or travel, for fun, health and sport, through the promotion of cycling activities, events and led cycle rides.
- Develop approaches to promoting access to bikes e.g., develop Bike Library schemes for schools and communities to promote access to bikes in areas of low cycle use or deprivation, as taster cycling sessions.
- Encourage all employers across all sectors to become Cycle Friendly (e.g., by offering support for workplace cycling facilities and promotional resources, active travel champions, travel planning).
- Develop follow-up work from the Smarter Choices, Smarter Places evaluation report, applying learning to encourage active travel as part of community-based sustainable transport promotion.

	<ul> <li>Report annually on an appropriate suite of national indicators to inform the national picture of cycling participation.</li> <li>Develop local monitoring, using data from local cycle counts and surveys etc., with support from national delivery bodies to develop a coordinated approach to data collection.</li> <li>Our vision is for walking and cycling to be the natural choice for short journeys, creating a healthier, socially inclusive, economically vibrant, environmentally friendly Scotland.</li> </ul>	
Active Travel, Active Scotland: Our Journey To A Sustainable Future (2012)	To realise our vision:  We need championing – by politicians, local councillors, heads of transport, public health directors and others – to advocate active travel.  We need to achieve more creative and appropriate use of existing transport budgets to allocate more to active travel schemes on the basis that they clearly deliver better value for money than most traditional schemes.  We need to invest in people and places, not modes of transport.  We need to develop better partnership working to help align policy objectives and to achieve common outcomes and benefits.  We need more holistic and effective planning and appraisal systems that truly recognise the benefits walking and cycling schemes bring.	Throughout the development of the ATS, the focus of creating a sustainable future and culture and behavioural change throughout East Dunbartonshire in terms of promoting the benefits and enhancing the active travel network will need to be in line with the vision set out within the Active Travel, Active Travel Scotland document.
A Long-Term Vision for Active Travel in Scotland 2030 (2014)	Scotland's communities are shaped around people, with walking or cycling the most popular choice for shorter everyday journeys.  This helps people make healthy living choices and assists in delivering places that are happier, more inclusive and equal, and more prosperous. Travelling by foot or cycle, or with a personal mobility aid such as a scooter, is a realistic option for all local journeys as individuals.  People are confident to walk and cycle more often and they value and use their local transport networks (streets, roads and path networks), which offer safe, high quality, realism and predictable journey options for active travel.  Objectives:  Better health and safer travel for all	With active travel provision and accessibility forming the main focus for the ATS, the objectives of the Strategy should demonstrate long-term strategic thinking and links that will complement the actions set by the Long-Term Vision for Active Travel in Scotland in order to meet Scottish Government targets.

	<ul> <li>Reducing inequalities</li> <li>Cutting carbon emissions and other pollution</li> <li>Delivering Liveable, more pleasant communities</li> </ul>	
Scotland's National Transport Strategy	As Scotland's strategy for the long-term future of transport, one of the three key issues it outlines is to reduce transport-related emissions in order to establish a future which relies upon sustainable transport.	Transport is one of the main contributors of air pollution in East Dunbartonshire. The ATS will focus on the active travel network throughout East Dunbartonshire and opportunities as one of the areas to be addressed in order to improve air quality, alongside the Local Transport Strategy and emerging Green network Strategy. Consequently, the ATS will contribute to the NTS objective of reducing emissions and improving air quality.
Scottish Outdoor Access Code	The Scottish Outdoor Access Code provides detailed guidance on the responsibilities set out within the Land Reform (Scotland) Act. The main principles laid out in the Code are:  Respect the interests of other people Care for the environment Take responsibility for your own actions	The ATS should ensure that the principles of the Outdoor Access Code are integrated within the Strategy as part of identifying opportunities to enhance the active travel network throughout East Dunbartonshire.
Let's Get Scotland Walking – A National Walking Strategy	The National Walking Strategy is a key element to delivering the National Physical Activity Implementation Plan. Its vision is a Scotland where everyone benefits from walking as part of their everyday journeys, enjoys walking in the outdoors and where places are well designed to encourage walking.  The 3 strategic aims are:  Create a culture of walking where everyone walks more often as part of their everyday travel and for recreation and well-being  Better quality walking environments with attractive, well designed and managed built and natural spaces for everyone  Enable easy, convenient and safe independent mobility for everyone.	The development of the ATS will ensure that the aims of the National Walking Strategy are contributed to. The ATS will present a number of different opportunities to encourage walking in East Dunbartonshire.

Let's Make Scotland More Active: A Strategy for Physical Activity (2003)	Strategy Vision – 'People in Scotland will enjoy the benefits of having a physically active life'  Strategy Goal – 'To increase and maintain the proportion of physically active people in Scotland'  Strategic Objectives  To develop and maintain long-lasting, high-quality physical environments to support inactive people to become active.  To provide accurate and evidence-based advice to staff who are involved in government policy and service delivery and who work in the voluntary and private sectors.  To raise awareness and develop knowledge and understanding about the benefits of physical activity and provide access to information.  To carry out research, monitoring and evaluation.	The development of the ATS will ensure that the aims of the National Strategy for Physical Activity are contributed to. The Strategy will present and promote a number of different opportunities to encourage walking and active travel throughout East Dunbartonshire together with highlighting the leisure and sport facilities to increase physical activity statistics in the area.
Scottish Historic Environment Policy (SHEP) 2011	SHEP sets out the main principles and policies that will guide the management and enhancement of the historic environment for Scotland in support of the national outcome that 'we value and enjoy our built and natural environment and protect and enhance it for future generations'.  The aims of SHEP are to:  Realise the full potential of the historic environment as a resource — cultural, educational, economic and social — across every part of Scotland and for all the people;  Make the best use of the historic environment to achieve their wider aims of economic and social regeneration;  Identify the many aspects of our environment and protect and manage them in a sustainable way to secure their long-term survival and preserve their embodied energy;  Understand fully all aspects of the historic environment, and their condition and inter-relationships;  Broaden access to the historic environment and break down intellectual physical and economic barriers;  Ensure that effective systems underpinned by appropriate legislation	The ATS will contribute to the aims of SHEP by encouraging appropriate management, use and access in terms of the active travel network, which will encompass historical assets within East Dunbartonshire. It is likely that enhancements to the active travel network will provide benefits for the historic environment including visual amenity and improved access. Conversely, management and enhancement of the historic environment is likely to promote knowledge and use of the surrounding active travel network.

	and information are in place to conserve and manage the historic environment.	
Fitting Landscapes: Securing More Sustainable Landscapes (2014)	Policy Vision To promote the more sustainable design, implementation, maintenance and management of the transport estate and ensure that the landscapes we create and manage are of high quality, well integrated, bio-diverse, adaptable and deliver a meaningful contribution to national sustainability targets.  Fitting Landscapes Policy sets out the Scottish Governments commitment to quality in aspects of landscape design and management in connection with transport infrastructure.	The ATS will contribute to the vision and objectives of the Fitting Landscapes Policy through the creation, enhancement and maintenance of East Dunbartonshire's active travel network. This policy will be taken into consideration in terms of the impact of active travel infrastructure and assets on landscape character, local distinctiveness and scenic value.
Good Places, Better Health (2008)	Good Places, Better Health recognises the role of the physical environment for improving health inequalities and highlights the need to improve connections between these two factors. It supports five of the national outcomes:  Our children have the best start in life and are ready to succeed  We live longer, healthier lives  We have tackled the significant inequalities in Scottish society  We live in well-designed, sustainable places where we are able to access the amenities and services we need  We value and enjoy our built and natural environment and protect and enhance it for future generations.	Through the opportunities that will be identified in in the ATS, the Strategy will show its commitment improving health and wellbeing in East Dunbartonshire. The ATS will demonstrate how the physical environment is vital for improving health and wellbeing.
Equally Well (2008)	In order to drive a vision to improve health inequalities in Scotland, the key principles include:  Improving the whole range of circumstances and environment that offer opportunities to improve people's life circumstances and hence their health  Addressing the inter-generational factors that risk perpetuating Scotland's health inequalities from parent to child, particularly by supporting the best possible start in life for all children in Scotland  Engaging individuals, families and communities most at risk of poor health in services and decisions relevant to their health  Delivering health and other public services that are universal, but also targeted and tailored to meet the needs of those most at risk of poor health. We need to prevent problems from arising in the future, as	The ATS should demonstrate its commitment to improving health inequalities at a local level in East Dunbartonshire. It is likely that by enhancing the active travel network for benefits related to biodiversity and improvements in accessing the environment for local communities, there will also be notable health benefits as a result.

well as addressing them if they do.	

#### Regional

The GCV Landscape Assessment report undertook an assessment of landscape character in the Glasgow and Clyde Valley area including Glasgow, West Dunbartonshire, East Dunbartonshire, Renfrewshire, East Renfrewshire, North Lanarkshire, South Lanarkshire and Inverclyde. The purpose of the document is to:

- Provide a detailed description and analysis of the study area in written, diagrammatic and map form;
- Identify the extent to which each landscape character type is due to human influences or natural processes;
- Outline the physical and ecological as well as the cultural and human influences which have helped shape the landscape within the study area;
- Outline the key features of the landscape which contribute to their character, including a broad assessment of their contribution to that character;
- Identify and describe each distinct character area within the study area based on factors such as the shape, scale and diversity of the landscape, including the visual experience of that landscape and its sensory qualities;
- Consider the historic landscape which should be integrated throughout the report, describing those historical features which are characteristic and make a contribution to the landscape character;
- Consider the likely and existing pressures and opportunities for landscape change, assess each character area's sensitivity and robustness to landscape change, and identify those elements of the landscape which are most prone to change;
- Identify the links between urban areas and their surroundings, both visually and in recreational terms and assess how the surrounding area acts as a setting for the urban area;
- Prepare management guidelines for each landscape character type

The findings of the Landscape Assessment are a key consideration for the ATS as it will need to be taking into account to ensure that the development of the ATS action plan, and its integration, notes the different landscape typologies within East Dunbartonshire and develops actions that are sensitive to the local landscape.

Glasgow and Clyde Valley Landscape Assessment (1999)

	during Phase 2 of the project.	
	The Scottish Ministers approved, with modifications, the Glasgow and the Clyde Valley Strategic Development Plan on 29.5.12.	
	The SDP together with the LDP forms the Development Plan in city region areas. It is prepared under Scottish Parliamentary Law, the Planning etc. (Scotland) Act 2006 and the Town and Country Planning (Scotland) Act 1997.	
Glasgow and Clyde Valley Strategic Development Plan (SDP)	The key aim of the SDP is to set out a long term Spatial Vision and related spatial development strategy. This will determine the future geography of development in the city region to 2035, which will support economic competitiveness & social cohesion, set within a sustainable environmental approach. It is about creating quality of place by focusing on the continued regeneration and transformation of the city region's communities whilst securing positive action on its key asset, its natural environment. It seeks to minimise the development and carbon footprints of the city region, meet climate change emissions targets and above all, support a drive towards a sustainable low carbon economy. It recognises the green network as a key environmental component for addressing the range of objectives in the SDP.	The SDP provides the overall geographical framework for development in the Glasgow and Clyde Valley Region. The ATS should consider the role of the active travel network in East Dunbartonshire for achieving the objectives set by the SDP, particularly those pertaining to sustainability and emission reduction targets.
Glasgow and Clyde Valley Forestry and Woodland Strategy	The Strategy recognises the role of trees, woods and forests as essential to the environment, livelihood and culture. It also supports the delivery of woodland based opportunities as part of the wide green network in the Glasgow and Clyde Valley region and establishes a framework to guide local level interventions.  It aims to 'increase the economic, social and environmental contribution that forests and woodlands make to Glasgow and the Clyde Valley. This requires us to make the most of both our existing woodlands and to created opportunities for new ones where they add most value to the environment, local communities and society as a whole'. The Vision is intended to be delivered with a 25 year life span.	The ATS should support the vision of the Glasgow and Clyde Valley Forestry and Woodland Strategy. It should consider the role of woodland and forestry in East Dunbartonshire and the role this can play in integrating with the Strategy objectives in order to align with the aims of the GCV Forestry and Woodland Strategy.
A Catalyst for Change: The Regional Transport Strategy for the west	Strategy Vision – "A world class sustainable transport system that acts as a catalyst for an improved quality of life for all."  The Shared Goals for the Strategy include; Develop the economy; Promote	The ATS should support and align with the vision, shared goal and objectives of the wider Regional Transport Strategy. The ATS should consider the role of active travel within East Dunbartonshire and its role in integrating with neighbouring authorities and the wider region.

of Scotland (2008- 2021)	social inclusion and equality; and Improve health and protect the environment.	
SPT Walking and Cycling Action Plan (2008)	The Walking and Cycling Action Plan is one of a series of action plans developed as part of the Regional Transport Strategy. The Action Plan sets out the key issues, objectives and recommendations for encouraging more individuals to walk and cycle in the SPT area. It summarises work undertaken in analysing the issues and challenges for encouraging walking and cycling, and is intended to set out a clear programme of action to take forward.	The ATS should support and align with this regional Walking and Cycling Action by implementation and promoting the active travel agenda at a local level within East Dunbartonshire.
Clyde and Loch Lomond Flood Risk Management Plan (Draft)	The draft Clyde and Loch Lomond Flood Risk Management Plan provides a short overview of the Local Plan District and the flood risk authorities involved (of which there are 16 local authorities that are completely within or overlapping the district boundary; Argyll and Bute Council, Dumfries and Galloway Council, East Ayrshire Council, East Dunbartonshire Council, East Renfrewshire Council, Falkirk Council, Glasgow City Council, Inverclyde Council, North Ayrshire Council, North Lanarkshire Council, Renfrewshire Council, Scottish Borders Council, South Lanarkshire Council, Stirling Council, West Dunbartonshire Council and West Lothian Council).  The Plan sets out actions for flood risk management within the Clyde and Loch Lomond District, which are summarised separately for each District. The overall objective of the Plan is to reduce overall flood risk. To achieve this general objective, a set of actions are outlined:  Self-help — individuals have the responsibility for protecting themselves and their property from flooding  Awareness raising — SEPA and the responsible authorities have a duty to raise public awareness of flood risk  Flood forecasting  Emergency planning and response  Watercourse maintenance/clearance and repair  Maintenance/asset management  In addition to the general objective and actions for the management of floods in the Clyde and Loch Lomond district, Potentially Vulnerable Areas (PVA) have been identified, each with a set of objectives and potential actions for the	Although the Clyde and Loch Lomond Flood Risk Management Plan (C&LLFRMP) is currently only at a consultation stage, it will be an important consideration for the ATS once it is fully implemented, particularly since East Dunbartonshire lies within or overlapping the district boundary of the C&LLFRMP. The ATS should consider the impacts of the actions discussed in the C&LLFRMP.

	delivery of the Plan. PVA 11/04 Kilsyth to Bearsden – North of Glasgow City is	
Antonine Wall Management Plan 2014-19	relevant to the area of East Dunbartonshire.  The Management Plan sets out the significance of the proposed Antonine Wall World Heritage Site, and provides a vision and a framework for an integrated and consensual approach to the management of the Site while ensuring outstanding universal values are conserved.  The Plan's long term aims for 2014-44 are:  Safeguard and enhance the Outstanding Universal Value of the World Heritage Site by managing, conserving and protecting the Site and its cultural and natural landscape setting  Promote awareness and understanding of this Outstanding Universal Value to local, regional, national and global audiences by improving physical and intellectual accessibility  Realise the World Heritage Site's full potential as an education and learning resource  Build strong structural and organisational partnerships with local, national and international organisations; strengthen engagement with local communities; and contribute to sustainable economic growth  Balance wider environmental concerns in the sustainable management of the World Heritage Site  Increase research opportunities nationally and internationally and use this new research to underpin work to protect and promote the World Heritage Site.	The ATS will need to consider the requirements set out in the Antonine Wall Management Plan to ensure the protection and conservation of the WHS within East Dunbartonshire. It should ensure that any actions proposed within the Strategy are sensitive to the setting and value of the Antonine Wall WHS.
Antonine Wall World Heritage Site and Buffer Zone Supplementary Planning Guidance (SPG) 2011 - 2016	The area that is covered by the SPG includes Falkirk, North Lanarkshire, Glasgow City, West Dunbartonshire and East Dunbartonshire.  The policy emphasis of the SPG is upon protection and conservation of the authenticity and integrity (and the Outstanding Universal Value underpinning its inscription) of the World Heritage Site.	As above.
Neighbouring Authority Strategic Actions	The neighbouring authorities to which this would relate include:  West Dunbartonshire Council Stirling Council	The ATS will need to consider neighbouring authorities strategic plans in the development of the Strategy. This is particularly important where active travel routes and networks cross boundaries into other local authorities, such as Mugdock Country Park which is part of Stirling Council.

	<ul> <li>North Lanarkshire Council and</li> <li>Glasgow City Council</li> <li>This will include documents that could potentially impact on East Dunbartonshire, for example:         <ul> <li>Local Plan (Local Development Plans)</li> <li>Local Biodiversity Action Plans</li> <li>Local Transport Strategies</li> <li>Active Travel Strategies</li> <li>Green Network Strategies</li> </ul> </li> </ul>	
Dunbartonshire Local Biodiversity Action Plan – Dunbartonshire Biodiversity Partnership 2010-2013	<ul> <li>The LBAP was developed between West and East Dunbartonshire in order:         <ul> <li>To conserve species and habitats in Dunbartonshire that are considered vulnerable or threatened on a local or national basis, and in turn to contribute to conservation of our global biodiversity</li> <li>To promote awareness of our local natural resources</li> <li>To promote community engagement in, and ownership of, the practical conservation of our natural resources</li> <li>To promote sustainable and wise use of our natural resources</li> </ul> </li> </ul>	The ATS will recognise the importance of biodiversity in the wider Dunbartonshire area and will seek to prevent adversities on species and habitats by encouraging the use of and enhancement of the active travel network and ultimately improve air quality.

	Local	
	EDC Vision:	
EDC Community	Working together to achieve the best with the people of East Dunbartonshire	The delivery of the ATS will contribute to the SOA for East Dunbartonshire. In particular:  East Dunbartonshire has an expanding economy with a competitive and diverse business and retail base
Planning Partnership -	Local Outcomes:	Our people are equipped with knowledge, skills and training to
Single Outcome		enable them to progress to employment
Agreement (2014-2017)	East Dunbartonshire has an expanding economy with a competitive and diverse business and retail base	East Dunbartonshire is a safe and sustainable environment in which to live, work and visit
	<ul> <li>Our people are equipped with knowledge, skills and training to enable them to progress to employment</li> </ul>	<ul> <li>Our people and communities enjoy increased physical and mental wellbeing and health inequalities are reduced</li> </ul>
	Our children and young people are safe, healthy and ready to learn	
	East Dunbartonshire is a safe and sustainable environment in which to	

	live, work and visit  Our people and communities enjoy increased physical and mental wellbeing and health inequalities are reduced  Our older population are supported to enjoy a high quality of life and our more vulnerable citizens, their families and carers benefit from effective care and support services.	
Local Plan 2 2011-2016	The Local Plan 2 is primarily concerned with the use and development of land in East Dunbartonshire. The Plan contributes towards sustainable development by providing clear guidance on what developments will be acceptable and where they will be permitted.	The ATS will be in line with Local Plan 2 particularly related to the promotion of sustainable development and the integration of the active travel network throughout East Dunbartonshire and the Councils sustainable transport policy.
Local Development Plan (2016)	The emerging LDP for East Dunbartonshire sets the framework for the growth and development of East Dunbartonshire up to 2025 and beyond and establishes a presumption in favour of development that contributes to sustainable development as defined in Scottish Planning Policy (2014).	As above- the emerging LDP is currently a material consideration.
Local Transport Strategy (2013-2017)	<ul> <li>The LTS sets out the objectives, strategy and transport actions and interventions for East Dunbartonshire Council. The principal transport objectives include:</li> <li>Delivering a safe transport network across all modes;</li> <li>Improving the health and wellbeing of the community through promoting sustainable travel and attractive well designed streets and/or active travel routes throughout East Dunbartonshire;</li> <li>Improving the accessibility of services, facilities and businesses in East Dunbartonshire, which promote social inclusion;</li> <li>Delivering reliable and efficient public transport services through close working with key transport partners and providers in order to achieve modal shift;</li> <li>Ensuring that existing roads and footways are maintained incorporating high environmental and design standards;</li> <li>Developing a transport network that supports both the local and wider region through delivering sustainable economic growth and travel, while conserving and enhancing the natural and historic environment where possible; and</li> <li>Ensuring that the impacts from transportation on the environment and air</li> </ul>	There is a direct link between ATS and LTS within East Dunbartonshire. The ATS will include improvements and enhancement opportunities for the active travel network in line with the active travel objectives and principles within the LTS, with the goal of improving air quality throughout East Dunbartonshire by encouraging a modal shift towards active travel alternatives.

	quality are mitigated in order to work towards the targets set out in the Climate Change Act 2008.  Measures to reduce emissions from regional emission sources  Measures to reduce receptor exposure to poor air quality  Measures to prevent new emissions sources or minimise growth of emissions in the future.	
EDC Core Path Plan	<ul> <li>The East Dunbartonshire Council Core Path Plan objectives are:</li> <li>To improve the health and wellbeing of our communities by delivering a path network that gives everyone opportunities for uncomplicated everyday physical exercise,</li> <li>To support the reduction of traffic congestion and pollution by providing everyone with opportunities to make journeys on foot and by bike,</li> <li>To support local business by bringing visitors to the area, using our key routes such as the West Highland Way, the Forth and Clyde Canal and the Campsie Hills as destinations, linked with encouraging walking and cycling, and</li> <li>To support good farming and land management and minimise irresponsible behaviour by proactively managing access to the countryside.</li> </ul>	The Core Path Plan promotes the enhancement of the wider countryside in East Dunbartonshire, with a particular focus around the natural environment and the associated benefits of improvements to these assets. Issues related to access will be directly addressed within the ATS and opportunities will be highlighted to improve the active travel network. As such, the objectives of the Strategy will be aligned with those in the Core Path Plan. In addition, the different network and core paths identified in the CPP will be an important consideration when developing the Strategy and enhancement measures and action for the ATS.
East Dunbartonshire Sustainable Development Strategy (2004)	<ul> <li>To promote a strong local economy</li> <li>To ensure the social wellbeing of everyone in the community</li> <li>To protect the natural environment</li> </ul> The Sustainable Development Strategy for East Dunbartonshire will be replaced by the Sustainability and Climate Change Framework over the course of the preparation of the LBAP.	The ATS will contribute, in parallel, to the aims of the Sustainable Development Strategy. In particular, the ATS should show its commitment to the sustainable use of the natural environment to ensure that it is protected. The ATS should also take into account the emerging EDC Sustainability and Climate Change Framework once it has been implemented.
EDC Open Space Strategy 2015 - 2020	The Open Space Strategy sets a framework for current and future open space provision in East Dunbartonshire, which includes an updated Audit. The OSS will contribute to SPP, NPF3 and the Central Scotland Green Network as a tool to:  Improve the management structures and practices; Help ensure that the Council has a clear strategic direction to its open space investment and asset management; Establish requirements for new open space from development	The ATS will contribute to the aims of the Open Space Strategy. Both are aligned in terms of expected outcomes to improve open spaces and there accessibility throughout East Dunbartonshire and meeting the SOA targets. Improvements to the active travel network, as expressed in the OSS, will be addressed specifically through the ATS.

	proposals together with the scale and nature of any planning obligations; and  Contribute to meeting the objectives of the Single Outcome Agreement.  East Dunbartonshire Council are in the process of developing a Local Biodiversity Action Plan which will play an important role in contributing towards the national targets for biodiversity set out by the Scottish Biodiversity	
EDC Local Biodiversity Action Plan 2016-2020	Strategy (SBS) to prevent further biodiversity loss and restore the essential services for a healthy natural environment by 2020. The targets of the SBS are due to be updated in 2020. As a result it is proposed the LBAP will run from 2016-2020 and then be reviewed to reflect any changes emerging from the review of the SBS targets. The proposed outcomes of the Plan are:  Biodiversity in East Dunbartonshire is protected and enhanced with clear evidence for the reversal or slowing of decline  Improved health and quality of life for the people of East Dunbartonshire, through protection and enhancement of greenspaces, protected areas, nature and landscapes  The intrinsic value and importance of East Dunbartonshire's biodiversity and the additional social and economic benefits it provides are understood by all  Ecosystems in East Dunbartonshire are healthy and functioning well so they are able to provide ecosystem services to residents and businesses	The LBAP and the ATS will be developed in parallel, and due to a direct link between biodiversity and the enhancement of East Dunbartonshire's active travel network, the ATS should demonstrate an alignment between the objectives for the Strategy and the LBAP.
The Campsies: A Strategic Review and Action Plan (2011)	The Campsies Action Plan is a key document for a number of local authorities to which the Campsie Fells are a significant landscape feature; Stirling Council, East Dunbartonshire Council, North Lanarkshire Council and Falkirk Council. The purpose and vision of the Action Plan is:  'Contributing towards realising sustainable economic, social and ecological development in the Campsies through the delivery of strategically significant actions and initiatives. These should support communities living and working within the Campsies, promote responsible access for all, develop visitor interest, use and understanding of the mixed land use resource whilst conserving the area's landscape, biodiversity and geodiversity features'.  The Action Plan is focused around access, tourism and recreation, marketing,	The Campsie Fells is significant to the landscape of East Dunbartonshire. There is significant potential to integrate the actions of the ATS with the actions set out in the Campsies Action Plan in terms of protecting and enhancing East Dunbartonshire's natural environment. The ATS should reflect East Dunbartonshire's commitment to protecting biodiversity assets and promoting active travel access that are linked to the Campsie Fells. The ATS should also consider its role in benefiting the landscape of the Campsies.

	economic development and business support, and biodiversity and geodiversity	
	as key themes to meet the objectives and vision of the Plan over a 10 year timescale.	
EDC Green Network Strategy (emerging)	The Green Network Strategy seeks to produce a strategic green network map for East Dunbartonshire to identify opportunities for enhancement of East Dunbartonshire's existing green network including areas that are classified as vacant and derelict land, fragmented habitats or greenspaces that are underperforming. The identification of opportunities will help to highlight areas that are eligible for expansion and/or enhancement to realise a number of benefits to East Dunbartonshire including improved habitat connectivity, increased active travel and better access to green and open spaces, and improved health and wellbeing, as well as opportunities for adaptation to the effects of climate change.	
	The Strategy will present local, EDC-wide and regional opportunities which include the enhancement of the green network between neighbouring authorities. In doing so, the Green Network Strategy will help to inform the emerging Local Development Plan Green Infrastructure and Green Network Supplementary Guidance and related planning obligations, as well as demonstrating synergies between both biodiversity and access. It will also define open space provision in East Dunbartonshire as an update to the Open Space Strategy 2015 – 2020, although the Open Space Strategy will continue to set open space requirements. Both Strategies should complement each other. The Green Network Strategy should also help to raise awareness and an understanding of East Dunbartonshire's green network for local communities and demonstrate how the green network can be of benefit in terms of education.	The ATS will be developed in line with the emerging Green Network Strategy (GNS) objectives in order to ensure that proposed enhancement opportunities and improvement measures in terms the active travel network are integrated into the decision-making and taken into consideration as part of the GNS opportunities mapping exercise.
	By identifying opportunities for enhancing the green network, a set of recommendations will be established that will be used to inform an action plan. This will be developed between East Dunbartonshire Council and the key stakeholders and will highlight opportunities for external funding and funding from developer contributions as well as interventions that contribute to the aims and objectives of the Strategy.	

### Appendix B –Ambition and Aims – Options and Reasonable Alternative Assessment

Environmental Factor (Annex 1 of EC Directive)	SEA Objective
Population and Human Health	To improve human health and community wellbeing.
Cultural Heritage	To protect, conserve and where appropriate enhance the historic environment.
Biodiversity, Flora and Fauna	To protect, enhance, create and where necessary restore biodiversity and encourage habitat connectivity.
Soil and Geology	To protect and, where appropriate, use high quality and sensitive soils in a sustainable manner and conserve recognised geodiversity assets.
Landscape	To protect, enhance and, where appropriate, restore landscape character, local distinctiveness and scenic value.
Water Quality	To prevent deterioration and, where possible, enhance the ecological status of water bodies.
Air Quality	To prevent deterioration and, where possible, enhance air quality
	To contribute towards the reduction of Scottish greenhouse gas outputs in line with Government targets.
Climatic Factors	To reduce overall flood risk by ensuring new development is not at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk secure management measures.
Material Assets	To promote the sustainable use of community assets and natural resources in East Dunbartonshire.

Assessmen	Assessment Table Key										
++	Major Positive		CEA Bustoned Oakien								
+	Minor Positive	V	SEA Preferred Option								
0	Neutral										
X	No Significant Effect	•	ATS Preferred Alternative Option								
-	Minor Negative										
	Major Negative	]									
?	Uncertain										

## Alternative Ambition for the Active Travel Strategy

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option	
Ambition Alternative 1	+ ? ? ? ? + + +/?										
East Dunbartonshire is a walking and cycling friendly area.	This ambit travel but ambition here is portion quality, cli limited due to the control of the co	fails to indicate the country of the	proad but valicate why, he noted intends this ambition or and mat pe of this are of the sore levisions and treated to the sore and th	now and for to make the n to have perial assets nbition. The tivity levels rel of modal	r whom this e area walki ositive effect. The signine identified through act shift away stion levels.	will be de ng and cycle it in relation ficance of to positive effor ive travel p from privat	ibartonshire livered. It is e friendly win to populat these effect ects are relaranticipation e car use an eravel netwo	s unclear th th no disting ion, human s is anticipa ted to: d resultant	rough this ct focus.  health, air sted to be reductions		

throughout East Dunbartonshire through the implementation of the Strategy.

Through this ambition the effects on the remaining environmental factors are uncertain at this stage due to the lack of detailed focus noted within the ambition and limited scope of the Strategy as a result.

### **SEA Suggested Alteration:**

Mitigation in the form of an alteration to the proposed ambition has the potential to benefit the overall Strategy from an environmental perspective.

"East Dunbartonshire is a place where walking and cycling for everyday journeys is a convenient, viable, safe and attractive choice for residents, commuters and visitors."

**Ambition Alternative 2** East Dunbartonshire is a place where walking and cycling for everyday journeys is a convenient, viable, safe and attractive choice for residents.

commuters and visitors.



### **Assessment Commentary:**

This ambition ensures that walking and cycling will be facilitated through the ATS and that East Dunbartonshire is seeking to create an area where active travel is a convenient, viable, safe, attractive and natural choice for residents, workers and visitors and not merely an inferior choice to private car journeys. This will have a significant positive effect in terms of population, human health and wellbeing through the enhancement and promotion of the active travel network with the aim of increasing public participation and physical activity levels and enabling sustainable access to open space assets, leisure and recreational opportunities.

Through this ambition the Strategy has the potential to provide a significant positive in terms of landscape character and material assets through the provision of a reasonable and attractive alternative to private car use. With a focus on the provision and enhancement of the active travel network this could lead to increased protection for community and settlement distinctiveness, scenic value and landscape character while improving the active travel infrastructure and links with public transport network to enable convenient and viable journeys (full or part) through active travel alternatives.

Through increased provision of the active travel network this ambition could also have a significant



positive impact in terms of air quality and climatic factors through modal shift towards active travel alternatives, resulting in reduced road congestion levels, carbon emissions reduction and divert East Dunbartonshire's reliance on private car use and the road based network.

The impacts anticipated through the active travel network enhancements and improved provision are likely to result in positive impacts in relation to cultural heritage, biodiversity, water quality and soil and geology. This is mainly through the provision of sustainable access alternatives to East Dunbartonshire's natural and historic environment assets, facilities and opportunities. However, these impacts aren't fully certain at this stage and will be scrutinised in more detail within the assessment of the ATS Action Plan where more site specific information, constraints and opportunities are known.

0

X

0

X

#### **Ambition Alternative 3**

East Dunbartonshire is a place where on-road cycling and footway walking adjacent to roads is permitted where it is safe to do so and supplements road based transport.

### Assessment Commentary:

0

0

Through this alternative ambition there is no significant change proposed to promote or enhance walking and cycling levels throughout East Dunbartonshire. As a result of this, the anticipated effects on human health and wellbeing, cultural heritage, biodiversity, landscape and material assets is likely to be overall neutral. This is mainly due to the fact that the ambition displays a distinct lack of ambition to alter, upgrade or promote the use of active travel alternatives which will limit the scope of the Strategy in terms of infrastructure enhancements and public participation.

With a lack of direction or focus on encouraging active travel use by residents, workers or visitors there is potential that such an ambition will have an adverse impact on human health and wellbeing, air quality and climatic factors as it suggests that active travel alternatives will be merely tolerated rather than promoted and focusses the Councils transport agenda towards road based travel and a continued reliance on private vehicles.

### Alternative Aims for the Active Travel Strategy

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option		
Aim 1	+		3	3	3	3	+	+	?			
Alternative 1 Increase the number of walking and cycling journeys in East Dunbartonshire.	This aim s clear on he the enviro limited sco This aim i however, traffic con	Assessment Commentary:  This aim simply focuses on increasing the number of journeys made by walking or cycling but isn't clear on how this will be facilitated or achieved. As a result, the effects of this aim are uncertain for the environmental factors illustrated above due to the lack of detailed focus, strategic direction and limited scope of the aim for the Strategy.  This aim is somewhat vague and draws no distinction between everyday journeys and tourism, however, there is likely to be a minimal positive effect in relation to improved air quality, reduced traffic congestion and carbon emissions levels and the resultant health benefits of these factors along										
	Mitigation ambition f	with increased levels of physical activity.  SEA Suggested Alteration:  Mitigation in the form of an alteration to the proposed aim has the potential to benefit the overall ambition from an environmental perspective.  "Facilitate an increase in the proportion of everyday journeys made by walking and cycling in East Dunbartonshire."										
	++	++ ?/+ ?/+ ?/+ ?/+ ++ ++ ?/+										

## Aim 1 Alternative 2

Facilitate an increase in the proportion of everyday journeys made by walking and cycling in East Dunbartonshire.



### **Assessment Commentary:**

Through this aim and the intention to increase everyday journeys by active travel means there is potential for significant positive effects in relation to a focus of increasing the proportion of everyday journeys by walking or cycling and create a realistic, natural option and alternative to private car use throughout East Dunbartonshire. The significance of these effects is through the facilitation element of the aim which highlights the strategic focus and implication that active travel infrastructure works, alterations and enhancement measures will be implemented to better enable active travel.

The positive effects will be mainly focussed around the increased provision and participation in active travel alternatives throughout East Dunbartonshire which will have an impact on air quality levels through modal shift away from private car use, physical activity, and health and community wellbeing improvements. In addition to this, the intended works which link directly with Aim 2 have uncertain impacts at this stage but through this aim and preferred option for aim 2 there is potential for positive impacts on each of the environmental factors through the integration of high quality design and environmental standards.



SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option		
Aim 2	++	+/-	+/-	?/-	+	?/-	++	++	+/-			
Alternative 1	Assessmer	Assessment Commentary:										
Deliver new active travel	This aim is likely to be significantly positive for a number of environmental factors, including											
routes and infrastructure.	population	population and human health, air quality and climatic factors. The positive nature of these effects on										
	the above	the above factors is mainly through the creation of new active travel routes and infrastructure which										
	would con	tribute to:										
	- A r	- A modal shift towards active travel alternatives and away from private car and road based										
	transport.											
	- Improved air quality.											
	- A r	eduction in	traffic conge	estion and r	esultant car	bon emissic	ons levels.					

- Encouraging and contributing to increased provision of active travel infrastructure and participation in physical activity levels throughout East Dunbartonshire.

Impacts on the soil and water resources in East Dunbartonshire through the implementation of this aim are uncertain at this stage, although there is potential for adverse impacts on soil quality, loss of peatland areas, drainage and pollutants entering the water system with the construction and integration of new or updated active travel routes throughout East Dunbartonshire.

Through the creation of active travel routes and infrastructure improvements there is potential for positive and adverse impacts in relation to cultural heritage, biodiversity and material assets. By creating new active travel routes there is potential for improved sustainable access to East Dunbartonshire's natural and historic environment designated sites, facilities and assets. Whilst improved access will be positive there is also potential for adverse impacts on these assets in relation to unmanaged increases in visitor numbers to such sensitive, vulnerable and valuable areas through path erosion and degradation of the assets and their setting and surrounding environment. In addition to this, the aim fails to identify the need to maintain or upgrade the existing active travel network or connect existing links and provide new links to create a coordinated network of routes that allow for efficient connections between communities and across East Dunbartonshire. It also fails to incorporate new active travel routes or infrastructure connections to trip attractors such as rail stations, bus hubs and town centres which could result in adverse impact on material assets.

### **SEA Suggested Alteration:**

Mitigation in the form of an alteration to the proposed aim has the potential to benefit the overall ambition from an environmental perspective.

"Deliver a more connected network of active travel routes and infrastructure incorporating high environmental and design standards."

?/+

?/+

Aim 2
Alternative 2
Deliver a more connected network of active travel

### **Assessment Commentary:**

++

This aim is likely to be significantly positive for most of the set environmental factors, including population and human health, cultural heritage, biodiversity, landscape, air quality, climatic factors

routes and infrastructure incorporating high environmental and design standards.



and material assets. The positive nature of these effects on the above factors is mainly through the creation of a more integrated and connected network of active travel infrastructure which incorporates high environmental and design standards throughout its delivery. The resultant effects include:

- A modal shift towards active travel alternatives and away from private car and road based transport.
- Improved air quality.
- A reduction in traffic congestion and resultant carbon emissions levels.
- Encouraging and contributing to increased provision of active travel infrastructure and participation in physical activity levels throughout East Dunbartonshire.
- Improved sustainable access to East Dunbartonshire's rich natural and historic environment and through the inclusion of high environmental and design standards into active travel projects (improvements, enhancements or creation of new infrastructure) any impacts should be avoided, reduced or mitigated where possible.
- Improved active travel connectivity to open space and recreational opportunities.
- Improved connectivity between communities and across East Dunbartonshire through active travel means.
- Improved connections with the existing active travel network, core path network, new routes and trip attractors including the public transport network.
- The retention and enhancement of scenic value, settlement character and local distinctiveness throughout East Dunbartonshire through improved active travel infrastructure, improving connectivity and contributing towards a modal shift to more sustainable active travel alternatives.

Impacts on the soil and water resources in East Dunbartonshire through the implementation of this aim are uncertain at this stage, although there is potential for positive effects on soil quality, geological assets and water quality through the inclusion of high environmental and design standards which would alleviate, avoid or mitigate any infrastructure construction related impacts in terms of the loss of peatland areas, drainage and pollutants entering the water system through construction

and promote environmental enhancement measures. The aim explicitly mentions delivery of a more connected network and reduces the risk of projects which fail to plug gaps in the network. This aim also ensures that infrastructure which increases the effectiveness of the routes like signage, dropped kerbs and crossing points is delivered to supplement new routes. This aim is likely to act as an enabler for persons on the margin considering using active travel for everyday journeys and is likely to make a significant positive contribution to the delivery of the overall Strategy aim for active travel within east Dunbartonshire. 0/+ 0/+ 0 + 0 + Aim 2 **Assessment Commentary: Alternative 3** This aim ensures that the existing network will not be neglected and fall into disrepair which will have Maintain the existing a positive impact on human health, community wellbeing through maintenance of the existing active active travel network and infrastructure. travel provision and infrastructure. There is also potential for positive effects in relation to improving air quality and impacts on climatic factors through the continual maintenance of existing active travel provision throughout East Dunbartonshire and encouraging the use of such assets, however the overall effect of this aim on these factors is neutral along with the remaining factors as this approach fails to attempt to enhance the existing network either through improved surfacing, provision of new

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option	
Aim 3	+	+ X X X X + + ?									
Alternative 1	Assessmen	Assessment Commentary:									
Promote cycling and	This propo	osed aim is	likely to ha	ave a positi	ve impact o	on levels of	active trav	el however	it fails to		
walking in East	identify ho	ow the pro	motion of a	active trave	I will delive	er change. I	Promotion v	while useful	I does not		
Dunbartonshire.	actually fa	actually facilitate active travel by making it easier to do so (e.g. through training). It also limits the									
	scope of t	he Strategy	by excludin	g other pos	ssible meası	ures like ind	entives, pro	vision of ro	oute maps,		

disadvantaged but it fails to connect gaps in the existing network.

infrastructure or improved promotion. This aim ensures that walkers and cyclists will not be

schools training or availability of information. Minor positive impacts are expected in terms of health and community wellbeing through increased physical activity levels, together with improved local air quality, traffic congestion and resultant carbon emissions levels through the promotion of active travel alternatives to private car use. The effects of this aim on the areas active travel network and infrastructure is uncertain as it is unclear how the aim will be facilitated. X X X X X Aim 3 **Assessment Commentary: Alternative 2** This proposed aim acknowledges the need to make active travel easier for people to undertake in Facilitate the delivery of behaviour change, through order to deliver widespread behavioural change. This approach also identifies that programmes of activities such as training training and promotion need to be carried out in tandem to ensure both those who require training and promotion of active and those who simply need more information to enable them to walk or cycle more are enabled. travel. Significant positive effects are likely through this aim in terms of: Access and knowledge of the active travel network throughout East Dunbartonshire. Promotion and training of active travel alternatives and routes increasing physical activity and improving health and community wellbeing. Behavioural change and increased knowledge of the existing or enhanced network through the ATS leading to significant modal shift towards active travel, reducing car dependency in one of the highest car ownership districts in Scotland and resulting in reduced traffic congestion and carbon emissions. This proposed aim is also likely to result in positive impacts on material assets and the utilisation of the active travel infrastructure through improved training and promotion of active travel routes throughout East Dunbartonshire. In combination with the preferred option for Aim 2, the likely impact on Material assets could be further enhanced in relation to increased provision and creation of vital active travel improvements. X X X X X X X

# Aim 3 Alternative 3

Provide group led walking and cycling sessions.

### **Assessment Commentary:**

It is likely that this aim would increase confidence in persons unaccustomed to walking or cycling and may lead to a rise in active journeys. However it is also likely to have limited impact without adequate training and corresponding promotional activities for general unsupervised journeys. General awareness of routes and options is unlikely to be significantly affected by providing group led sessions and without providing interactive training there is a risk that many may choose not to participate in active travel without a guide. Minor positive impacts are anticipated in terms of encouraged physical activity, improved community wellbeing opportunities and improved localised air quality levels through small scale modal shift to active travel alternatives, particularly for leisure.

Appendix C – Actions – Options and Reasonable Alternatives Assessment

Population, Human Health and community welless in process or inflammature provision in region or notice or light pollution in eaching settlements?  Health  From the process or receivable of public realistics and opportunities?  From the process or receivable of the process or receivable of public realistics and opportunities?  From the process or receivable of the process or receivable of process or receivable or receivable or process or receivable	Environmental Factor	SEA Objective	SEA Criteria Will the action:						
Population, Human Hotalith and community wellbeing in Improve the pulsation of authors of the content of the co			Through new infrastructure provision impact on noise or light pollution in existing settlements?						
Population, Human Health File of the process more the public realm and provide additional auditor for mission and provide additional marks to access the welface connectivity for realments in that makes to access the welface connectivity for realments in that makes to access the welface connectivity for realments in that makes to access the welface connectivity for realments in that makes to access the welface connectivity for realments in that makes to access the welface connectivity for realments in that makes the welface and the real and outbook realments and several marks and welface the following welface connectivity for realments in that makes welface the file of the real and outbook realments and welface access that the real and outbook realments in the realments and welface access that the realments and welface that the realments and welface access to the realments and the realmen									
To protect, contents and understand commonly wellbeing. Interpret commentally well-being statistics?    Control Heritage   To protect, conserve, and where appropriate enhance in the formation of a propriate the part and well-being statistics?									
Cultural Heritage  Cultural Heritage  To protect, conserve, and where appropriate enhancement his to be under the control of t	Population, Human	To improve human health and community wellbeing.							
Cultural Heritage  To protect, conserve, and where appropriate enhance in historic environment.  To protect, centance, create and where necessary record biodiversity and encourage hatter to constitute to environment or conservation areas?  To protect, enhance, create and where necessary record biodiversity and encourage hatter to constitute the constitute of the constit	Health		Enhance connectivity for people to access amenities and services in East Dunbartonshire and in other local authority areas?						
Cultural Heritage  To protect, conserved, and where appropriate channels that the fall age areas, including flacet buildings and their setting, Conservation Areas, gardens & designed landscapes, archaneological slees? Have an infect on non-designated areas of local built heritage areas, including flowers buildings and their setting, Conservation Areas, gardens & designed landscapes, archaneological slees? Have an infect on non-designated areas of local built heritage interest, including Townscape Protection Areas?  To protect, cehanics, create and where necessary readers building and emocrage has been accommended and emocrage has been accommended and emocrage and emocrage has been accommended and emocrage and emocrage and emocrage has been accommended and emocrage and emocra			Encourage active travel and outdoor leisure?						
Cultural Heritage  To protect, concerve, and where appropriate embary. Here an impact on any designated built heritage areas, including listed buildings and their cetting, Conservation Areas, gardens & designed landscapes, archaeological stee? Here an infection of conservation areas, protection from the historic environment or conservation areas?  To protect, enhance, create and where encourage habitat connectivity.  To protect and, where appropriate, use high quality, and encourage habitat connectivity.  To protect and, where appropriate, use high quality, and ensistive soils in a sustainable manner area area of potentially content in the lost of improved access to the wider environment and conflicts with biodiversity and habital protection?  Prevent the loss of biodiversity, flora and favue?  Affect rocks or deposits that from the interest of local geodiversity stee?  Indicape character, local distinctiveness and security and experiments of sensitive soils in a sustainable manner area or potentially contentiated and?  Affect rocks or deposits that from the interest of local geodiversity stee?  Indicape character, local distinctiveness and security and experiments of sensitive soils in a sustainable manner area or potentially contentiated and?  Affect rocks or deposits that from the interest of local geodiversity stee?  Indicape character, local distinctiveness and security and the area of sensitive soils in the area of potentially contentiated and?  Affect rocks or deposits that from the interest of local geodiversity stee?  Indicape character, local distinctiveness and security and experiments of sensitive soils in the area of potentially contentiated and?  Affect rocks or deposits that from the interest of local geodiversity stee?  Indicate of content of the colonisms, green bett decembers, for an adoption of sensitive soil, including potentially are decident on sensitive soil in manner of sensitive soils in manner of sensitive soils in manner of sensitive soils included to the finance of manner of sensitiv									
Have an effect on non-designated areas of local built heratege interest, including Townscape Protection Area?  Incorporate injustmentant or adaptore the design and propriet as design and propriet as design in located within or adjacent to the historic environment or conservation areas?  Directly or indirectly impact on designated sites of importance?  Affects the connectivity.  Affects the connectivity of hisbitars?  Affects the connectivity of hisbitars?  Frement the locs of Biodiversity, including non-protected and protected species?  Affects the connectivity of hisbitars?  Frement the locs of Biodiversity, including non-protected and protected species?  Affects the connectivity of hisbitars?  Frement the locs of Biodiversity, including non-protected and protected species?  Affects the connectivity of hisbitars?  Frement the locs of Biodiversity, including non-protected and protected species?  Affects the connectivity of hisbitars?  Frement the locs of Biodiversity, including non-protected and protected species?  Affects the connectivity of hisbitars?  Frement the locs of Biodiversity, including non-protected and protected species?  Affects the connectivity of hisbitars?  Frement the local distinctiveness and special land and crashor-rich solid?  Frement the local distinctiveness and special land and crashor-rich solid?  Frement the lond connectivity of hisbitars?  Frement the lond connectivity of hisbitars?  Frement the rough connectivity of hisbitars?  Frement the rough connectivity of hisbitars?  Frement the lond connectivity of hisbitars?  Frement the rough connectivity of hisbitars?  Frement the ro									
Biodiversity Flora and Fauna  To protect, enhance, create and where necessary and encourage habitates of connectivity.  Soil & Geology  To protect and, where appropriate, use high quality and connectivity, the soil faunary and connectivity, the soil faunary and connectivity, the soil faunary and connectivity is a south and in many adverse impacts on valued biodiversity including non-protected and protected and protected species?  Address issues related to improved access to the wider environment and conflicts with biodiversity and habitat protection?  Prevent the loss of biodiversity, thosa and faunary and conserve recognised geodiversity sites.  International conserve recognised geodiversity sites.  To protect, enhance and, where appropriate, use high quality and conserve recognised geodiversity sites.  To protect, enhance and, where appropriate, sub-time and conserve recognised geodiversity sites.  To protect, enhance and, where appropriate, sub-time and conserve recognised geodiversity sites.  Affect rock or depote the form the interest of Local geodiversity sites?  Impact or areas of protected and pro	Cultural Heritage	To protect, conserve, and where appropriate enhance							
Biodiversity Flora and Fauna To protect, enhance, create and where necessary and encourage habitats comectivity.  Soil & Geology  To protect and, where appropriate, use high quality and sensitive soils in a sustainable manner and conformable and sensitive soils in a sustainable manner and conformable and sensitive soils in a sustainable manner and conformable and sensitive soils in a sustainable manner and conformable and sensitive soils in a sustainable manner and conformable and sensitive soils in a sustainable manner and conformable and sensitive soils in a sustainable manner and conformable and sensitive soils in a sustainable manner and conformable and sensitive soils in a sustainable manner and conformable and sensitive soils inchange and sensitive sensitives and sensitive sensitives?  In protect to towards the reduction of Socials and sensitive soils inchange and sensitive sensitives and sensitive soil sensitives and sensit	Cultural Heritage	the historic environment							
Blodiversity Flora and Fauna  To protect, enhance, create and where necessary restore blodiversity and encourage habitat connectivity.  Soil & Geology  To protect and, where appropriate, use high quality  To protect, enhance and, where appropriate, use high quality  To protect, enhance and, where appropriate, use high quality  To protect, enhance and, where appropriate, use high quality  Seek to prevent soil degradation and encoion?  Indiscape  To protect, enhance and, where appropriate, restore landscape character, local distinctiveness and sure in a protect and use of a community seek and considered the encological status of water bodies.  Affect trocks or deposits that form the interest of Local goodwarsity Sites?  Indiscape  To prevent, deterioration and, where possible, enhance are quality.  To prevent, deterioration and, where possible, enhance are quality.  To prevent deterioration and, where possible, enhance are quality.  To prevent deterioration and, where possible, enhance are quality.  To prevent deterioration and, where possible, enhance are quality.  To protect, enhance and where the ecological status of water bodies.  To protect and where appropriate, restore high quality and protection of scottish greenhouse gas outputs in line with Government targets.  Climatic Factors  To reduce overall flood risk by ensuring men depote the protect, create or enhance natural resources such as tress?  To reduce overall flood risk by ensuring and encourage through advanced protection in carbon emissions levels and contribute to National reduction targets?  Fromote an age and improve the active travel alternatives and raise the awareness and link between emissions levels and protect water water and protect water quality?  Fromote an age and improve the safe use of Core Path Networks, Rights of Way and heritage paths?  To grow the sustainable use of community seeks and natural resources in a sto Dumbarhorshive.			Incorporate high standards of appropriate design when located within or adjacent to the historic environment or conservation areas?						
Soil & Geology   To protect, enhance, create and where necessary and encourage habitar connectivity.   Soil & Geology   To protect and, where appropriate, use high quality and encourage developed in a sensitive soils in a sustainable manner and sensitive soils in the sensitive soils including good quality and sensitive soils including good quality contaminated and?    To protect, enhance and, where appropriate, restore landscape character, local distinctiveness and sensitive soils, including good quality applicativariation of confidence of the sensitive soils, including good quality applicativeness, settlement pattern or scenic value of the area?    Alicit areas designated for their landscape character, local distinctiveness, and sensitive soils, including good quality applicativeness, settlement pattern or scenic value of the area?    Alicit areas designated for their landscape character, local distinctiveness, and sensitive soils, including good quality applicativeness, settlement pattern or scenic value of the area?    Alicit areas designated for their landscape character, local distinctiveness, settlement pattern or scenic value of the area?    Alicit areas designated for their landscape character, local distinctiveness, settlement pattern or scenic value of the area?    Alicit areas designated for their landscape character, local distinctiveness, settlement pattern or scenic value of the area?    Alicit areas designated for their landscape character, local distinctiveness, and sensitive soils, including good quality applicativeness, settlement pattern or scenic value of the areas?    Alicit areas designated			Directly or indirectly impact on designated sites of importance?						
restore biodiversity and encourage habitat connectivity.  Found the connectivity.  To protect and, where appropriate, use high quality and encourage access to the wider environment and conflicts with biodiversity and habitat protection?  Frevent the loss of biodiversity, facts and fauna?  To protect, enhance and, where appropriate, restore landscape character, local distinctiveness and scene the ecological status of where possible, enhance and ecological status of where possible, enhance air quality.  Water Quality  To prevent deterioration and, where possible, enhance air quality.  For protect deterioration and, where possible, enhance air quality.  For protect deterioration and, where possible, enhance air quality.  For protect deterioration and, where possible, enhance air quality.  For protect deterioration and, where possible, enhance air quality.  For protect deterioration and, where possible, enhance air quality.  For protect deterioration and, where possible, enhance air quality.  For protect deterioration and, where possible, enhance air quality.  For protect deterioration and, where possible, enhance air quality.  For protect deterioration and, where possible, enhance air quality.  For protect deterioration and, where possible, enhance air quality.  For protect deterioration and, where possible, enhance the ecological status of water bodies.  For protect deterioration and, where possible, enhance the ecological status of water bodies.  For protect deterioration and, where possible, enhance the ecological status of water bodies.  For protect deterioration and, where possible, enhance the ecological status of water bodies.  For protect deterioration and, where possible, enhance the ecological status of water bodies.  For protect deterioration and, where possible, enhance the ecological status of water bodies.  For protect deterioration and, where possible, enhance the ecological status of water bodies.  For protect deterioration and, where possible, enhance the ecological status of water bodies.  For pr	Bladfordt element	To protect, enhance, create and where necessary	Affect the connectivity of habitats?						
Address issues related to improved access to the wider environment and conflicts with biodiversity and habitat protection?  Prevent the loss of biodiversity, flora and fauna?  Soil & Geology  To protect and, where appropriate, use high qualty, and sensitive soils in a sustainable manner and conserve recognised geodiversity sizes.  Conserve recognised geodiversity sizes.  To protect, enhance and, where appropriate, restores landscape character, local distinctiveness and seenic value.  Water Quality  To provent deterioration and, where possible, enhance the ecological status of water bodies.  Air Quality  To provent deterioration and, where possible, enhance are quality.  To provent deterioration and, where possible, enhance are quality.  To contribute towards the reduction of Scottish greenhouse gas outputs in line with Government targets.  To reduce overall flood risk by ensuring new development is not at flood risk and it doesn't add to the first deswhere. For areas already at flood risk send it doesn't add to the first deswhere. For areas already at flood risk send it doesn't add to the first deswhere. For areas already at flood risk send it doesn't add to the first deswhere. For areas already at flood risk and rid doesn't add to the first deswhere. For areas already at flood risk and rid doesn't add to the first deswhere. For areas already at flood risk and rid doesn't add to the first deswhere. For areas already at flood risk and rid doesn't add to the first deswhere. For areas already at flood risk and rid doesn't add to the first deswhere. For areas already at flood risk and rid doesn't add to the first deswhere. For areas already at flood risk and rid doesn't add to the first deswhere. For areas already at flood risk and rid doesn't add to the first deswhere. For areas already at flood risk and rid doesn't add to the first deswhere. For areas already at flood risk and rid doesn't add to the first deswhere. For areas already at flood risk and rid doesn't add to the first deswhere. For areas already at flo		restore biodiversity and encourage habitat	Seek to minimise any adverse impacts on valued biodiversity including non-protected and protected species?						
Soil & Geology  To protect and, where appropriate, use high quality and sensitive soils in a sustainable manner and conserve recognised geodiversity sites.  Indexcape  Landscape  To protect, enhance and, where appropriate, restore landscape character, local distinctiveness and seen in landscape character, local distinctiveness, settlement pattern or scenic value of the area?  Affect rocks or deposits that for one binterest of Local geodiversity Sites?  Impact on areas of potentially contaminated land?  Impact on a reas of potentially contaminated land?  Impact on a reason of sentitive soils, including good quality agricultural band or arbon-rich soils?  Impact on a reason of sentitive soils, including good quality agricultural band or carbon-rich soils?  Impact on a reason of sentitive soils, including good quality agricultural band or carbon-rich soils?  Impact on a reason of sentitive soils, including good quality agricultural band or carbon-rich soils?  Impact on a reason of sentitive soils, including good quality agricultural band or carbon-rich soils?  Imp	Tadila	connectivity.	Address issues related to improved access to the wider environment and conflicts with biodiversity and habitat protection?						
and sentitive soils in a sustainable manner and conserve recognised geodiversity sites.  Indicate a conserve recognised geodiversity sites.  To protect, enhance and, where appropriate, restore value.  To protect, enhance and, where appropriate, restore value.  To prevent deterioration and, where possible, enhance air quality.  To prevent deterioration and, where possible, enhance air quality.  To prevent deterioration and, where possible, enhance air quality.  To prevent deterioration and, where possible, enhance air quality.  To contribute towards the reduction of Scottish greenhouse gas outputs in line with Government targets.  Climatic Factors  Material Assets  To produce overall flood risk by ensuring new development is not at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk and reason and the protection of netural resources such as trees?  To promote the sustainable use of community assets and natural resources in East Dunbartonshire.  Encourage and improve the safe use of Core Path Networks, Rights of Way and heritage paths?			Prevent the loss of biodiversity, flora and fauna?						
Affect rocks or deposits that form the interest of Local geodiversity Sites?  Index recognised geodiversity sites.  Affect rocks or deposits that form the interest of Local geodiversity Sites? Impact areas of sensitive soils, including good quality agricultural land or carbon-rich soils?  Have a significant effect on the landscape character, local distinctiveness, settlement pattern or scenic value.  Water Quality  To prevent deterioration and, where possible, enhance the ecological status of water bodies.  Air Quality  To prevent deterioration and, where possible, enhance air quality.  To prevent deterioration and, where possible, enhance air quality.  To prevent deterioration and, where possible, enhance air quality.  To provent deterioration and, where possible, enhance air quality.  To contribute towards the reduction of Scottish greenhouse gas outputs in line with Government targets.  To contribute towards the reduction of Scottish greenhouse gas outputs in line with Government targets.  To reduce overall flood risk by ensuring new development is not at flood risk and it desen't add to the risk elsewhere. For areas already at flood risk secure management measures.  To promote the sustainable use of community assets and natural resources in fast Dunbartonshire.  Material Assets  To promote the sustainable use of community assets and natural resources in fast Dunbartonshire.  Encourage and improve the safe use of Core Path Networks, Rights of Way and heritage paths?  Consider the sustainable use and protection of natural resources?		To protect and, where appropriate, use high quality	Seek to prevent soil degradation and erosion?						
Landscape  Landscape  To protect, enhance and, where appropriate, restore landscape character, local distinctiveness and sensitive soils, including good quality agricultural land or carbon-rich soils?  Water Quality  To prevent deterioration and, where possible, enhance the ecological status of water bodies.  Air Quality  To provent deterioration and, where possible, enhance air quality.  May a direct or indirect impact on water quality?  Have an impact on drainage through active travel internatives?  Impact or are designated for the landscape character, local distinctiveness, settlement pattern or scenic value of the area?  Affect areas of sensitive soils, including good quality agricultural land or carbon-rich soils?  Impact on settlements on tocar pattern, local distinctiveness, settlement pattern or scenic value of the area?  Affect areas of sensitive soils, including good quality agricultural land or carbon-rich soils?  Affect areas of sensitive soils, including good quality agricultural land or carbon-rich soils?  Affect areas of sensitive soils, including good quality agricultural land or carbon-rich soils?  Affect areas of sensitive soils, including good quality agricultural land or carbon-rich soils?  Affect areas of sensitive soils, including good quality agricultural land or carbon-rich soils?  Affect areas of sensitive soils, including good quality agricultural land or carbon-rich soils?  Affect areas of sensitive soils, including good quality agricultural land or carbon-rich soils?  Affect areas of sensitive soils, including good quality agricultural land or carbon-rich soils?  Affect areas of sensitive soils, including good quality agricultural land or carbon-rich soils?  Affect areas of sensitive soils distinctiveness, settlement pattern or scenic value of the area?  Affect areas of sensitive soils, including good quality agricultural land or carbon-rich soils?  Affect areas of sensitive soils distinctiveness, settlement patterns.  Affect areas of sensitive indicators, field to the landscape Area	Soil & Geology								
Landscape  To protect, enhance and, where appropriate, restore landscape character, local distinctiveness and scenario value.  Water Quality  To prevent deterioration and, where possible, enhance the ecological status of water bodies.  Air Quality  To prevent deterioration and, where possible, enhance air quality.  To prevent deterioration and, where possible, enhance air quality.  To contribute towards the reduction of Scottish greenhouse gas outputs in line with Government targets.  To reduce overall flood risk by ensuring new development is not at flood risk and it doesn't add to the risk elsewhere. For areas a laready at flood risk and it doesn't add to the risk elsewhere. For areas a laready at flood risk secure management measures.  Material Assets  To promote the sustainable use of community assets and natural resources in East Dunbartonshire.	Son & Scology	conserve recognised geodiversity sites.							
Climatic Factors   Climatic Fa									
Impact on greenfield locations, green belt defensibility and/or contribute to community identity?    Water Quality	Landscane	To protect, enhance and, where appropriate, restore							
Water Quality  To prevent deterioration and, where possible, enhance the ecological status of water bodies.  Air Quality  To prevent deterioration and, where possible, enhance air quality.  To provent deterioration and, where possible, enhance air quality.  To contribute towards the reduction of Scottish greenhouse gas outputs in line with Government targets.  To reduce overall flood risk by ensuring new development is not at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk secure management measures.  Material Assets  To promote the sustainable use of community assets and natural resources in fast Dunbartonshire.  Have a direct or indirect impact on water quality?  Have an impact on dater quality?  Have an impact on dater quality?  Have an impact on dater quality?  Promote the role and use of active travel alternatives?  Improve the active travel alternatives?  Promote a change in culture and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and contribute to National reduction targets?  Seek to protect, create or enhance natural resources such as tress?  Seek to protect, create or enhance natural resources such as tress?  Seek to protect pread of risk and / or incorporate SUDS to help reduce flood risk within the area and protect water quality?  Encourage and improve the safe use of Core Path Networks, Rights of Way and heritage paths?  Consider the sustainable use and protection of natural resources?	Landscape	· · · · · · · · · · · · · · · · · · ·							
## Air Quality enhance the ecological status of water bodies.  Air Quality To prevent deterioration and, where possible, enhance air quality.  To provent deterioration and, where possible, enhance air quality.  To contribute towards the reduction of Scottish greenhouse gas outputs in line with Government targets.  To reduce overall flood risk by ensuring new development is not at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk secure management measures.  Material Assets  Material Assets  To promote the sustainable use of community assets and natural resources in East Dunbartonshire.  Have an impact on drainage through active travel improvements in close proximity to watercourses?  Promote the role and use of active travel alternatives?  Improve the active travel alternatives?  Improve the active travel alternatives?  Promote and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and contribute to National reduction targets?  Seek to protect, create or enhance natural resources such as tress?  Result in the creation of new or improvements to infrastructure in an area at flood risk and / or incorporate SUDS to help reduce flood risk within the area and protect water quality?  Encourage and improve the safe use of Core Path Networks, Rights of Way and heritage paths?  Consider the sustainable use and protection of natural resources?		value.	impact on greentield locations, green belt defensibility and/or contribute to community identity?						
Air Quality  To prevent deterioration and, where possible, enhance air quality.  To contribute towards the reduction of Scottish greenhouse gas outputs in line with Government targets.  Climatic Factors  To reduce overall flood risk by ensuring new development is not at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk secure management measures.  Material Assets  To promote the sustainable use of community assets and natural resources in East Dunbartonshire.  Finance ari quality.  Have an impact on drainage through active travel alternatives?  Improve the active travel internatives?  Improve the active travel alternatives and raise the awareness and link between emissions levels and contribute to National reduction targets?  Fromote a change in culture and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and contribute to National reduction targets?  Fromote and seek a reduction in carbon emissions levels and contribute to National reduction targets?  Seek to protect, create or enhance natural resources such as tress?  Seek to protect, create or enhance natural resources such as tress?  Encourage and improve the safe use of Core Path Networks, Rights of Way and heritage paths?  Consider the sustainable use and protection of natural resources?	Water Quality	l · · · · · · · · · · · · · · · · · · ·							
Air Quality enhance air quality.  Improve the active travel network to reduce the reliance on vehicular based travel?  Impact on any existing AQMA's?  Promote a change in culture and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and climate change?  Promote a change in culture and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and contribute to National reduction targets?  Promote and seek a reduction in carbon emissions levels and contribute to National reduction targets?  Seek to protect, create or enhance natural resources such as tress?  To reduce overall flood risk by ensuring new development is not at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk secure management measures.  Result in the creation of new or improvements to infrastructure in an area at flood risk and / or incorporate SUDS to help reduce flood risk within the area and protect water quality?  To promote the sustainable use of community assets and natural resources in East Dunbartonshire.  Encourage and improve the safe use of Core Path Networks, Rights of Way and heritage paths?  Consider the sustainable use and protection of natural resources?		-							
Impact on any existing AQMA's?   Promote a change in culture and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and climate change?   Promote a change in culture and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and climate change?   Promote and seek a reduction in carbon emissions levels and contribute to National reduction targets?   Seek to protect, create or enhance natural resources such as tress?   Seek to protect, create or enhance natural resources such as tress?   Result in the creation of new or improvements to infrastructure in an area at flood risk and / or incorporate SUDS to help reduce flood risk within the area and protect water quality?   Promote and seek a reduction in carbon emissions levels and contribute to National reduction targets?   Seek to protect, create or enhance natural resources such as tress?   Result in the creation of new or improvements to infrastructure in an area at flood risk and / or incorporate SUDS to help reduce flood risk within the area and protect water quality?   Impact on any existing AQMA's?   Promote and seek a reduction in carbon emissions levels and contribute to National reduction targets?   Seek to protect, create or enhance natural resources such as tress?   Result in the creation of new or improvements to infrastructure in an area at flood risk and / or incorporate SUDS to help reduce flood risk within the area and protect water quality?   Encourage and improve the safe use of Core Path Networks, Rights of Way and heritage paths?   Consider the sustainable use and protection of natural resources?		· · · · · · · · · · · · · · · · · · ·							
Climatic Factors  To contribute towards the reduction of Scottish greenhouse gas outputs in line with Government targets.  To reduce overall flood risk by ensuring new development is not at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk secure management measures.  To promote the sustainable use of community assets and natural resources in East Dunbartonshire.  Promote a change in culture and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and climate change?  Promote a change in culture and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and climate change?  Promote a change in culture and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and climate change?  Promote a change in culture and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and climate change?  Promote a change in culture and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and climate change?  Promote a change in culture and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and climate change?  Promote a change in culture and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and climate change?  Promote a change in culture and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and climate change?  Seek to protect, create or enhance natural resources such as tress?  Seek to protect, create or enhance natural resources at the awareness and link between emissions levels and contribute to National reduction targets?  Seek to protect, create or enhance natural resources at the awareness and link between emissions levels and contribute to National resources?	Air Quality	enhance air quality.							
To contribute towards the reduction of Scottish greenhouse gas outputs in line with Government targets.  Climatic Factors  To reduce overall flood risk by ensuring new development is not at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk secure management measures.  Material Assets  To promote the sustainable use of community assets and natural resources in East Dunbartonshire.  From the and seek a reduction in carbon emissions levels and contribute to National reduction targets?  Seek to protect, create or enhance natural resources such as tress?  Result in the creation of new or improvements to infrastructure in an area at flood risk and / or incorporate SUDS to help reduce flood risk within the area and protect water quality?  Encourage and improve the safe use of Core Path Networks, Rights of Way and heritage paths?  Consider the sustainable use and protection of natural resources?									
Climatic Factors  Promote and seek a reduction in carbon emissions levels and contribute to National reduction targets?  Seek to protect, create or enhance natural resources such as tress?  To reduce overall flood risk by ensuring new development is not at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk secure management measures.  Material Assets  To promote the sustainable use of community assets and natural resources in East Dunbartonshire.  Promote and seek a reduction in carbon emissions levels and contribute to National reduction targets?  Seek to protect, create or enhance natural resources such as tress?  Result in the creation of new or improvements to infrastructure in an area at flood risk and / or incorporate SUDS to help reduce flood risk within the area and protect water quality?  Encourage and improve the safe use of Core Path Networks, Rights of Way and heritage paths?  Consider the sustainable use and protection of natural resources?		To contribute towards the reduction of Scottish	Promote a change in culture and modal shift towards active travel alternatives and raise the awareness and link between emissions levels and climate change?						
Climatic Factors  To reduce overall flood risk by ensuring new development is not at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk secure management measures.  To promote the sustainable use of community assets and natural resources in East Dunbartonshire.  Seek to protect, create or enhance natural resources such as tress?  Result in the creation of new or improvements to infrastructure in an area at flood risk and / or incorporate SUDS to help reduce flood risk within the area and protect water quality?  Encourage and improve the safe use of Core Path Networks, Rights of Way and heritage paths?  Consider the sustainable use and protection of natural resources?			Promote and seek a reduction in carbon emissions levels and contribute to National reduction targets?						
development is not at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk secure management measures.  Result in the creation of new or improvements to infrastructure in an area at flood risk and / or incorporate SUDS to help reduce flood risk within the area and protect water quality?  To promote the sustainable use of community assets and natural resources in East Dunbartonshire.  Encourage and improve the safe use of Core Path Networks, Rights of Way and heritage paths?  Consider the sustainable use and protection of natural resources?	Climatic Factors	targets.	Seek to protect, create or enhance natural resources such as tress?						
Material Assets  To promote the sustainable use of community assets and natural resources in East Dunbartonshire.  Consider the sustainable use and protection of natural resources?		development is not at flood risk and it doesn't add to the risk elsewhere. For areas already at flood risk							
and natural resources in East Dunbartonshire.			Encourage and improve the safe use of Core Path Networks, Rights of Way and heritage paths?						
	Material Assets		Consider the sustainable use and protection of natural resources?						
		and hadden resources in East Sumburtonsime.	Promote changes to the current transport infrastructure to a more sustainable network?						

Assessme	Assessment Table Key										
++	Major Positive		CEA Bustoned Outlier								
+	Minor Positive		SEA Preferred Option								
0	Neutral										
X	No Significant Effect	<b>Y</b>	ATS Preferred Alternative Option								
-	Minor Negative										
	Major Negative										
?	Uncertain										

## Alternative Actions for the Active Travel Strategy: Increasing Active Travel through Delivery of Infrastructure

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.1	available at this	Path and Cycle nentary:  as the intended estage to carry ou	xploration or feas t an appropriate	sibility studies hav assessment. In or	der to ensure th	ut for this action t at potential enviro ications as part of	onmental implica	ations are taken in		

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.2	Assessment Community Until such time a available at this	Path and Cycle nentary: as the intended estage to carry ou	it an appropriate	sibility studies hav assessment. In or	der to ensure th	ut for this action t at potential enviro ications as part of	onmental implica	ations are taken in		

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.3	++	+/-	+/-	?/-	X	?/-	++	++	++	
Alternative 1	Proposed Action:									
	Twechar Towpath and Crossing Improvements.									

## **Assessment Commentary:** The anticipated effects of this action are, in general, likely to be positive in nature with the environmental effects predicted for: Population and Human Health, Air Quality, Climatic Factors and Material Assets – By carrying out improvements to the towpath in Twechar, provision to facilitate active travel in Twechar will be promoted and improvements will respond to the result of the audit carried out in the development of the ATS highlighting poor surfacing and crossing provision. In addition, crossing improvements are likely to ensure that safe use of the towpath for residents and potential visitors to the area and provide the means to connect with the wider natural environment and countryside. It would also be a safer option than implementing cycle provision on the main A8023 road in Twechar which has high volumes of traffic. By removing physical barriers on the network and providing appropriate crossing facilities this action ensures that residents, commuters and visitors have improved access to a safe, secure and attractive active travel network while also providing opportunities to access public transport interchanges, local amenities, leisure and recreational opportunities while also increasing the areas physical activity levels and health and wellbeing of its residents. This will also contribute to a model shift away from vehicular based travel in an area with recognised high volumes of traffic and promote active travel alternatives. There are potential positive and negative impacts in relation to: Cultural Heritage and Biodiversity, Flora and Fauna – Whilst this action is likely to encourage access to the wider environment which includes a Local Nature Conservation Site through Twechar and the Antonine Wall, there are potential negative impacts that may arise as a result of increased access to the wider environment particularly in areas of sensitive and protected/designated sites of importance by resulting in direct disturbance to the site or its setting. At this stage the impacts to Water Quality and Soil and Geology are unclear, there are potential negative impacts from maintenance and infrastructure changes to the towpath and crossings, as well as an increase in access to the network, which may result in soil erosion and compaction. Effects such as temporary discharge or changes to drainage are also predicted; this is particularly important with the vicinity to the Forth and Clyde Canal. Although Twechar is a settlement situated within the green belt, it is not predicted that improvements to the towpath and crossings will impact on this designation and therefore the effects to Landscape are likely to be insignificant in terms of settlement character or local distinctiveness. **Proposed Mitigation: Cultural Heritage** Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or their setting. **Biodiversity, Flora & Fauna** Ensure that removal of topsoil, trees and vegetation is minimal Potential Protected Species Surveys, Licences or mitigation if considered necessary to avoid adverse impacts particularly in sensitive areas Control and treatment of surface runoff. Soil & Geology Implement soil erosion prevention measures outlined in good practice guidance **Water Quality** Control and treatment of surface runoff. Adoption of best practices to avoid pollution of watercourses. X ?/-+/-+/-?/-**Proposed Action 1.3 Proposed Action:** Alternative 2 Provision of advisory cycle lanes on the B8023 and Main Street carriageways in Twechar, ensuring access to Forth and Clyde Towpath in Twechar is provided.

This option is likely to have a positive impact to **Population and Human Health** as providing advisory cycle lanes on the main carriageways in Twechar will promote cycling and the active travel agenda. Furthermore, it will ensure that residents, visitors and commuters will have a direct link to the strategically important cycle/footpath along the Forth and Clyde Canal with wider connections to Kirkintilloch and the rest of East Dunbartonshire. However, potential negative impacts might arise in terms of safety since it is recognised that the B8023 has high volume traffic and this might discourage cyclists to use this route due to an increased risk of accidents. Furthermore, the audit carried out in the development of the ATS highlighted crossing issues along the towpath. This action fails to address such issues; therefore physical barriers for walkers will not be removed and walkers might be discourage/disengaged to increase walking rates.

It is anticipated that there will be minor positive impacts to Air Quality, Climatic Factors and Material Assets as this action will encourage cycling rates in the area and promote a shift from vehicular-based travel to active travel with benefits in improving air quality and reductions in emissions.

There are potential positive and negative impacts in relation to:

Cultural Heritage and Biodiversity, Flora and Fauna – Whilst this action is likely to encourage access to the wider environment which includes a Local Nature Conservation Site through Twechar and the Antonine Wall, there are potential negative impacts that may arise as a result of increased access to the wider environment particularly in areas of sensitive and protected/designated sites of importance by resulting in direct disturbance to the site or its setting.

At this stage the impacts to Water Quality and Soil and Geology are unclear, there are potential negative impacts from maintenance and alterations to the B8023, as well as an increase in access to the wider network, which may result in soil erosion and compaction. Effects such as temporary discharge or changes to drainage are also predicted; this is particularly important with the vicinity to the Forth and Clyde Canal.

Although Twechar is a settlement situated within the green belt, it is not predicted that improvements to the towpath and crossings will impact on this designation and therefore the effects to Landscape are likely to be insignificant in terms of settlement character or local distinctiveness.

#### **Proposed Mitigation:**

#### **Population and Human Health**

- Use of appropriate lighting and signage to reduce safety risks.

#### **Cultural Heritage**

 Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or their setting.

#### **Biodiversity, Flora & Fauna**

- Ensure that removal of topsoil, trees and vegetation is minimal
- Potential Protected Species Surveys, Licences or mitigation if considered necessary to avoid adverse impacts particularly in sensitive areas
- Control and treatment of surface runoff.

#### Soil & Geology

- Implement soil erosion prevention measures outlined in good practice guidance

#### **Water Quality**

- Control and treatment of surface runoff.
- Adoption of best practices to avoid pollution of watercourses.

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option

## **Proposed Action 1.4**



## **Proposed Action:**

Bishopbriggs / Forth and Clyde Canal access.



## Assessment Commentary:

Until such time as the intended exploration or feasibility studies have been carried out for this action there is an insufficient level of detailed information available at this stage to carry out an appropriate assessment. In order to ensure that potential environmental implications are taken into consideration the action has incorporated the identification of likely environmental impacts or implications as part of the study process.

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.5	Assessment Comr Until such time a available at this	nectivity Improvenentary: as the intended extrage to carry or	ıt an appropriate	sibility studies hav assessment. In or	ve been carried or der to ensure that		onmental implica	icient level of deta ations are taken in		

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.6	available at this	ents. mentary: as the intended e stage to carry ou	it an appropriate	assessment. In or	der to ensure th		onmental implica	icient level of deta ations are taken in ss.		

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.7	++	X		-	X	X	++	++/-	++	
Alternative 1	positive benefits connectivity between residential devel	ef Road (BRR) / nentary: that this action for Population ween settlemer opments. It wou	to create an active and Human Headston Bishopbrigg	ve travel corridor alth, Air Quality, s as well as implactive travel optic	connecting Wes Climatic Factors roved active tradens ons and alternati	s and Material As vel connections b ves to car-based t	ssets. It is pred etween Strathk cravel in the eas	Relief Road will pricted that there welvin Retail Park at of Bishopbriggs well a viable active t	vill be improved and surrounding with potential to	

Bishopbriggs, there is the potential that this will encourage people in the community to partake in more active pursuits which has recognised health benefits. In addition, this action is likely to influence a modal shift in transport and travel choices to walking and cycling which will promote a change to a more sustainable behaviour change. This will contribute to a reduction in emissions locally with benefits to improving areas of poor air quality and meeting local and national carbon reduction targets. In particular, this will have a positive effect on improving the AQMA in Bishopbriggs and reducing congestion.

There are also potential negative impacts predicted for the following environmental factors:

Biodiversity, Flora and Fauna, Soil and Geology and Climatic Factors – Low Moss and High Moss Plantation are located to the north and south of Westerhill Road. Both are designated as LNCS for biodiversity and existing woodland. Peatland (lowland raised bog) has been identified within the surrounding Plantations to Westerhill Road. Low Moss is currently being restored from a degraded state so is extremely vulnerable to disturbance. Any increase in use such as walking and cycling could be damaging to the state of these sites and hinder its restoration project. Furthermore, disturbance to peatland has the potential to result in the significant release of carbon into the atmosphere. In general, both the implementation and use of a new active travel route has the potential to result in temporary compaction of soil and soil erosion. However, Westerhill Road is used for vehicle traffic currently so should this action use the existing route with minimal construction/additional infrastructure the effects to biodiversity and soil and geology will have a more minimal effect on these assets.

## **Proposed Mitigation:**

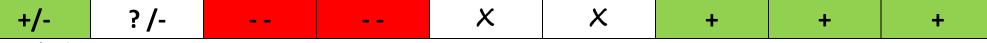
## **Biodiversity, Flora and Fauna**

- Additional surveys to determine level and type of species/habitats that will be potentially impacted from the action such as bat surveys/extended habitat surveys etc.
- Where access route requires lighting to ensure that the route is safe for users, lighting design should follow best practice guidance Bat Conservation Trust 'Bats and Lighting in the UK'.
- Any infrastructure changes/improvements should aim to retain features of ecological value within the design and ensure the highest priorities for protection such as woodland, riparian habitats, ponds, wetlands etc. should be considered and any impact prevented.

#### **Soil and Geology and Climatic Factors**

- Implement soil erosion prevention measures outlined in good practice guidance.
- Action should avoid the disturbance of peatland and Low/High Moss Plantation in order to minimise the impact of use/implementation of active travel route on these assets.

## Proposed Action 1.7 Alternative 2



## **Proposed Action:**

Provide advisory cycle lanes on the existing carriageway of the Bishopbriggs Relief Road (BRR).

#### **Assessment Commentary:**

The impacts predicted resulting from this action for the following environmental factors include:

- Population and Human Health This option is likely to provide an opportunity for cyclists to use the north/south route along the BRR for leisure and commuting purposes. The location of the BRR enables direct access into Glasgow as well as the wider natural environment in East Dunbartonshire so this option is likely to encourage residents and visitors to access their surrounding environment. There is potential that this option would increase active pursuits and leisure activities locally with benefits for health and wellbeing. However, the BRR is a fast moving route with a 60 mph limit set. This has the potential to reduce safety for cyclists in terms of accidents and discourage use of the route for cycling, particularly at peak times. It is also likely that there would be additional safety concerns in terms of lighting and signage required.
- Air Quality and Climatic Factors This option is likely to see minimal modal shift in travel from car-based to cycling which will have a positive impact on improving localised air quality which is important as an AQMA has been designated in Bishopbriggs due to traffic levels through the town centre reducing associated carbon emissions from vehicles. This would demonstrate a commitment to national carbon emission reduction targets and will contribute to reducing the effects of climate change, including flood risks, as well as reducing noise levels. However, for the above safety issues the improvements to air quality and climatic factors are likely to be reduced with the implementation of Advisory Cycle Lanes as opposed to segregated cycle lanes along the route.

Conversely, negative impacts have the potential to arise for Cultural Heritage, Biodiversity, Flora and Fauna and Soil and Geology including:

- Cultural Heritage The route of the BRR connects to the Torrance Roundabout in the north of Bishopbriggs which is on the line of the Antonine Wall, and part of the road is within in the buffer zone for this World Heritage Site. Although it is unlikely that the creation of an advisory cycle lane along the BRR will have a significant impact on the setting of this cultural heritage site, it is important that consideration should be given to its designation.
- Biodiversity, Flora and Fauna and Soil and Geology Low Moss Plantation borders the BRR to the west of the road. This site is designated as a LNCS for biodiversity and its existing woodland. Lowland raised bog peatland has been identified at Low Moss and is currently being restored from a degraded state so is extremely vulnerable to disturbance. Human intervention, such as cycling, could be damaging to the state of the site and hinder its restoration. Furthermore, disturbance to peatland has the potential to result in the release of carbon to the atmosphere. A LNCS for geodiversity has also been designated to the east of the BRR which has the potential to be degraded in value from this action.

#### **Proposed Mitigation:**

#### **Population and Human Health**

- Implementation of appropriate lighting and signage to improve the safety for cyclists.

#### **Cultural Heritage**

- Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or their setting.

### **Biodiversity, Flora and Fauna and Soil and Geology**

- See above assessment.

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.8	++	-	+ +/-	-	+/-	-	++	+/-	++	
Alternative 1	Proposed Action Torrance to Bird		r Kelvin Railway P	ath.						
	- Cultural any action Wall itse - Biodivers disused responsitive in as it alreed that pear excess can be compared to reduce to	Heritage – The ron (infrastructure) If will have an ad sity, Flora and Frailway which are walkers and cycle that this action impact and direct and and/or care arbon from disturbe – The River Kenavel has the pote y encroachment	oute of the River oute of the River e improvements overse impact on it auna and Soil are likely to host a rists will impact not will help to impact link to the wider is potential for so bon rich soils existing bance of the land livin Railway Path of the green belt	Kelvin Railway Pa or increased use to its setting and histo ad Geology - Varia number of importa- egatively on these rove habitat confi- green network wo oil erosion and const in the area so to its set within a Spe- ne scenic value of to ensure that val	th is partially in the hrough active trace or the constant of the constant of the constant of the constant of the consideration where the consideration where the consideration where consideration where the consideration where consideration where consideration where the consideration where consideration wh	odiversity and geo ecies and habitats. In the loss or dama in Torrance and Bi rtonshire. Althoug increased access on in should be taken rea and within the egative impacts to land is retained. H	Buffer Zone nead cinity of the Buffer diversity are detended age to wildlife a firdston within the disused ration account so the greenbelt. Upgo landscape charal sowever, the upgoing in the upgoing a sowever, the upgoing in the divergence of the landscape charal sowever, the upgoing in the landscape charal sowever.	ar Torrance. There fer Zone or route signated near to total that increased and habitats. Howe he wider environmilway would provide degradation of so as not to result increased acter. It is important grade also presente, Birdston, Milton	of the Antonine the route of the access along the ver, there is also nent and have a de an ideal route soil. It is possible in the release of railway path for at that the action is an opportunity	



- Water Quality and Climatic Factors It is anticipated that there are likely negative impacts as a result of potential infrastructure improvements for access and increased footfall to drainage; compacting soil might restrict drainage of rainfall which might further enhance the flood risk that is present in the area from the River Kelvin and minor watercourses such as Red Burn. This could have additional effects on flooding to the east and west of the Railway Path, with adverse effects to settlements such as Torrance and the north of Kirkintilloch.
- Air Quality and Climatic Factors The environment from Torrance to Birdston and connections to the north of Kirkintilloch currently rely on vehicular based travel. Upgrades to the Railway Path is likely to present active travel friendly infrastructure to the local area which has benefits in reducing a reliance on vehicular travel contributing to a modal shift to active travel. Furthermore, this will contribute to alleviating congestion levels in the area by reducing carbon emissions, potentially improving air quality.
- Population and Human Health and Material Assets A lack of connectivity between Torrance, Birdston and the north of Kirkintilloch has been identified through audit processes in the development of the ATS. This action is likely to improve connectivity, allowing people to have direct access to the wider environment, including the Campsie Fells, and towns such as Kirkintilloch and present a more sustainable network for the local community to take advantage of. For those who are encouraged to increase their walking and cycling uptake there are associated health benefits anticipated. Current active travel access from Torrance to Birdston meanders through the Hayston and Kirkintilloch Golf Clubs; a change in route will prevent degradation of the golf courses for recreation and further promote the participation and use of more sustainable forms of transport infrastructure (Core Path Network etc).

## **Proposed Mitigation:**

#### **Cultural Heritage**

- Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or their setting.

## **Biodiversity, Flora and Fauna**

- Additional surveys to determine level and type of species/habitats that will be potentially impacted from the action such as bat surveys/extended habitat surveys etc.
- Where network improvements require lighting to ensure that the route is safe for users, lighting design should follow best practice guidance Bat Conservation Trust 'Bats and Lighting in the UK'.
- Any infrastructure changes/improvements should aim to retain features of ecological value within the design and ensure the highest priorities for protection such as woodland, riparian habitats, ponds, wetlands etc. should be considered and any impact prevented.

#### Soil and Geology

- Further surveys of peatland/carbon rich soils should be carried out to determine whether the upgrade of the disused railway will result in the loss or devalue protected soil.
- Implement soil erosion prevention measures outlined in good practice guidance

#### Landscape

- Integration of high environmental and design standards that maintain existing landscape distinctiveness and will be consistent with the area as a Special Landscape Area and within the greenbelt.

#### **Water Quality**

- Control and treatment of surface runoff.
- Adoption of best practices to prevent/minimise adverse impacts to drainage.

#### **Climatic Factors**

++

- Further Flood Risk Assessments to determine extend of flood risk in the area and the implementation of flood risk management measures, if required.

+ +/-

?/-

Proposed Action 1.8
Alternative 2

## Proposed Action:

Provide segregated cycle lanes on the main A807 and A803 carriageways or a shared use footway connecting Torrance and Kirkintilloch.

This option is anticipated to have positive impacts to the following environmental factors:

- Population and Human Health and Material Assets Through the provision of a segregated cycleway along the A807 and A803 or shared use footway, residents, commuters and visitors are more likely to be able to cycle or walk using this route, giving them active travel options to access Kirkintilloch and the Forth and Clyde Canal from Torrance which currently has poor connectivity and improve viability for active travel. By ensuring that the active travel route is segregated against the main route of traffic, this would be a viable and safe option for active travel users, which will benefit those in Torrance and other residents, visitors or commuters in East Dunbartonshire. Consideration should be given as to whether safety could be further enhanced with appropriate lighting and signage. However, it should be noted that the audit process in the development of the ATS did not reveal a demand for connectivity between Torrance and Kirkintilloch which may influence a lesser improvement in active travel.
- Air Quality and Climatic Factors Upgrading the existing carriageways with encourage a modal shift from vehicular based travel to active travel. Although many will opt to continue travelling with unsustainable methods, active travel is likely to increase and reduce a reliance on car-based travel. This will contribute to mitigating the effects of climate change through a reduction in related carbon emissions.

However, negative impacts have been predicted for the following environmental factors:

- Cultural Heritage, Landscape and Material Assets The A807 and A803 are within the Antonine Wall Buffer Zone, and the A803 is situated along the line of the Antonine Wall. This action will involve the construction of infrastructure improvements to the existing carriageways which has the potential to significantly impact on the setting and value of the Antonine Wall as a key tourist attractor and historical asset for East Dunbartonshire. At this stage the effects to landscape are uncertain but there are potential adverse impacts that will encroach or alter the setting of the green belt in which this route is situated depending on the nature of the design and change to the carriageways.
- Biodiversity, Flora and Fauna, Soil and Geology, Water Quality and Climatic Factors A LNCS for geodiversity has been designated between Torrance and Bishopbriggs and borders the A807. An increase in active travel along this route has the potential to have a negative effect on this designation through the removal or damage of features. There is also potential that construction activity will result in soil erosion/degradation/compaction as well as influence the temporary discharge of pollutants into nearby watercourses and the water table and potential drainage issues. It is anticipated that there are likely negative impacts as a result of potential infrastructure improvements which might further enhance the flood risk that is present in the area south of Torrance from the River Kelvin.

#### **Proposed Mitigation:**

#### **Cultural Heritage**

- Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or their setting.

#### **Biodiversity, Flora and Fauna**

- Additional surveys to determine level and type of species/habitats that will be potentially impacted from the action such as bat surveys/extended habitat surveys etc.
- Where access route requires lighting to ensure that the route is safe for users, lighting design should follow best practice guidance Bat Conservation Trust 'Bats and Lighting in the UK'.
- Any infrastructure changes/improvements should aim to retain features of ecological value within the design and ensure the highest priorities for protection such as woodland, riparian habitats, ponds, wetlands etc. should be considered and any impact prevented.

#### Soil and Geology

- Further surveys of peatland/carbon rich soils should be carried out to determine that construction activities to achieve this option will not result in the loss or devalue protected soil.
- Implement soil erosion prevention measures outlined in good practice guidance

### Landscape

- Integration of high environmental and design standards that maintain existing landscape distinctiveness and will be consistent with the greenbelt and sensitive to the surrounding area.

#### **Water Quality**

Control and treatment of surface runoff.

- Adoption of best practices to prevent/minimise adverse impacts to drainage.

#### **Climatic Factors**

- Further Flood Risk Assessments to determine extend of flood risk in the area and the implementation of flood risk management measures, if required.

+/-

+ /-

#### **Material Assets**

- Reuse of materials where appropriate/sustainable use of resources.
- Waste Management Plan implemented to reduce the impact of waste.

## Proposed Action 1.8 Alternative 3

## ++ -- ++

#### **Proposed Action:**

Provide segregated cycle lanes on the main A807 and A803 carriageways or a shared use footway connecting Torrance and Bishopbriggs.

#### Assessment Commentary:

This option is anticipated to have significant positive impacts to the following environmental factors:

- Population and Human Health Through the provision of a segregated cycleway along the A807 and A803 or shared use footway, people are more likely to be able to safely cycle or walk using these infrastructure improvements, giving them active travel options to access Bishopbriggs and additional opportunities to link with Kirkintilloch and the Forth and Clyde Canal from Torrance which currently has poor connectivity and viability for active travel. By ensuring that the active travel route is segregated against the main route of traffic, this would be a viable and safe option for active travel users, which will benefit those in Torrance and other residents, visitors or commuters in East Dunbartonshire. Consideration should be given as to whether safety could be further enhanced with appropriate lighting and signage. This option will potentially improve connections to Bishopbriggs Train Station which may be beneficial to commuters to Glasgow linking active travel and public transport interchanges.
- Air Quality and Climatic Factors Upgrading the existing carriageways with encourage a shift from vehicular based travel to active travel. Although many will opt to continue travelling with unsustainable methods, active travel is likely to increase and reduce a reliance on car-based travel. This will contribute to mitigating the effects of climate change and will play a part in reducing the flood risks identified in the area from the River Kelvin.
- ➤ Material Assets It is likely that this action will influence a change to more sustainable transport infrastructure enhancing the existing active travel infrastructure provision.

However, negative impacts have been predicted for the following environmental factors:

- ➤ Cultural Heritage, Landscape and Material Assets The A807 and A803 are within the Antonine Wall Buffer Zone, and the A803 is situated along the line of the Antonine Wall. This action will involve infrastructure changes and construction to the existing carriageways which has the potential to significantly impact on the setting and value of the Antonine Wall as a key tourist attractor and historical asset for East Dunbartonshire. At this stage the effects to landscape are uncertain but there are potential negative impacts that will alter the setting of the green belt in which this route is situated depending on the nature of the design and change to the carriageways.
- Biodiversity, Flora and Fauna, Soil and Geology, Water Quality and Climatic Factors There are a series of environmental designations for biodiversity and habitats between Torrance and Bishopbriggs town centre including a LNCS for geodiversity and Low Moss/High Moss Plantation which are both a LNCS for biodiversity with identified lowland raise bog peatland. An increase in active travel along this route has the potential to have a negative effect on these designations through the removal or damage of features and it is important that consideration is given to the effects of changing the infrastructure of the carriageway on these. There is also potential that construction activity will result in soil erosion/degradation/compaction as well as influence the temporary discharge of pollutants into nearby watercourses and the water table and potential drainage issues. It is anticipated that there are likely negative impacts as a result of potential infrastructure improvements which might further enhance the flood risk that is present in the area south of Torrance from the River Kelvin.

#### **Proposed Mitigation:**

#### **Cultural Heritage**

- Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or their setting.

#### **Biodiversity, Flora and Fauna**

- Additional surveys to determine level and type of species/habitats that will be potentially impacted from the action such as bat surveys/extended habitat surveys etc.
- Where access route requires lighting to ensure that the route is safe for users, lighting design should follow best practice guidance Bat Conservation Trust 'Bats and Lighting in the UK'.
- Any infrastructure changes/improvements should aim to retain features of ecological value within the design. The highest priorities for protection such as woodland, riparian habitats, ponds, wetlands etc. should be considered and any impact prevented.

### **Soil and Geology**

- Further surveys of peatland/carbon rich soils should be carried out to determine that construction activities to achieve this option will not result in the loss or devalue protected soil.
- Implement soil erosion prevention measures outlined in good practice guidance

#### Landscape

- Integration of high environmental and design standards that maintain existing landscape distinctiveness and will be consistent with the greenbelt.

#### **Water Quality**

- Control and treatment of surface runoff.
- Adoption of best practices to prevent/minimise adverse impacts to drainage.

#### **Climatic Factors**

- Further Flood Risk Assessments to determine extend of flood risk in the area and the implementation of flood risk management measures, if required.

#### **Material Assets**

- Reuse of materials where appropriate/sustainable use of resources.
- Waste Management Plan implemented to reduce the impact of waste.

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.9	++	?/-	X	X	X	X	+	+	+	
	implementation. motorised vehicl  This action is like with the aims of increase particip enhancing the p good surfacing o quality, noise rec walking and cycle creating the pote.  In relation to Cu	mentary: itself already extends already extends already extends a from the town and the Masterplan action levels in a public realm to confective travel reduction, congesting friendly town and aller and a for more a factural Heritage,	kists and is currenupport the Master on centre.  Distinct impacts for by increasing provinctive travel within create a more plead outes and result in the impacts at until the impacts at unit the impacts at uni	Population and Fivision for active transition for active transitions as an environment reduced traffic legarbon emissions ovide better links journeys to the active train at this stansicertain at the stansicertain at this stansicertain at the stansicertain at the stansicertain at the st	duman Health, Aid avel and improving the centre. This will the for walkers, cyclevels in the town and a more please with the Forth area.	and as a result the perspective with a perspective	the aim of remonstrate to the aim of remonstrate to a more sure districts to the lid generate posity. Delivery of this Strathkelvin Rails on the hosts a rangement of the lides.	aterial Assets as it ove active travel in stainable travel ne town. This action ive benefits on le action is likely to way Path and oth	the proportion of twould be in line of the proportion of twould be in line of the proportion of two lines. The proportion of two lines of the proportion of	

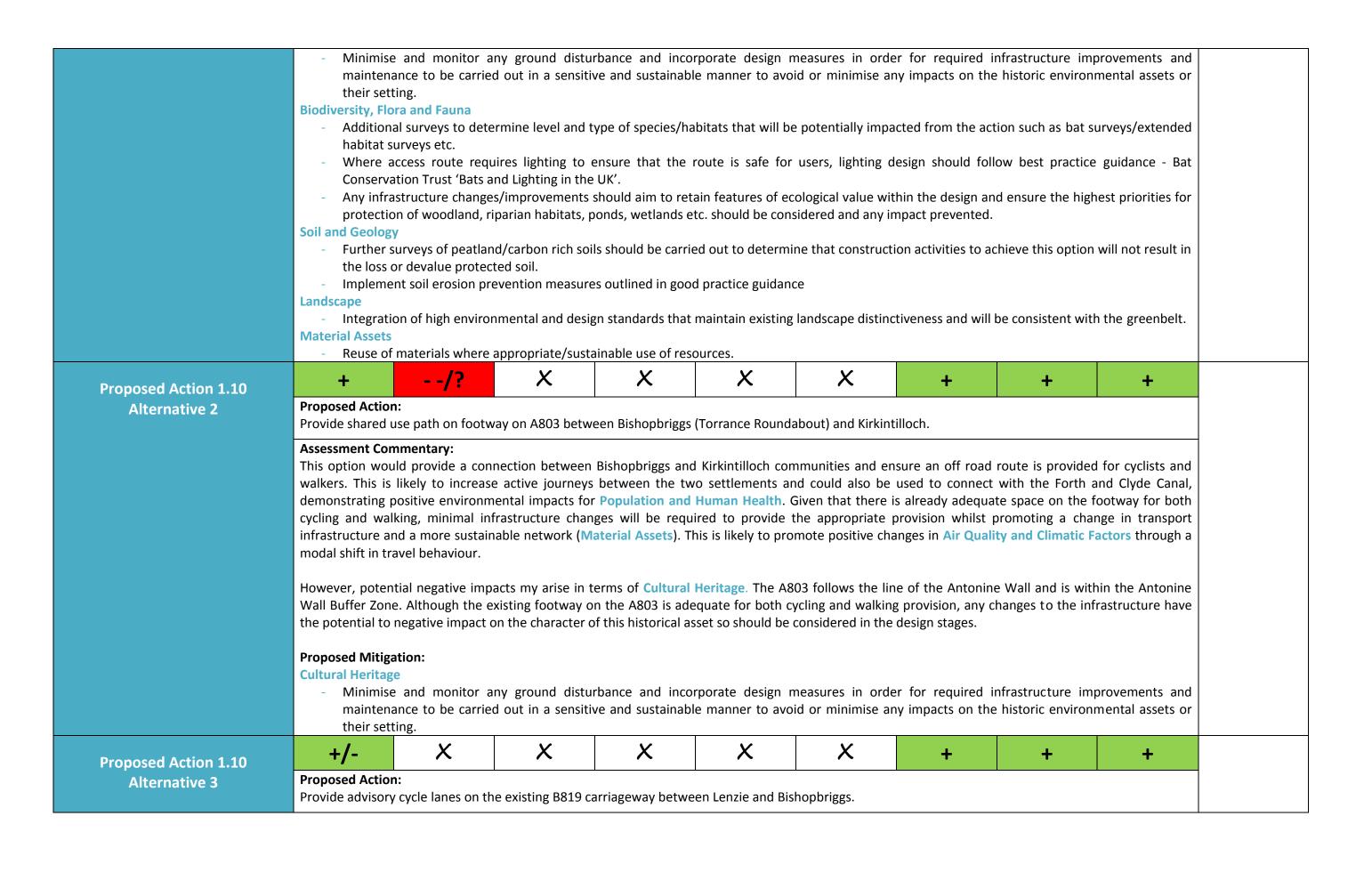
centre is designated as a Conservation Area. This action could adversely impact on these assets through active travel infrastructure improvements which could potentially degrade their value.

## **Proposed Mitigation:**

## **Cultural Heritage**

- Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or their setting

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferre Alternative Option
Proposed Action 1.10	++	?/-	/+		+/-	X	++	++	+ +/-	
Alternative 1	Proposed Action Kirkintilloch/Lenz		ggs off-road active	travel route.						
	audit carried out facilitate active to travel between so natural environme promote changes infrastructure will.  In terms of Air Coalternative to care a reduction in cale.  In relation to Cull and Kirkintilloch/Consideration will degrade their values.  However, negative infrastructures infrastructures in the LNCS for levalued and has the potential providing.	ely to present sin the develop ravel in Bishopk rettlements and rent in a sustain sto the current lineed to be instituted and Climber and Climber and Elements and Climber and Elements and Climber and detraction empacts have ity, Flora and ture required) and ture required and protected specification of the control of the central to rest to detract from enhanced scential control of the central to rest to detract from enhanced scential control of the central control of the central to rest to detract from enhanced scential control of the central con	ment of the ATS horiggs being of a look access Bishopbright access Bishopbright able and safe mand transport infrastructure.  matic Factors, it is swell as improve on the impacts at under the impacts at under the through an arrowen to these designing from the character been predicted for Fauna, Landscap and the result of invegetation and valuering Glasgow and ecies and potential ult in harm to the	ighlighting the lack with state and soil and see and Soil and and see	ik of connectivity fore, active traveland Lenzie Train his action is likely Bishopbriggs and a new route be olic transport into rair quality in the nat has been destinappropriate den centre.  Invironmental factor of the soils. Furthermole Local Nature Reference of the there is some property of the centre.	et ween Bishopke would be promo Station. This route to contribute to ind Kirkintilloch/Le etween Bishopbrigerchanges, contribe designated AQM proposed route alignated as both a evelopment or information. The implementation ore, the route for active ore, the route of eserve at Lenzie Mefore, the construction of the proposed route propo	origgs and Kirkin of the decision of an offect the railway line oss. These sites ction and implese will be within	would respond to tilloch/Lenzie and esidents, visitors are allow people to health and wellbe sustainable network loch/Lenzie will prements in air qualities.  Trailway line between and Townscape ges in these areas road active trave potential to cause is adjacent to Higare likely to be host mentation of an active greenbelt. The bitat connectivity	infrastructure to add commuters to access the wider sing statistics and rk, although new rovide a realistic ty and leading to een Bishopbriggs Protection Area. could potentially  I route (i.e. the soil erosion and h Moss LNCS, and st to a number of ctive travel route e action has the	
	Proposed Mitiga Cultural Heritage									



In general, it is likely that this option would not have a significant environmental impact. However, it would provide an opportunity for people to cycle between Bishopbriggs and Lenzie which is likely to present benefits in terms of Human Health and wellbeing through active travel provision. However, the route of the B819 is not straight so there are safety concerns in terms of the viability of the route for cycling and potential conflicts with traffic on this B road. Furthermore, adequate lighting and signage for the safety of cyclists would be required in order to reduce the likelihood of and prevent accidents. Despite these constraints predicted, this option would likely present minor positive impacts for Air Quality, Climatic Factors and Material Assets by contributing to a shift from car-based travel to a more sustainable form, with benefits in reducing resultant carbon emissions and improving air quality.

## **Proposed Mitigation:**

**Population and Human Health** 

- Implementation of appropriate lighting and signage to improve the safety for cyclists.

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.11		rkintilloch – Actinentary: Is the intended estage to carry or	exploration or fea ut an appropriate	assessment. In or	der to ensure th	at potential enviro	onmental implica	itions are taken in	ailed information ato consideration	

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.12	available at this	o Milngavie/Bear mentary: as the intended e stage to carry ou	exploration or feas	assessment. In or	rder to ensure th	ut for this action t at potential environ ications as part of	onmental implica	ntions are taken in		

SE	A Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
	Proposed Action 1.13	+ + Proposed Action	<b>?/</b>	?//+	?/	?/-	?/	+	+/-	++	
	Alternative 1	East Dunbartons	hire Loop (Circul	ar Route)							

This action would create a circular route around the full perimeter of East Dunbartonshire, providing links between settlements where gaps in the network have been identified. This will provide positive benefits for Population and Human Health in terms of linking the majority of settlements with active travel in mind and for facilitating regular active travel journeys as a realistic alternative throughout East Dunbartonshire. The benefits will be particularly important for the rural villages where public transport provision and infrastructure that is active travel friendly is lacking. Connectivity to the wider environment, including key attractors such as Mugdock Country Park, the Campsie Fells, the West Highland Way and town centres for services, facilities and amenities with potential tourism benefits. Furthermore, there is potential for this action to take advantage of existing off-road infrastructure which represents a safe option for a modal shift from vehicular travel to walking and cycling. However, there are settlements such as Torrance that will not benefit from this opportunity. There is likely to provide benefits for improving Air Quality and Climatic Factors with a contribution towards carbon emission reductions. However, it should be noted that improvements to existing infrastructure and upgrades are required to address gaps in the existing network has the potential to have a negative impact on areas prone to flooding which exist around the areas of the Forth and Clyde Canal, River Kelvin and the Glazert Water. In terms of Material Assets, the Loop is likely to encourage and improve the safe use of core paths throughout East Dunbartonshire to promote a change to a more sustainable travel network for East Dunbartonshire.



This Council-wide action will encompass a range of different environmental designations and constraints and as such some of the effects are uncertain at this stage, without detailed plans and designs of the proposed 'loop', although there are potential positive and negative impacts anticipated for the following environmental factors:

- ➤ Cultural Heritage It is likely that providing connectivity around the perimeter of East Dunbartonshire for the promotion of active travel will improve connections to cultural assets such as the Antonine Wall, Craigend Castle and the Forth and Clyde Canal. In addition to this, there are a number of designated sites for their historical value throughout the area including:
  - Gardens and Designed Landscapes such as around Clachan of Campsie and Lennoxtown
  - Townscape Protection Areas such as near Bardowie and Langbank Farm
  - Conservation Areas in Milngavie, Bearsden, Kirkintilloch, Lenzie, Twechar, Bardowie and Clachan of Campsie
  - Antonine Wall and Antonine Wall Buffer Zone
  - Forth and Clyde Canal Scheduled Monument.

There are potential significant negative effects to these historical designations in terms of degrading their value through inappropriate access detracting from their character as a result of required infrastructure improvements.

- Biodiversity, Flora and Fauna and Soil and Geology The impact of increased access via walking and cycling has the potential to result in negative impacts to the setting and value of designated sites such as the 3 LNR sites, LNCS such as Douglas Muir, Craigmaddie Muir and Bardowie, SSSI such as South Braes, Mugdock Wood and Cadder Wilderness. Furthermore, increased footfall to sites where protected and non-protected species can be found has the potential to result in disturbance to habitats, breeding and nesting. This includes sites designated for their geodiversity value such as Auld Wives' Lifts and along the Crow Road on the Campsie Fells. Conflicts between access and soil quality have the potential to arise, resulting in soil degradation/erosion and potential disturbance to peatland/carbon rich soils. Conversely, it is also likely that this action could also help to improve habitat connectivity, with links to the wider green network in East Dunbartonshire.
- ➤ Landscape East Dunbartonshire hosts a number of Local Landscape Areas which have been designated around the Kilpatrick Hills, Campsie Fells, south of Waterside and through the centre of the boundary area from Birdston to Milngavie. The effects at this stage are uncertain as the exact improvements to be carried forward are subject to further investigation as to design and feasibility, but there is potential that minor negative impacts to these designations without consideration of landscape setting, character and appropriate design.
- ➤ Water Quality and Climatic Factors In terms of water quality, active travel improvements on existing infrastructure has the potential to result in drainage issues, particularly where the route is near to watercourses, from the result of increased footfall and changes to soil quality and quantity. Where drainage issues arise, there is the potential for secondary effects of flooding, particular if the intended route of the EDC loop will be within or in the vicinity of the SEPA designated Flood Risk Area.

#### **Proposed Mitigation:**

#### **Cultural Heritage**

- Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or



#### their setting.

#### **Biodiversity, Flora and Fauna**

- Additional surveys to determine level and type of species/habitats that will be potentially impacted from the action such as bat surveys/extended habitat surveys etc.
- Where access route requires lighting to ensure that the route is safe for users, lighting design should follow best practice guidance Bat Conservation Trust 'Bats and Lighting in the UK'.
- Any infrastructure changes/improvements should aim to retain features of ecological value within the design. The highest priorities for protection such as woodland, riparian habitats, ponds, wetlands etc. should be considered and any impact prevented.

#### **Soil and Geology**

- Further surveys of peatland/carbon rich soils should be carried out to determine that construction activities to achieve this option will not devalue protected soil.
- Implement soil erosion prevention measures outlined in good practice guidance

#### Landscape

- Integration of high environmental and design standards that maintain existing landscape distinctiveness and will be consistent with the greenbelt.

#### **Water Quality and Climatic Factors**

- Control and treatment of surface runoff.

?/- -

- Adoption of best practices to prevent/minimise adverse impacts to drainage.
- Further Flood Risk Assessments to determine extend of flood risk in the area and the implementation of flood risk management measures, if required.
- Use of construction SUDS and adoption of best practices to avoid pollution of watercourses.

?/- **-**

#### **Material Assets**

+ +/-

- Reuse of materials where appropriate/sustainable use of resources.
- Waste Management Plan implemented to reduce the impact of waste.

?/- -/+

# Proposed Action 1.13 Alternative 2



Ensure all settlements in East Dunbartonshire are connected to neighbouring settlements by some form of active travel infrastructure, with minimum standards of advisory cycle lanes for cyclists or footways adjacent to carriageways for pedestrians. This approach would create a radial web of routes with connections from the centre of the area outwards.

?/-

?/- -

++/-

#### **Assessment Commentary:**

This action is likely to present significant positive impacts to **Population and Human Health** as it will promote active travel between all settlements in East Dunbartonshire, including radial routes to rural villages in the centre of the local authority area such as Torrance and Balmore. Provision of active travel routes will also encourage residents who are able to commute to their place of work, either by active travel completely or using the routes partially before accessing public transport interchanges in a nearby settlement e.g. cycling from Torrance to Bishopbriggs and travelling by train to Glasgow. Overall, this will enable people to lead a more active lifestyle with health and wellbeing benefits and provide opportunities for them to connect to the wider natural environment and open spaces throughout East Dunbartonshire. However, there are potential concerns over safety as advisory lanes or footways alongside carriageways with potential high volumes of traffic providing risks of accidents which could potentially discourage active travel, as opposed to off-road active travel provision.

There is potential for this action to encourage a modal shift from vehicular travel to walking and cycling. This is likely to present benefits for improving Air Quality and Climatic Factors with a contribution towards carbon emission reductions. However, it should be noted that improvements to existing infrastructure and network upgrades are required to address gaps in the existing routes has the potential to have a negative impact on areas prone to flooding which exist around the areas of the Forth and Clyde Canal, River Kelvin and the Glazert Water. In terms of Material Assets, this action is likely to encourage and improve the safe use of core paths throughout East Dunbartonshire for a change to a more sustainable travel network. However, there are many routes in rural areas that will require additional infrastructure due to physical issues in accommodating both footways/advisory cycle lanes and traffic, resulting in waste and resource use.

This Council-wide action will encompass a range of different environmental designations and constraints and as such some of the effects are uncertain at this stage without specific plans and designs of required improvements and upgrades, although there are potential positive and negative impacts anticipated for the following environmental factors:

- ➤ Cultural Heritage It is likely that providing connectivity as a radial web of routes throughout East Dunbartonshire for the promotion of active travel will improve connections to cultural heritage assets such as the Antonine Wall, Craigend Castle and the Forth and Clyde Canal. In addition to this, there are a number of historical sites of value designated throughout the area including:
  - Gardens and Designed Landscapes such as around Clachan of Campsie and Lennoxtown
  - Townscape Protection Areas such as near Bardowie and Langbank Farm
  - Conservation Areas in Milngavie, Bearsden, Kirkintilloch, Lenzie, Twechar, Bardowie and Clachan of Campsie
  - Antonine Wall and Antonine Wall Buffer Zone through the centre of the Council area
  - Forth and Clyde Canal Scheduled Monument.

There are potential significant negative effects to these historical designations in terms of degrading its value and detracting from its character as a result of impacts from access to these sites.

- ▶ Biodiversity, Flora and Fauna and Soil and Geology The impact of increased access via walking and cycling has the potential to result in negative impacts to the setting and value of designated sites such as the 3 LNR sites, LNCS such as Douglas Muir, Craigmaddie Muir and Bardowie, SSSI such as South Braes, Mugdock Wood and Cadder Wilderness. Furthermore, increased footfall to sites where protected and non-protected species can be found has the potential to result in disturbance to habitats, breeding and nesting. This includes sites designated for their geodiversity value such as Auld Wives' Lifts and along the Crow Road on the Campsie Fells. Conflicts between access and soil quality have the potential to arise, resulting in soil degradation/erosion and potential disturbance to peatland/carbon rich soils. However, it is likely that this action could also help to improve habitat connectivity, with links to the wider green network in East Dunbartonshire.
- ➤ Landscape East Dunbartonshire hosts a number of Local Landscape Areas which have been designated around the Kilpatrick Hills, Campsie Fells, south of Waterside and through the centre of the boundary area from Birdston to Milngavie. In order to accommodate both active travel and vehicular travel on some routes in East Dunbartonshire, significant changes to the existing infrastructure may be required including the widening of carriageways. This will potentially encroach further into the green belt and have a negative effect on landscape character in high valued areas.
- ➤ Water Quality In terms of water quality, active travel improvements on existing infrastructure has the potential to result in drainage issues, particularly where the route is near to watercourses, from the result of increased footfall and changes to soil quality and quantity. Where drainage issues arise, there is the potential for secondary effects of flooding.

#### **Proposed Mitigation:**

#### **Population and Human Health**

- Implementation of appropriate lighting and signage to improve the safety for cyclists and walkers.

### **Cultural Heritage**

- Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or their setting.

#### **Biodiversity, Flora and Fauna**

- Additional surveys to determine level and type of species/habitats that will be potentially impacted from the action such as bat surveys/extended habitat surveys etc.
- Where access route requires lighting to ensure that the route is safe for users, lighting design should follow best practice guidance Bat Conservation Trust 'Bats and Lighting in the UK'.
- Any infrastructure changes/improvements should aim to retain features of ecological value within the design. The highest priorities for protection such as woodland, riparian habitats, ponds, wetlands etc. should be considered and any impact prevented.

#### Soil and Geology

- Further surveys of peatland/carbon rich soils should be carried out to determine that construction activities to achieve this option will not devalue protected soil.
- Implement soil erosion prevention measures outlined in good practice guidance

#### Landscape

- Integration of high environmental and design standards that maintain existing landscape distinctiveness and will be consistent with the greenbelt.

## **Water Quality and Climatic Factors**

- Control and treatment of surface runoff.
- Adoption of best practices to prevent/minimise adverse impacts to drainage.
- Further Flood Risk Assessments to determine extend of flood risk in the area and the implementation of flood risk management measures, if required.
- Use of construction SUDS and adoption of best practices to avoid pollution of watercourses.

### **Material Assets**

- Reuse of materials where appropriate/sustainable use of resources.
- Waste Management Plan implemented to reduce the impact of waste.

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.14	++	?/-/+	?/-/+	?/	?/-	?/-	++	+ +/-	+/-	
Alternative 1	Proposed Action:									
7 1100111011100 2		-	o green network a	assets/open space:	S.					
	Assessment Com	•	vill procent signific	cant positive impa	sts for the followi	ing anvironmental	factors			
				•		-		t Dunbartonshire	as it will enable	
				•				uits, enjoyment of		
								petter connected w		
	The Ope	n Space Strategy	for East Dunbart	onshire highlighte	d inadequacies i	n how accessible	the open space	/play parks in East	Dunbartonshire	
				n the ATS will proa	•	•				
					-	-	-	ire likely to result		
			•	_				able network. In tu	• •	
				s an issue such as pate and utilise ac			e able to impro	ve as vehicle carbo	on emissions are	
	likely to	be reduced as mic	ne people partici	pate and utilise ac	live traver afterno	atives.				
	Open spaces an	d green network	assets in East D	unbartonshire are	vast and are pro	otected by several	different envir	onmental designat	cions, constraints	
		_			•	•		tive and negative i	-	
	arise for the env	vironmental facto	rs including:							
			=				=	al environment as		
				•				ardens and Desig	•	
				_				as the potential to		
		_		s these sites of his	• • •		value and chara	acteristics. Howeve	er, people will be	
	•						nat connectivity	throughout the gre	een network and	
		• •		•	•		•	ential to increase		
		•	•			•	•	e including LNCS, I		
		= = = = = = = = = = = = = = = = = = = =						between access		
								ntially have a direc		
		• •		o peatland or carb						
					•		•	d the Kilpatrick Hill	•	
			_			_	•	orove active travel	•	
	areas gre	een network and	open spaces par	ticularly in rural a	reas, signiticant o	changes to the exi	isting infrastruct	ture may be requir	red including the	

widening of carriageways. This will potentially encroach further into the green belt and have a negative effect on landscape character in high valued areas.

- Water Quality and Climatic Factors Flood risk areas have been identified around much of East Dunbartonshire. Active travel infrastructure improvements in the natural environment are likely to have a direct impact on drainage, particularly in Flood Risk Areas and near waterbodies which has the potential to be exacerbated by the potential loss of vegetation and soil erosion.
- Climatic Factors and Material Assets Although there is existing infrastructure and provision to allow for active travel in East Dunbartonshire, it is likely that infrastructure will need to be upgraded in areas to ensure that it is of a high standard or new infrastructure implemented where necessary. This may result in extensive use of materials and waste generation such as aggregate waste and pollution. Through this action it is likely that sustainable transport infrastructure will be increasingly utilised as a realistic alternative to vehicular based travel which will contribute to modal shift.

### **Proposed Mitigation:**

#### **Cultural Heritage**

- Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or their setting.

## **Biodiversity, Flora and Fauna**

- Additional surveys to determine level and type of species/habitats that will be potentially impacted from the action such as bat surveys/extended habitat surveys etc.
- Where access route requires lighting to ensure that the route is safe for users, lighting design should follow best practice guidance Bat Conservation Trust 'Bats and Lighting in the UK'.
- Any infrastructure changes/improvements should aim to retain features of ecological value within the design. The highest priorities for protection such as woodland, riparian habitats, ponds, wetlands etc. should be considered and any impact prevented.

#### **Soil and Geology**

- Further surveys of peatland/carbon rich soils should be carried out to determine that construction activities to achieve this option will not devalue protected soil.
- Implement soil erosion prevention measures outlined in good practice guidance

#### Landscape

- Integration of high environmental and design standards that maintain existing landscape distinctiveness and will be consistent with the greenbelt.

#### **Water Quality and Climatic factors**

- Control and treatment of surface runoff.
- Adoption of best practices to prevent/minimise adverse impacts to drainage.
- Further Flood Risk Assessments to determine extend of flood risk in the area and the implementation of flood risk management measures, if required.
- Use of construction SUDS and adoption of best practices to avoid pollution of watercourses.

#### **Material Assets**

- Reuse of materials where appropriate/sustainable use of resources.
- Waste Management Plan where necessary.

# Proposed Action 1.14 Alternative 2

+/-

? -/+

-/+ ?

?/- -

X

?/-

+

+/-

+/-

## **Proposed Action:**

Improve access by active travel to green network assets/open spaces in urban areas only

#### **Assessment Commentary:**

The anticipated positive impacts for the following environmental factors include:

> Population and Human Health – This action is likely to present benefits for residents and visitors within urban areas as it will enable accessibility

to local open spaces which is shown to have health benefits in terms of increased active pursuits, enjoyment of the environment and community wellbeing. However while this is likely to promote the use of local open spaces through improved connectivity it excludes connectivity to large rural open spaces leaving significant gaps in the green network. This would represent a significant missed opportunity to provide access for urban dwellers to assets like the Campsie Fells and Mugdock Park.

Air Quality, Climatic Factors and Material Assets – There are potential positive impacts from a localised perspective that are likely to result from improved networks in East Dunbartonshire by facilitating a shift from existing transport infrastructure to a more sustainable network. In turn, air quality in areas, particularly where poor air quality is an issue such as Bearsden and Bishopbriggs, will be able to improve as vehicle carbon emissions are likely to be reduced as more people participate and utilise local active travel alternatives.

At this stage, some of the environmental impacts are uncertain but it's likely that there will be both positive and negative impacts that may arise for the environmental factors including:

- ➤ Cultural Heritage The green network and many open spaces in urban areas are located in or near the vicinity of cultural assets such as the Antonine Wall and Buffer Zone, Forth and Clyde Canal Scheduled Monument, Conservation Areas and Gardens and Designed Landscapes. Increasing opportunities for active travel in urban settings to open spaces/the green network has the potential to have an adverse effect on the setting of many of these historical sites without appropriate consideration to their value and characteristics. However, people will be provided with more opportunities to access these sites of historic value by sustainable means.
- ➤ Biodiversity, Flora and Fauna and Soil and Geology This option has the potential to ensure that connectivity to open spaces within the urban area with potential benefits for habitat connectivity. However, there is potential that use of active travel routes and the impact of increased footfall will have an adverse effect on natural sites of importance including LNCS, LNR and TPOs as well as disturbance to species. There is also the potential that, through increased footfall and conflicts between access and biodiversity conservation, a loss of biodiversity, flora, fauna and geodiversity will result. This could have a direct impact on soil erosion and compaction, and disturbance to peatland or carbon rich soils.
- Water Quality and Climatic Factors Flood risk areas have been identified in urban locations such as Kirkintilloch, Bishopbriggs, Bearsden and Milngavie. Active travel improvements will potentially have a direct impact on drainage, particularly in Flood Risk Areas and near waterbodies which has the potential to be exacerbated by the potential loss of vegetation and soil erosion.
- Material Assets Although there is existing infrastructure and provision to allow for active travel to open spaces throughout urban locations it is likely that infrastructure will need to be upgraded in areas to ensure that it is of a high standard or new infrastructure implemented. This might result in extensive use of materials and waste generation such as aggregate waste and pollution.

#### **Proposed Mitigation:**

#### **Cultural Heritage**

- Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or their setting.

#### **Biodiversity, Flora and Fauna**

- Additional surveys to determine level and type of species/habitats that will be potentially impacted from the action such as bat surveys/extended habitat surveys etc.
- Where access route requires lighting to ensure that the route is safe for users, lighting design should follow best practice guidance Bat Conservation Trust 'Bats and Lighting in the UK'.
- Any infrastructure changes/improvements should aim to retain features of ecological value within the design. The highest priorities for protection such as woodland, riparian habitats, ponds, wetlands etc. should be considered and any impact prevented.

#### **Soil and Geology**

- Further surveys of peatland/carbon rich soils should be carried out to determine that construction activities to achieve this option will not devalue protected soil.
- Implement soil erosion prevention measures outlined in good practice guidance

## **Water Quality and Climatic Factors**

- Control and treatment of surface runoff.
- Adoption of best practices to prevent/minimise adverse impacts to drainage.

- Use of construction SUDS and adoption of best practices to avoid pollution of watercourses.

#### **Material Assets**

- Reuse of materials where appropriate/sustainable use of resources.
- Waste Management Plan where necessary.

# Proposed Action 1.14 Alternative 3

+/- ? ?/- ?/- ?/- ++

#### **Proposed Action:**

Improve access by active travel to green network assets/open spaces in rural areas only.

#### **Assessment Commentary:**

The anticipated positive impacts for the following environmental factors include:

- Population and Human Health – This action is likely to present benefits for residents and visitors within rural areas as it will enable accessibility to local open spaces which is shown to have health benefits in terms of increased active pursuits, enjoyment of the environment and community wellbeing. However while this is likely to promote the use of local open spaces as people will be better connected to open spaces it excludes connectivity to urban open spaces leaving significant gaps in the green network and to urban open spaces such as Peel Park, Lennox Park and Colguboun Park. This would represent a significant missed opportunity for those living in rural areas to access assets in urban areas.

+/-

+/-

- Air Quality, Climatic Factors and Material Assets — There are potential significant positive impacts that are likely to result from improved networks in East Dunbartonshire by facilitating a shift from existing transport infrastructure to a more sustainable network. In turn, air quality in areas will be able to improve as emissions are likely to be reduced as more people have access to active travel provision. This would see a notable change in rural areas as there is currently a reliance on car-based travel.

At this stage, some of the environmental impacts are uncertain but it likely that there will be both significant negative and positive impacts that may arise for the environmental factors including:

- Cultural Heritage The green network and many open spaces in rural areas are located in or near the vicinity of cultural assets such as the Antonine Wall and Buffer Zone, Forth and Clyde Canal Scheduled Monument, Conservation Areas and Gardens and Designed Landscapes. Increasing opportunities for active travel in rural settings to open spaces/the green network has the potential to have an adverse effect on the setting of many of these historical sites without appropriate consideration to their value and characteristics. However, people will be more likely to access these sites of historic value by sustainable means.
- Biodiversity, Flora and Fauna and Soil and Geology This option has the potential to ensure that connectivity to open spaces within rural areas with potential benefits for habitat connectivity. However, there is potential that the increased use of active travel routes and the impact of increased footfall will have an adverse effect on natural sites of importance including LNCS, LNR and TPOs as well as disturbance to species. There is also the potential that, through increased footfall and conflicts between access and biodiversity conservation, a loss of biodiversity, flora, fauna and geodiversity will result. This could have a direct impact on soil erosion and compaction, and disturbance to peatland or carbon rich soils.
- Landscape East Dunbartonshire hosts a number of Local Landscape Areas which have been designated around the Kilpatrick Hills, Campsie Fells, south of Waterside and through the centre of the boundary area from Birdston to Milngavie. In order to improve active travel provision to the areas green network and open spaces in rural areas, significant changes to the existing infrastructure may be required including the widening of carriageways. This will potentially encroach further into the green belt and have a negative effect on landscape character in high valued areas.
- Water Quality and Climatic Factors Flood risk areas have been identified in rural areas such as Twechar, Milton of Campsie and Lennoxtown, as well as in throughout the green belt. Active travel improvements will potentially have a direct impact on drainage, particularly in Flood Risk Areas and near waterbodies which has the potential to be exacerbated by the potential loss of vegetation and soil erosion.
- Material Assets Although there is existing infrastructure and provision to allow for active travel to open spaces throughout rural locations it is likely that infrastructure will need to be upgraded in areas to ensure that it is of a high standard or new infrastructure implemented. This may result in extensive use of materials and waste generation such as aggregate waste and pollution.

#### **Proposed Mitigation:**

**Cultural Heritage** 

- Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or their setting.

#### **Biodiversity, Flora and Fauna**

- Additional surveys to determine level and type of species/habitats that will be potentially impacted from the action such as bat surveys/extended habitat surveys etc.
- Where access route requires lighting to ensure that the route is safe for users, lighting design should follow best practice guidance Bat Conservation Trust 'Bats and Lighting in the UK'.
- Any infrastructure changes/improvements should aim to retain features of ecological value within the design. The highest priorities for protection such as woodland, riparian habitats, ponds, wetlands etc. should be considered and any impact prevented.

#### **Soil and Geology**

- Further surveys of peatland/carbon rich soils should be carried out to determine that construction activities to achieve this option will not devalue protected soil.
- Implement soil erosion prevention measures outlined in good practice guidance.

#### Landscape

- Integration of high environmental and design standards that maintain existing landscape distinctiveness and will be consistent with the greenbelt.

#### **Water Quality and Climatic Factors**

- Control and treatment of surface runoff.
- Adoption of best practices to prevent/minimise adverse impacts to drainage.
- Use of construction SUDS and adoption of best practices to avoid pollution of watercourses.

#### Material Assets

- Reuse of materials where appropriate/sustainable use of resources.
- Waste Management Plan where necessary.

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.15	++	+	+	X	X	X	+	+	+	
Alternative 1	Proposed Action Cycling in EDC pa				,					
	Population a cycle throug Milngavie tratown centres where approaccess the people to enconnections	effects of this act and Human Heal th parks in EDC, ain Station. This s, public transpo ppriate, this optic ark by active tra ijoy the parks mo to other Core F	th, Cultural Herita providing addition will provide newer trinterchanges are on will increase via evel and securely ore flexibly. This o	age, Biodiversity, onal off-road, tra additions to the and other attraction ability and acceptalock their bicycle option facilitates in abartonshire while	Material Assets, affic free options active travel netwins. Operating on ance of cyclists as should they wincreased active joine for the should they wincreased active joine free should the should be s	ng environmental factor Quality and Class to reach another works for cyclists at a 'Share with care's a mode. Provisions is a to continue into ourneys and access active travel access.	limatic factors — r destination e.g nd provide enha e' principle, poss n of cycle parkin to the park on fo s to services and	g. through Lennox anced connections libly with separating in parks will also bot, proving additi	to open spaces, and lines on paths of allow people to ional options for ell as encourages	
	+	0/+	0/+	X	X	X	+	+	+	

# Proposed Action 1.15 Alternative 2

#### **Proposed Action:**

Provide cycling provision such as sheltered cycle parking at all EDC parks to encourage active travel to parks.

#### **Assessment Commentary:**

This option is anticipated to have an overall neutral or minor positive impacts to the following environmental factors:

Population and Human Health, Cultural Heritage, Biodiversity, Flora and Fauna, Air Quality, Climatic Factors and Material Assets - This option would allow people to securely park bicycles at EDC parks and therefore access the parks by bicycle with confidence that they securely leave their bicycles while enjoying the park. Cycling will still be prohibited in parks but enhanced access to parks facilitated by provision of parking. This would represent an enhancement as no provision currently exists. It is likely therefore that this action would facilitate an increase in active travel journeys. However by failing to allow cycling in the parks only journeys to parks are facilitated which might discourage people as they will not be able to complete their journey by cycling. An example of this could be having to cycle on the carriageway to Milngavie Rail Station because it is not permitted to cycle through Lennox Park — this creates a desire line barrier in some cases and could hinder some active journeys. This option facilitates increased active journeys and access to services and attractions, as well as encourages connections to other Core Paths in East Dunbartonshire while increasing the active travel access to the areas natural and historic environment designated network for leisure and recreational purposes. This option is likely to promote the role and use of active travel in enhancing air quality and will contribute towards a shift in cultural behaviour towards active travel alternatives which will present benefits in reducing car based journeys and the resultant carbon emissions.

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.16	++	X	X	X	X	X	++	+	X	
Alternative 1	Proposed Action: Secure cycle stora	age at rail statio	ns and town centres.		l					
	that enhanced far train stations hav lock bikes to enal Dunbartonshire's for longer journey	is option would cilities for cycliste sheltered and ble short trips for settlements for ys. It is anticipat	present significant pots will be put in placed secure cycle storage or social and more sign work or further educed that increasing acts an AQMA), reduci	e as not all town e. This is likely to gnificantly for co Ication. This is als tive travel journe	centres, services encourage peop mmuting purpos so likely to have eys will contribute	s and amenities supple to increase actions in the high a positive influence to improving air	uch as leisure ce tive travel journe proportion of co ce on commuter quality (particul	ntres, doctors a eys by allowing ommuters to Gl s wishing to col ar in Bearsden	and libraries, and people to safely asgow from East nnect with trains and Bishopbriggs	
Proposed Action 1.16 Alternative 2	+ Proposed Action:		X	X	X	X	++	+	X	
	Assessment Come It is likely that the enhanced facilities people to safely I from East Dunbar trains for longer Bishopbriggs which	mentary:  nis option woul  es for cyclists at  ock bikes to en-  rtonshire's settl  journeys. It is  ch are currently	ns only – provision of  d present positive in all rail stations in Ea able short trips for so ements for work or f anticipated that incr designated as an A in nature as cycle sto	npacts to Popula st Dunbartonshir ocial purposes an urther education easing active tra QMA) and redu	e. This is likely to d significantly fo . This is likely to vel journeys will cing emissions, a	n Health, Air Qua o encourage peop or commuting give have a positive in I contribute to im along with the pro	ality and Climation of sustantial control of the high proper of the high proper of the high proving air quantion of sustantial control	ctive travel jour ortion of common muters wishing lity (particular ainable transpo	neys by allowing uters to Glasgow to connect with in Bearsden and rt infrastructure.	

	· ·	to acknowledge an	d cater for other touters which could	•				ure centres, docto	ors and libraries,
roposed Action 1.16	+	X	X	X	X	X	+	+	X
Alternative 2	Proposed Action Secure cycle stor		es only – provision	of sheltered cycle	e parking racks at	all town centres	in EDC.		
	enhanced faciliti active travel jou increasing active AQMA) and red	this option would es for cyclists in Luirneys by allowing travel journeys wucing emissions, a	present positive in enzie, Kirkintilloch, people to safely will contribute to in long with the proposity, which has the	Bishopbriggs, Be secure bikes to mproving air qual motion of sustair	earsden and Milng enable short trip lity (particular in nable transport in	gavie town centi os for social pur Bearsden and B frastructure. Ho	res. This is likely poses and for consistent of the constant of the impact of the impa	to encourage peo ommuting. It is a h are currently d cts are minor in	ople to increase anticipated that esignated as an nature as cycle

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.17 Alternative 1	assessed through	nd Developmen nentary: Transport Policy on the SEA proces ment within thes	within the Local ss. This action rel se documents ens	ates to the delive	ry of active trave	l throughout East	Dunbartonshire	from a planning p	e currently being perspective. The and as such this	

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option		
Proposed Action 1.18 Alternative 1	Proposed Action: Town Centre Stra	oposed Action: own Centre Strategies.										
	•	of Town Centre S	_	ir long-term vision entary Guidance /		•	ublic realm impro	ovements will be a	assessed through			

SEA Environmental Factors	Population & Human Health		Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option	
---------------------------	---------------------------	--	--------------------------------	----------------	-----------	---------------	-------------	------------------	-----------------	----------------------------------------	--

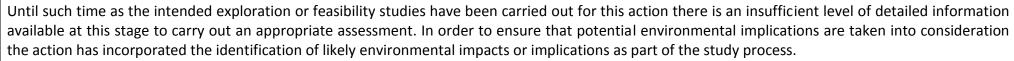
## **Proposed Action 1.19**



## Proposed Action:

20 MPH Zones.

## Assessment Commentary:





EA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.20	+	X	X	X	X	X	+	+	+	·
Alternative 1	Proposed Action: Signage Review:		out Healthy Habi	ts signage to ensu	re consistency o	f provision across t	he area.			
	some locations.  new network are easily recognisals of Healthy habit awareness of the There is likely to production and throughout East	ntified that havi Kirkintilloch and ea wide it repre ble colour schem as throughout Ea e active travel ne b be a minor pos implementation t Dunbartonshir	I Bishopbriggs alresents better optione and information st Dunbartonshire etwork and reap the litive impact in relation of a signage relation and the potential	eady has a cohere on to continue the on so users know in e will provide a str one befits of further ation to Population	ent network of F rollout of the e mmediately they rong base of sup ractive travel pro on and Human F ntly due to the	create visitor confidealthy habits signal existing Healthy habits are using the EDC opport and local known comotion.  Health, Air Quality, increased awaren participation as a	age and rather to bits theme. This active travel ne bwledge about to Climatic Factor dess and promo	than duplicate work will ensure unifor twork. Using the he initiative which as and Material Astion of the active	rk by providing a m provision with existing branding a should increase sets through the e travel network	
	commuting and	leisure journeys	. X	X	X	X	+	+	+	
Proposed Action 1.20 Alternative 2	which ensures countries and a regular aud Assessment Command This option would inconsistencies it and is likely to in However there is and efficient op	review and audiconsistency of produce developmentary: Id represent a lander to delive acrease the number of the salready good partion to continue entified strong p	ovision across all eloped.  rge scale enhance er a fully consistent per of active journ erovision of Health er the branding an rovision in Kirkint	ment to signage part suite of active treeys.  y Habits signage and active travel problems.	strategy should provision. The fulction of the	lit results to inform deliver enhanced Il review would iden nis would improve it eas in East Dunbart th healthy habits are east it seems sensible	ntify defects, en nformation availationshire and it was to continue roles.	sure repair and we lable to people was yould represent a existing provision ll out of healthy h	ould also identify alking and cycling more sustainable of signage. The nabits signage to	

There is likely to be a minor positive impact in relation to Population and Human Health, Air Quality, Climatic Factors and Material Assets through the production and implementation of a signage review predominantly due to the increased awareness and promotion of the active travel network throughout East Dunbartonshire and the potential for increased active travel participation as a realistic alternative to vehicular based travel for commuting and leisure journeys.

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.21	++	+/-	+/-	?/-	X	?/-	++	++	++	
Alternative 1	Proposed Action: Maintenance Rev	view. Ensure a h	igh standard of ma	aintenance of rou	tes is provided th	nrough an on-going	g annual audit ar	nd review process.		
	Assessment Commentary:  Through the Audit varying quality of active travel routes throughout East Dunbartonshire have been identified. A coordinated approach to maintenance and resurfacing was identified to be required. This approach employs a pragmatic approach to ensuring maintenance is effective, proportionate and ensures carriageways and active travel routes are fit for purpose. Physical enhancements are intended to remove physical barriers whilst ensuring that lighting, fencing, surfaces etc. in good state, and vandalism and faults are repaired promptly.  The anticipated effects of this action are likely to be mainly positive in nature, particularly related to the following environmental factors:  Population and Human Health, Material Assets, Air Quality and Climatic factors — In terms of the continual programme of maintenance in relation to the surfacing of routes, lighting and fencing which positively impact on the safety of active travel route users. This maintenance will provide a safe and secure active travel network for residents, commuters and visitors and enable users to connect and access the wider countryside, open spaces, amenities, services and public transport interchanges throughout East Dunbartonshire while contributing to a modal shift away from vehicular based travel and promoting the role and use of active travel alternatives.  There are likely to be both positive and negative potential effects in relation to:  Cultural Heritage and Biodiversity, Flora & Fauna — There are positive effects predicted as a result of this action through increased and improved provision of active travel for access to East Dunbartonshire's natural and historic environmental assets. There is also potential for adverse impacts through active travel infrastructure improvements in the vicinity of sensitive and vulnerable protected or designated sites of importance in terms of direct impacts on the sites or their setting.  Soil & Geology and Water Quality — The impacts of this action on water quality are uncertain a									
	Proposed Mitiga			J	,		. ,			
	maintena their sett	and monitor and monitor and monitor and monitorial	· -			measures in orde oid or minimise ar	<del>-</del>	-		
	- Potential	tree, vegetation	<del>-</del>		considered nece	essary to avoid adv	erse impacts.			
		nt soil erosion pi	evention measure	es outlined in good	d practice guidan	ce				

- Pre-construction surveys and application of good practice.

#### **Water Quality**

- Control and treatment of surface runoff.
- Use of construction SUDS and the adoption of best practices to avoid pollution of watercourses.

#### **Material Assets**

- Reuse of materials where appropriate/sustainable use of resources.
- Waste Management Plan where necessary.

## Proposed Action 1.21 Alternative 2

Reuse of materials where appropriate/sustainable use of resources.

++ ?/--/+ ?/--/+ ?/-- × ?/- ++ ++

#### **Proposed Action:**

Carry out a full review and audit of every route (carriageway, footway, core path and cycleway) in East Dunbartonshire and use audit results to inform development of comprehensive Maintenance Strategy which ensures consistency of provision across all settlements. The strategy should deliver enhanced routes and consistent provision, all defects quickly repaired and a regular audit schedule developed.

++/-

#### **Assessment Commentary:**

This option would represent large scale enhancement to delivery of maintenance. The full review would identify defects, ensure repair and would also identify inconsistencies in order to deliver an active travel network of a consistent outstanding standard. This would improve surfaces for walking and cycling and is likely to increase the number of active travel journeys. The audit identified the inconsistent standard of route surfaces as a major barrier to active travel which is likely to present significant positive impacts to **Population and Human Health**. This maintenance will provide a safe and secure active travel network for residents, commuters and visitors and enable users to connect and access the wider countryside, open spaces, amenities, services and public transport infrastructure throughout East Dunbartonshire while contributing to a modal shift away from vehicular based travel and promoting the role and use of active travel alternatives with significant positive effects for **Air Quality and Climatic Factors**.

The effects to Cultural Heritage, Biodiversity, Flora and Fauna, Soil and Geology and Water Quality are uncertain although there is potential for positive and negative effects including:

- ➤ Cultural Heritage and Biodiversity, Flora and Fauna There are potential positive effects predicted as a result of this action through increased and improved provision of active travel for access to East Dunbartonshire natural and historic environmental assets. However, there is also potential for significant adverse impacts through extensive active travel infrastructure improvements in the vicinity of sensitive and vulnerable protected or designated sites of importance in terms of direct impacts on the sites or their setting.
- > Soil and Geology and Water Quality The impacts of this action on water quality are uncertain at this stage, however, there is potential for adverse impacts particularly in relation to maintenance and resurfacing of the network which could have multiple impacts, including:
  - Erosion or damage to soil, land contamination, soil compaction from heavy machinery as well as from increased footfall along footways/cycleways/core paths.
  - Temporary discharge, run off or drainage issues if necessary works are carried out in close proximity to watercourses.

Although a full review and audit for the maintenance of all routes throughout East Dunbartonshire will help to significantly promote changes to the current transport infrastructure to a more sustainable network suitable for cycling and walking, this action will require resurfacing and possible widening/changes to existing infrastructure which is likely to require vast resources and also generate significant waste, dust and pollution. This is likely to present some minor negative impacts for Material Assets.

#### **Proposed Mitigation:**

#### **Cultural Heritage**

- Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or their setting.

#### **Biodiversity, Flora & Fauna**

- Minimise tree, vegetation or topsoil removal.

- Potential Protected Species Surveys, Licences or mitigation if considered necessary to avoid adverse impacts.
- Control and treatment of surface runoff.

## Soil & Geology

- Implement soil erosion prevention measures outlined in good practice guidance
- Pre-construction surveys and application of good practice.

## **Water Quality**

- Control and treatment of surface runoff.
- Use of construction SUDS and the adoption of best practices to avoid pollution of watercourses.

## **Material Assets**

- Reuse of materials where appropriate/sustainable use of resources.
- Waste Management Plan where necessary.

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 1.22	+	X	Х	X	X	X	+	+	+	
Alternative 1	Proposed Action Crossing Improv									
	identified the new but deemed unservince in terms of cross following environal properties of throughout and throughout and throughout and throughout and the contribute to the core patential Asservince travel contribute travel contr	mploys a pragmated for increased uitable and looksing facilities being facilities being facilities being facilities action le also providing the areas physical climatic Factors network throughowards a modal state – Improvement and provement	crossing provisions to provide adequate reviewed in line of the Through this funities in East Duensures that respond to activity levels and and Material Assemble to more sustains to fift to more sustains to the active to	an at some location at some location uate crossings at rewith the on-goin action there is like inbartonshire with sidents, commute access public tranhealth and wellbe ets — Through the conshire this action inable means of the ravel network and aft towards more	ns. It was furthenew development g maintenance.  The self to be a position the active travent interchange in gof its resident provision of crown could have a pransport to, from the infrastructure to the self to	ropriate, proportion identified that mets. This action is distributed in relation is distributed in relation in the impact in	rectly linked with ction is likely to he con to the increase moving physical lites to a safe, so so, leisure and recents providing furthelation to increase the area.	ations have alreaded action 1.21: Main ave minor positive ed provision and laborriers and province and attractional opportunities are connections as a sing active travel further encourage	dy been assessed intenance Review impacts on the ink between and ding appropriate cive active travel unities while also and access to the participation and the the safe use of	
Proposed Action 1.22	++	X	X	X	X	X	+	+	+	
Alternative 2	ensures consiste defects are quie environmental a	ew of each crosency of provision ckly repaired an and design stand	n across all settle d a regular audit lards are upheld.	ments. The strat schedule develo	egy should deliv ped. This reviev e place for cross	to inform develop er enhanced cros v will be extended sings whenever ar	sing facilities and to all new de	d consistent prov velopments to er	vision, ensure all nsure EDC's high	



In general, this action will present positive impacts to Population and Human Health, Air Quality, Climatic Factors and Material Assets. This option will facilitate improvements to existing crossing facilities and at new developments which will improve connections and remove physical barriers which currently discourage people to walk or cycle. The process may identify new locations for suitable crossings which may further improve facilities for crossing busy carriageways. Individually this action is likely to have minor positive impacts on the following environmental factors:

- Population and Human Health Through this action there is likely to be a positive impact in relation to the increased provision and links between and throughout residential communities in East Dunbartonshire with the active travel network. By removing physical barriers and providing appropriate crossing facilities this action ensures that residents, commuters and visitors have improved access to a safe, secure and attractive active travel network while also providing opportunities to access public transport interchanges, local amenities, leisure and recreational opportunities while also increasing the areas physical activity levels and health and wellbeing of its residents. There is also the potential for significant positive impacts due to the identification of new locations for suitable crossings which has the potential to benefit a greater number of people and will improve the safety for active travel along busy routes. This is one of the direct differences between the two alternative actions, providing additional benefits for Population and Human Health.
- Air Quality, Climatic Factors and Material Assets Through the provision of crossing improvements providing further connections and access to the active travel network throughout East Dunbartonshire this action could have a positive impact in relation to increasing active travel participation and contribute towards a modal shift to more sustainable means of transport to, from and throughout the area.
- Material Assets Improvement of the active travel network and infrastructure through crossing improvements will further encourage the safe use of the core path network and promote modal shift towards more sustainable transport alternatives by linking communities through the active travel network, services and public transport interchanges.

## Alternative Actions for the Active Travel Strategy: Developing Behavioural Change - Schools

EA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferre Alternative Option
Proposed Action 2.1	++	X	X	X	X	X	++	++	+	
Alternative 1	Proposed Action Ensure all Prima		y Schools provide	School Travel Plan	s or Active Trave	el Co-ordinator.				
	or dedicated co- pupils or provide so that families	s a more pragm -ordinator. This ed along with as can incorporate oportunity to de	action could be i sistance by a co-o some element c velop positive hea	mplemented thro rdinator post. The of active travel int	ugh the provision of their school justing the school justing their schoo	n and circulation of active travel alternourney regardless	of travel plan da natives includes of how far the	ensure all schools hata directly to schoon combinations with y live from the school which may be eng	pols, parents and public transport nool. This option	
	Population a travel plans travel network parking wou infrastructur carbon emis	and Human Hea and / or an Acti ork (and improve Id represent an e (including link	Ith, Air Quality, Cove Travel Co-ordined network through improvement on ages with the public of the	limatic factors an nator to encourage this Strategy). the current state lic transport netw	d Material Assemble pupils and particle This along with a facilitate more work and intercharge.	ts – Positive impace rents to access sch some funding to de active journeys a anges) and particu	cts are anticipat nool services an ensure physical and promote m larly during pea	genvironmental factoried through the product of the product of the facilities like shelt ore sustainable fook times reducing caphasis on the exi	ovision of school ne existing active ered secure bike rms of transport ongestion levels,	
Proposed Action 2.1 Alternative 2	+ + Proposed Action		X do a School Travel	X Plan or Active Tra	X val Co ordinator	X	+	+	+	
	Assessment Con This action is int regarding their multiple sustain	nmentary: ended to ensure potential travel able transport a ls and parents	e that all children a options to access Iternatives. Focus	at primary school s the school estat ssing solely on pri	in East Dunbarto e. This could b mary school pup	onshire and their pose in combination oils and locations o	with the public could limit the p	e of and provided transport networ potential of this AT ravel support as o	k to incorporate S by limiting the	
	Population and plans and / or a existing active t transport interch times reducing the existing AQM	Human Health, an Active Travel ravel network (nanges could factongestion levels MA's in Bearsde	Air Quality, Clima Co-ordinator for and improved ne cilitate more active s, carbon emission and Bishopbrigg	tic factors and Ma all primary school twork through thi e journeys and pro as and potentially	Iterial Assets — Following the stone of the strategy). The strategy is Strategy in the sustance of the Action of t	Positive impacts are pupils and parent its promotion of the parent is promotion of the promotion of the promotion in the vicinity in the vicinity	e anticipated the s to access scho he active travel ransport infrastr y of school facili	g environmental factoring the provision on services and factorial	n of school travel cilities using the ages with public larly during peak ular emphasis on	
	++	X	X	X	X	X	+	+	+	

# Proposed Action 2.1 Alternative 3

#### Proposed Action:

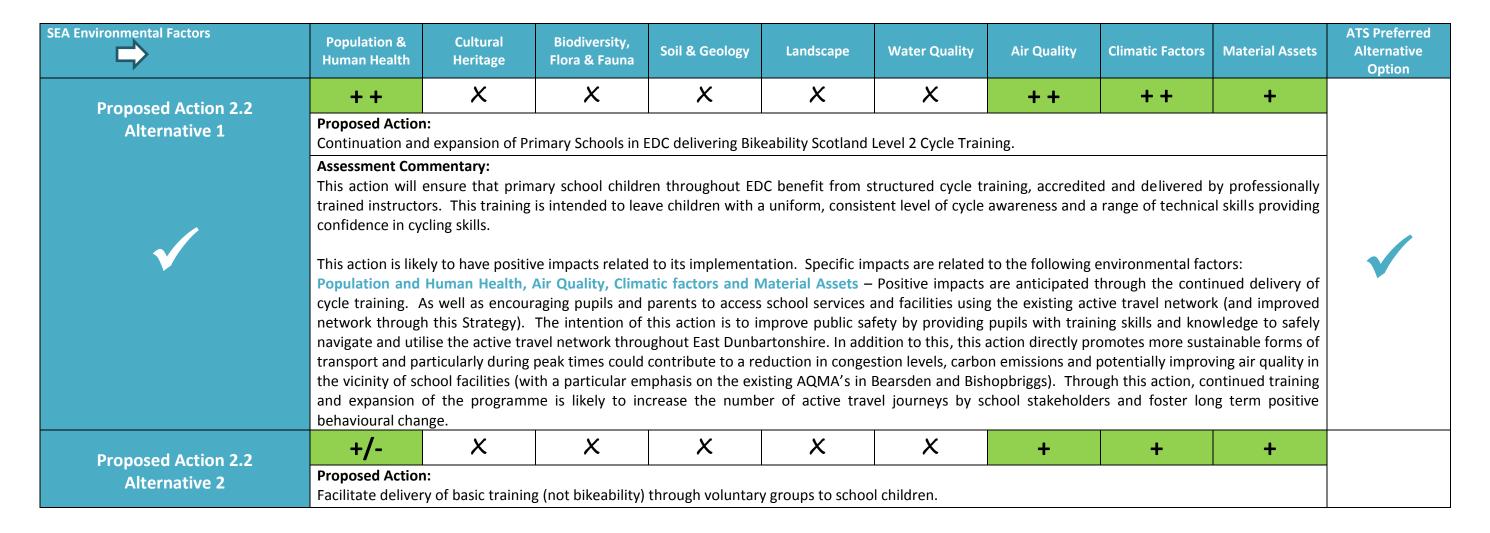
Ensure all secondary schools provide a School Travel Plan or Active Travel Co-ordinator.

#### **Assessment Commentary:**

This action is intended to ensure that all children at secondary school in East Dunbartonshire and their parents are aware of and provided with information regarding their potential travel options to access the school estate. This could be in combination with the public transport network to incorporate multiple sustainable transport alternatives. Focusing solely on secondary school pupils and locations could limit the potential of this ATS as active travel / healthy habits will not be in place at an earlier age. With an uncoordinated advice throughout school life, pupils and parents may develop less active travel habits and fail to capitalise active travel options ad a realistic alternative to car based journeys.

This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors:

Population and Human Health, Air Quality, Climatic factors and Material Assets – Positive impacts are anticipated through the provision of school travel plans and / or an Active Travel Co-ordinator for all secondary schools to encourage pupils and parents to access school services and facilities using the existing active travel network (and improved network through this Strategy). This promotion of the active travel network and linkages with public transport interchanges could facilitate more active journeys and promote more sustainable forms of transport infrastructure and particularly during peak times reducing congestion levels, carbon emissions and potentially improving air quality in the vicinity of school facilities (with a particular emphasis on the existing AQMA's in Bearsden and Bishopbriggs). By limiting the scope of the Action the relevant impacts are also likely to be affected, reducing the long-term potential positive impacts on air quality and climatic factors.

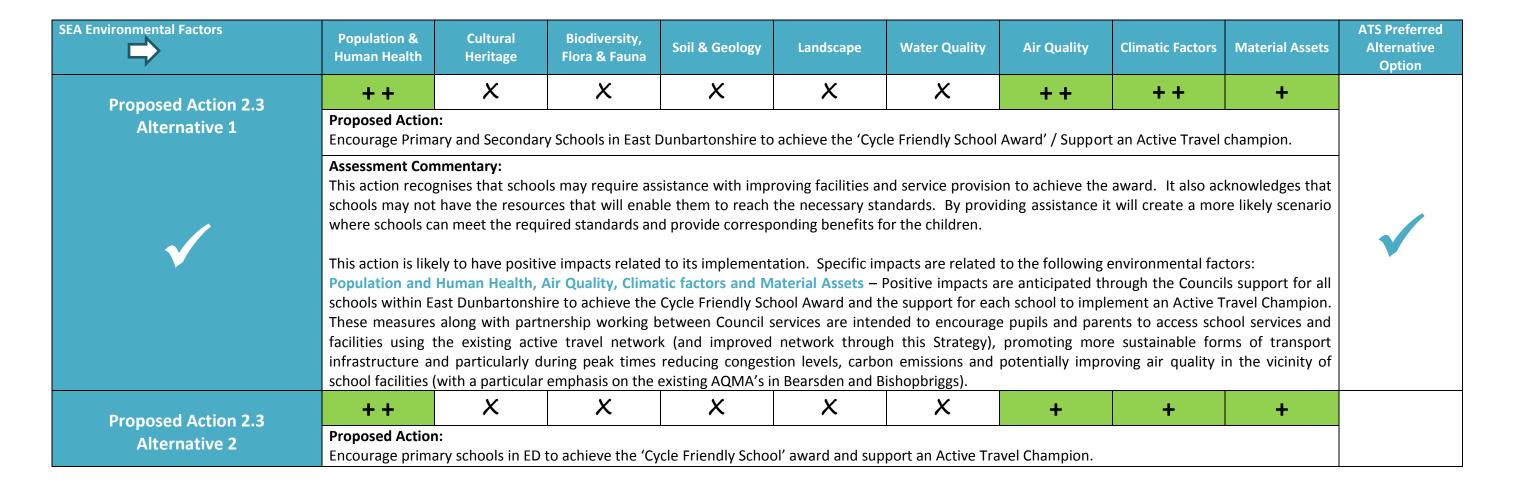


This action will ensure that some cycling training is provided to children through enthusiastic members of the local community. This is intended to increase confidence in use of the active travel network to access the school estate, develop basic technical skills to increase the likelihood of physical activity and active travel participation levels increasing. Through this action training is unlikely of a uniform standard and delivered by professionals.

This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors:

Population and Human Health, Air Quality, Climatic factors and Material Assets – Positive impacts are anticipated through the continued delivery of cycle training. As well as encouraging pupils and parents to access school services and facilities using the existing active travel network (and improved network through this Strategy). This action directly promotes more sustainable forms of transport and particularly during peak times could contribute to a reduction in congestion levels, carbon emissions and potentially improving air quality in the vicinity of school facilities (with a particular emphasis on the existing AQMA's in Bearsden and Bishopbriggs). Through this action, continued training and expansion of the programme is likely to increase the number of active travel journeys by school stakeholders and foster long term positive behavioural change.

Through this action there is a possibility that the lack of coordinated training and professional guidance may lead to poor cycling skills development and potentially increasing the risk of accidents. Relying on volunteers to run and deliver the training may result in some schools not being able to be facilitated leading to a risk that some schools and pupils not receiving the relevant training and falling behind in terms of skills and safety levels relevant to active travel.



This action recognises that primary schools may require assistance with improving facilities and service provision to achieve the award in the form of secure cycle parking etc. This assistance will also be through the appointment and support of an Active Travel Champion. Without such assistance the likelihood is that primary schools may not have the time or resources to develop the facilities and skills required to achieve the expected standards.

This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors:

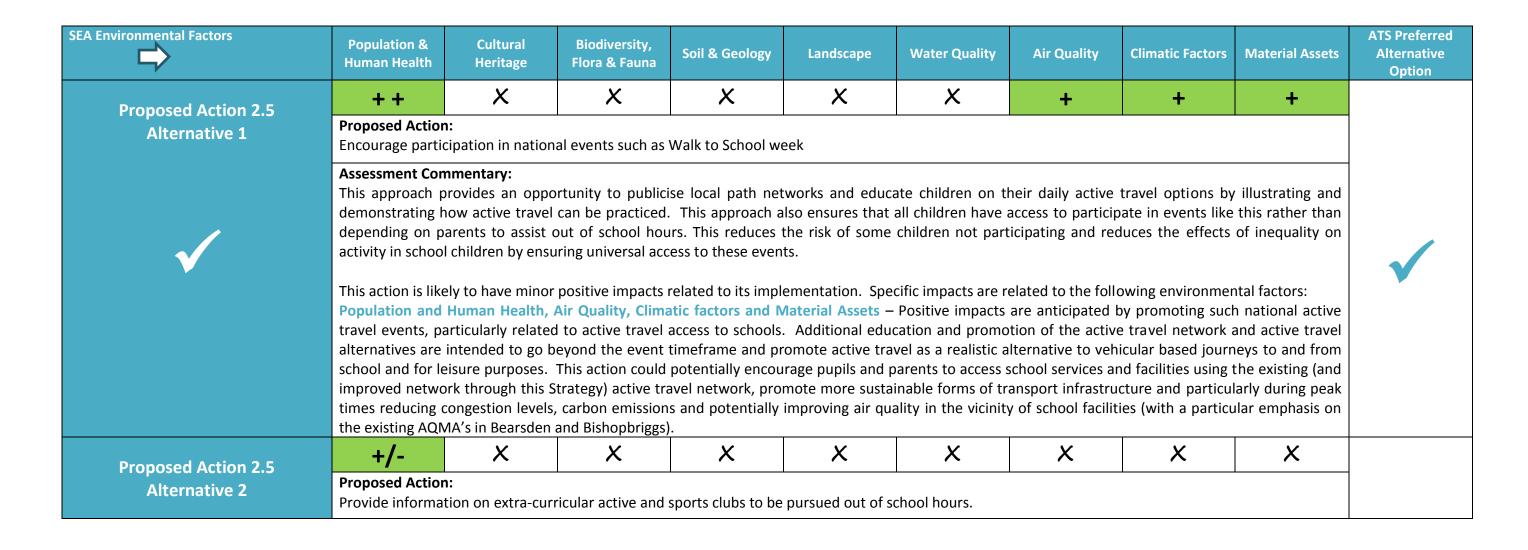
Population and Human Health, Air Quality, Climatic factors and Material Assets — Positive impacts are anticipated through the Councils support for primary schools within East Dunbartonshire to achieve the Cycle Friendly School Award and the support for school to implement an Active Travel Champion. These measures along with partnership working between Council services are intended to encourage pupils and parents to access school services and facilities using the existing active travel network (and improved network through this Strategy), promoting more sustainable forms of transport infrastructure and particularly during peak times reducing congestion levels, carbon emissions and potentially improving air quality in the vicinity of school facilities (with a particular emphasis on the existing AQMA's in Bearsden and Bishopbriggs). The scope of the action will limit the potential positive impacts by overlooking the need to expand the same facilitation into secondary schools which could lead to an increased risk that momentum and the loss of healthy habits gained at an early stage within primary school.

Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 2.4	++	X	X	X	X	X	++	++	+	
Alternative 1	Proposed Action: Educate the School		n Active Travel by ir	ncorporating into t	he School Curricı	ulum.				
	Step Guide' into the behaviour change This action is likely Population and Hoschool curriculum parents to access sustainable forms quality in the vicinity behaviour to the state of the st	buld increase print the school curricular into daily school by to have positive duman Health, Ain. Additional edus s school services of transport infrainity of all school	mary and secondary ulum. This will encount of life continued throw impacts related to the life continued throw impacts related to the life continued throw it is and facilities using frastructure and particular of facilities (with a ravel through education.	ourage developme ough to secondary o its implementation factors and Materials the existing active the ticularly during perparticular emphas	ent of healthy hab school. on. Specific impa rial Assets – Posi travel network ar ive travel networ ak times reducing sis on the existing	bitats at an early so acts are related to itive impacts are a nd active travel all ork (and improved og congestion levels og AQMA's in Bear	the following en inticipated by inc ternatives are in network throug s, carbon emissic	has the potent nvironmental factor corporating activatended to encount this Strategy ons and potentic pbriggs). In ad	ctors: ive travel into the ourage pupils and v), promote more ially improving air ddition to this, by	
Proposed Action 2.4	++	X	X	X	X	X	+	+	+	
Alternative 2	Proposed Action: Educate primary s To help promote s Assessment Com	school communi the health benef	ity on active travel fits of cycling.	by incorporating i	nto the school cu	urriculum using th	e 'Six Week, Ste	p by Step Guid	e' from Sustrans.	
	This approach wo	ould increase pri school curriculur	imary school childro m. This will encou							

This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors:

Population and Human Health, Air Quality, Climatic factors and Material Assets — Positive impacts are anticipated by incorporating active travel into the primary school curriculum. Additional education and promotion of the active travel network and active travel alternatives are intended to encourage pupils and parents to access school services and facilities using the existing active travel network (and improved network through this Strategy), promote more sustainable forms of transport infrastructure and particularly during peak times reducing congestion levels, carbon emissions and potentially improving air quality in the vicinity of primary school facilities (with a particular emphasis on the existing AQMA's in Bearsden and Bishopbriggs). In addition to this, by raising the awareness of active travel through education it is hoped that active travel participation levels outwith school commutes will be utilised for leisure and recreational purposes.

However, there is a risk that not progressing such further education and promotion of active travel, through the curriculum, into secondary school level that behavioural change may be restricted and healthy habits for pupils may be lost by secondary school age limiting the positive impacts of this action.



This approach will provide children with information on opportunities to get active out of school by joining sports and active clubs. This is likely to be beneficial to children not already participating in sport or physical activities out of school but fails to identify obvious opportunities to integrate active events such as 'Walk to School Week' into the school year and curriculum.

This action is likely to have minor positive and negative impacts related to its implementation. Specific impacts are related to Population and Human Health — Positive impacts are anticipated by promoting extra-curricular clubs enhancing young children's participation levels in active and sports clubs throughout East Dunbartonshire. It is likely that some families will not facilitate their children to participate in activity out of school and thus some children may be adversely affected which could have continued adverse effects on inequality. There would also be no scope for using the event as an opportunity to publicise the local path networks and educate children on their daily active travel options by demonstrating how active travel can be practised.

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 2.6 Alternative 1	available at this	ess to all new buinmentary:  as the intended estage to carry ou	xploration or feas t an appropriate	assessment. In or	der to ensure th	ut for this action t at potential enviro ications as part of	nmental implica	tions are taken in		

	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
P A U a	Assessment Com Until such time a available at this s	ed personnel to mentary: s the intended estage to carry ou	xploration or feas	sibility studies hav	ve been carried o		there is an insuffi	icient level of deta		

## Alternative Actions for the Active Travel Strategy: Developing Behavioural Change - Workplaces

EA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 2.8	?/++	X	X	X	X	X	?/++	?/++	?/++	
Alternative 1	Travel Co-ordinate  Assessment Come This approach poinforms employee  This action is like employers to unce Population and workplace travel active travel net increase the nur employers are performs of transpothe vicinity of workplace travel place.	mployers in Easter / Champion. Imentary: Dints employer Its of the benefication If to have positive the such me Human Health plans and / or work (and imposer of active rivate organisation or the places in toward provides a second control or the places in toward control or the places in the provides a second control or the places in the provides a second control or the places in the provides and provides a second control or the places in the	in the direction of ts of active travel five impacts related assures and accept the appointment of travel journeys a tions and cannot and particularly on centre locations ound base on whete	the information for their workforce d to its implement assistance. Specimatic factors and of an Active Trave rough this Strates and induce long to be forced into adduring peak times (with a particula ich private emplo	that allows then and why it may tation. These imific potential implemental Asself Co-ordinator to gy) and promotion positive belopting measure a reducing conger emphasis on the yers throughout	ist with developing to produce a transports are uncertain pacts are related to the process are related to the process are related to the process that facilitate income existing AQMA's teast Dunbartons of drive the process	vel plan and prohem.  In at this stage use the following elects are anticiped access/commulic transport into This pragmatic creased active the emissions and in Bearsden and ire can use as	ntil agreements are nvironmental factorated through the ated to workplaces uperchanges. This are approach identificavel, promoting repotentially improved Bishopbriggs). Up a guide to develop	g facilities. It also e confirmed with ors: development of using the existing action is likely to lies the fact that more sustainable ving air quality in Using the existing p their own plan	
Proposed Action 2.8	++	X	X	X	X	X	++	++	++	
Alternative 2	Proposed Action Provide dedicate ordinator / Cham	d officer to pro	vide training and	to assist major er	nployers with de	eveloping a Workp	lace Travel Plan	or appointing an $\iota$	Active Travel Co-	



This approach would provide employers with skills and information in order to allow each employer to deliver a bespoke travel plan and active travel champion to deliver actions specific to the respective employer. This action would if implemented, increase the number of active commuting journeys and facilitate a behavioural change.

This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors:

Population and Human Health, Air Quality, Climatic factors and Material Assets — Positive impacts are anticipated through the development of workplace travel plans and / or the appointment of an Active Travel Co-ordinator to encourage staff to access/commute to workplaces using the existing active travel network (and improved network through this Strategy) and promoting links with public transport interchanges. This action is likely to increase the number of active travel journeys and induce long term positive behavioural change. This approach identifies the fact that employers are private organisations and cannot be forced into adopting measures that facilitate increased active travel. However the appointment of a dedicated officer and the addition of training provision and assistance in producing workplace travel plans will ensure that the active travel agenda is driven and additional support and assistance will be available for East Dunbartonshire's employers promoting more sustainable forms of transport infrastructure and particularly during peak times reducing congestion levels, carbon emissions and potentially improving air quality in the vicinity of workplaces in town centre locations (with a particular emphasis on the existing AQMA's in Bearsden and Bishopbriggs). Using the existing Council travel plan provides a sound base on which private employers throughout East Dunbartonshire can use as a guide to develop their own bespoke plan without allocating considerable resources which is likely to encourage employers to implement the process themselves in order to reap the benefits of active travel.

EA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option	
Proposed Action 2.0	?/++	X	X	X	X	X	?/++	?/++	?/++		
Proposed Action 2.9 Alternative 1	Proposed Action: Promote Cycle Friendly Employer Status for EDC employers										
	Assessment Commentary:  This action seeks to actively promote achievement of the Cycle Friendly Employer status but does not bind employers into any formal agreement. It is likely that some employers will engage with this process in order to gain accreditation as a cycle friendly employer as it has obvious benefits for staff and publicity.  This action is likely to have positive impacts related to its implementation. These impacts are uncertain at this stage until agreements are confirmed with employers to undertake such measures and accept assistance. Specific potential impacts are related to the following environmental factors:										
	Population and Human Health, Air Quality, Climatic factors and Material Assets – Positive impacts are anticipated through the increased promotion of cycling within EDC private organisations as an alternative to encourage employees to access/commute to workplaces throughout the district using the existing active travel network (and improved network through this Strategy) and promoting links with public transport interchanges. If employers engage with the process to gain accreditation there is potential for an increase in active travel journeys promoting more sustainable forms of transport infrastructure and particularly during peak times reducing congestion levels, carbon emissions and potentially improving air quality in the vicinity of										
	workplaces in town centre locations (with a particular emphasis on the existing AQMA's in Bearsden and Bishopbriggs). This action, if implemented, throughout EDC organisations could also has the potential to contribute to long terms behavioural change without organisations having to dedicate significant resources to the process.										
Proposed Action 2.9	++	X	X	X	X	X	++	++	++		
Alternative 2	Proposed Action: Provide dedicated officer to promote and develop Cycle friendly Employer designation and scheme.										



This approach will ensure that employers have focussed support enabling them to achieve Cycle Friendly Employer status and that the status is well developed and has criteria which can be monitored. A dedicated officer would be able to assist employers to implement the changes necessary to achieve the status.

This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors:

Population and Human Health, Air Quality, Climatic factors and Material Assets – Positive impacts are anticipated through the provision of a dedicated officer to focus on promoting and developing cycle friendly schemes, awards and accreditation into EDC organisations to encourage staff to access/commute to workplaces using the existing active travel network (and improved network through this Strategy) and promoting links with public transport interchanges. This action is likely to increase the number of active travel journeys and induce long term positive behavioural change. This approach identifies the fact that employers are private organisations and cannot be forced into adopting measures that facilitate increased active travel. However the appointment of a dedicated officer and the addition of training provision and support will ensure that the active travel agenda is driven and additional support and assistance will be available for East Dunbartonshire's employers promoting more sustainable forms of transport infrastructure and particularly during peak times reducing congestion levels, carbon emissions and potentially improving air quality in the vicinity of workplaces in town centre locations (with a particular emphasis on the existing AQMA's in Bearsden and Bishopbriggs). The inclusion of the action would encourage employers to implement the required measures to gain accreditation in the knowledge that the Council will support and help develop the procedures necessary without allocating considerable resources.

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option	
Proposed Action 2.10 Alternative 1	?/++	X	X	X	X	X	?/++	?/++	?/ <b>+</b>		
	Proposed Action: Assist employers to support/designate an Active Travel Ambassador or a Workplace Cycling Instructor										
	Assessment Commentary: This approach points employers in the direction of on how to deliver workplace cycle training and designates an Active Travel Ambassador/Champion or a Workplace cycle instructor who would be able to then deliver training to colleagues which should have a beneficial effect on the number of active travel journeys. Providing this assistance is likely to induce long term positive behavioural change. This approach identifies that a pragmatic approach is required due to the fact that most employers are private organisations and cannot be forced into adopting measures that facilitate increased active travel but assistance and guidance may be provided to those employers that are willing to engage and induce behavioural change within their organisation.  This action is likely to have positive impacts related to its implementation. These impacts are uncertain at this stage until agreements are confirmed with employers to undertake such measures and accept assistance. Specific potential impacts are related to the following environmental factors:  Population and Human Health, Air Quality, Climatic factors and Material Assets – Positive impacts are anticipated through the increased promotion of cycling and active travel within EDC private organisations as an alternative to encourage employees to access/commute to workplaces throughout the district using the existing active travel network (and improved network through this Strategy) and promoting links with public transport interchanges. If employers engage with the process to gain accreditation there is potential for an increase in active travel journeys promoting more sustainable forms of transport infrastructure and particularly during peak times reducing congestion levels, carbon emissions and potentially improving air quality in the										
	implemented, throughout EDC organisations could also have the potential to contribute to long terms behavioural change without organisations having to dedicate significant resources to the process.										
	++	X	X	X	X	X	++	++	+		

## Proposed Action 2.10 Alternative 2

#### **Proposed Action:**

Provide dedicated officer to work as Active Travel ambassador or a workplace Cycling Instructor.

#### **Assessment Commentary:**

This approach would provide employers with a dedicated member of staff who would be able to visit worksplaces deliver cycle skills instruction and information. This action would likely if implemented, increase the number of active commuting journeys through delivery of training and could increase confidence and facilitate a behavioural change.

This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors:

Population and Human Health, Air Quality, Climatic factors and Material Assets – Positive impacts are anticipated through the provision of a dedicated officer to focus on promoting, developing and providing professional Cycle training into EDC organisations to encourage staff to access/commute to workplaces using the existing active travel network (and improved network through this Strategy) and promoting links with public transport interchanges. This action is likely to increase the number of active travel journeys and induce long term positive behavioural change. This approach identifies the fact that employers are private organisations and cannot be forced into adopting measures that facilitate increased active travel. However the appointment of a dedicated officer and the addition of training provision and support will ensure that the active travel agenda is driven forward and additional support and assistance will be available for East Dunbartonshire's employers promoting more sustainable forms of transport infrastructure and particularly during peak times reducing congestion levels, carbon emissions and potentially improving air quality in the vicinity of workplaces in town centre locations (with a particular emphasis on the existing AQMA's in Bearsden and Bishopbriggs).

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option			
Droposed Action 2 11	?/++	X	X	X	X	X	?/++	?/++	?/+				
Proposed Action 2.11 Alternative 1	Proposed Action: Promote adult and commuter cycle training to businesses												
	employers delive likely to induce lo effects are uncer.  This action is like and use the infenvironmental fare population and locycling and active district using the employers imple infrastructure and workplaces in to	ints employers ring training to ong term positivation at this staged by to have positivation proving tarent the alth, existing active ment the sugged particularly own centre local organisations of the suggestion of the suggestio	employees which we behavioural chare.  tive impacts related ided to install be a compact.  Air Quality, Climate EDC private organe travel network (and ested training their during peak times tions (with a part could also have the could be also have the could be a could be also have the could be also have the could be also have the could be a could be a could be also have the could be a co	should have a berange if take up was ed to its impleme chaviour change entic factors and Maisations as an alternal improved network is potential for a reducing congesticular emphasis of	neficial effect on shigh. However that ion. These in into their organisaterial Assets — ernative to encorork through this an increase in a tion levels, carbon the existing A	the number of act the number of act this approach pla mpacts are uncert hisations. Specific Positive impacts a burage employees Strategy) and pro- ctive travel journe on emissions and QMA's in Bearsde terms behavioura	tive travel journed ces the initiative ain at this stage or potential import anticipated the access/commoting links with ys promoting motentially import and Bishopbrices.	eys. Providing this with employers a until employers that acts are related through the increase the public transport ore sustainable for roving air quality aggs). This action,	assistance is also nd therefore the ake the initiative to the following sed promotion of a throughout the interchanges. If the interchanges in the vicinity of if implemented,				
	++	X	X	X	X	X	++	++	++				

# Proposed Action 2.11 Alternative 2



#### **Proposed Action:**

Provide adult cycle training to businesses directly.

#### **Assessment Commentary:**

This approach would directly deliver cycle training to businesses and would increase skills and confidence of employees. This is likely to increase the number of active journeys to work by bicycle and foster long term behavioural change within organisations throughout EDC.

This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors:

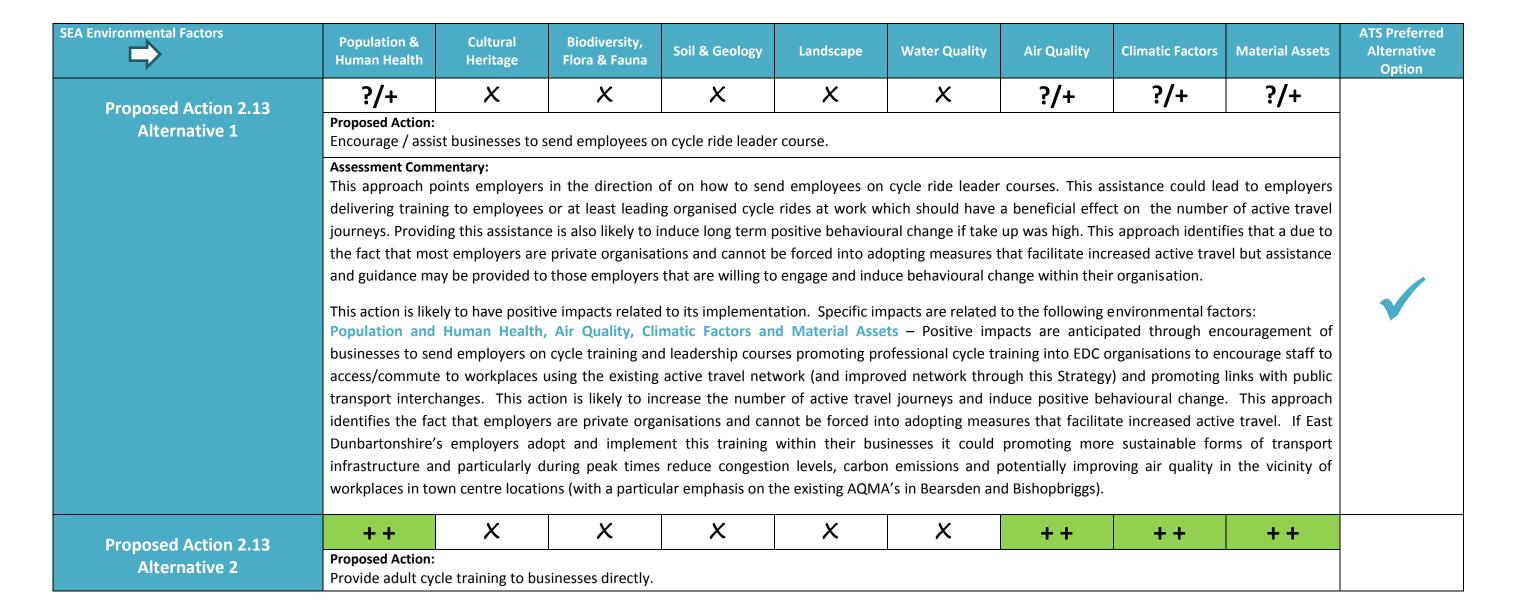
Population and Human Health, Air Quality, Climatic factors and Material Assets — Positive impacts are anticipated through the direct delivery of cycle training to EDC organisations with a focus on promoting, developing and providing professional Cycle training into EDC organisations to encourage staff to access/commute to workplaces using the existing active travel network (and improved network through this Strategy) and promoting links with public transport interchanges. This action is likely to increase the number of active travel journeys and induce long term positive behavioural change. This approach identifies the fact that employers are private organisations and cannot be forced into adopting measures that facilitate increased active travel. However the direct delivery of a specific training provision and support will ensure that the active travel agenda is driven forward and additional support and assistance will be available for East Dunbartonshire's employers promoting more sustainable forms of transport infrastructure and particularly during peak times reducing congestion levels, carbon emissions and potentially improving air quality in the vicinity of workplaces in town centre locations (with a particular emphasis on the existing AQMA's in Bearsden and Bishopbriggs).

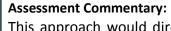
SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 2 12	++	X	X	X	X	X	+	+	+	
Proposed Action 2.12 Alternative 1	Proposed Action: Promote dedicate Assessment Come This approach per how active trave parents to assist children by ensure the children by ensure the challenges more sustainable long term behalinfrastructure it	red workplace active travel for work travel for work travel could lead to reduced to reduced to the reduced to	tive challenges to tunity to publicise ed. This approach ours. This reduces cess to these ever we impacts related Air Quality, Climbel network and population, leisure or recreathrough promotion eductions particular eductions particular through promotions particular eductions educations edu	local employers.  e local active travers also ensures that is the risk of some onts.  d to its implement atic Factors and provide education tion purposes. The on of the active larly during peak	el networks and it all children has children not paration. Specific in Material Assets on active travel his action is likely travel network. times in terms	educate people or ve access to particular tricipating and recompacts are related — Positive impacts alternatives as recompacts the number of congestion leves the aparticular emitted to increase the number of congestion leves the aparticular emitted to increase the number of congestion leves the aparticular emitted to the congestion leves the aparticular emitted to the congestion leves the aparticular emitted to the congestion leves the congestion	their daily activity ipate in events luces the effects to the following are anticipated alistic choices thumber of active to motion of motion of motion of motion of motion and resultant	ve travel options be like this rather that s of inequality on environmental fact through the pro iroughout East Du travel journeys and re sustainable for carbon emissions	oy demonstrating an depending on activity in school ctors: motion of active inbartonshire for d induce positive cms of transport is and potentially	
Proposed Action 2.12	+	X	X	X	X	X	+	+	+	
Alternative 2	Proposed Action: Provide information		note local active tr	ravel and sports cl	ubs events to lo	cal employers.				

#### **Assessment Commentary:**

This approach will provide employers and employees with information on opportunities to get active out of work by joining sports and active clubs. This is likely to be beneficial to people not already participating in sport or physical activities out of work but fails to identify obvious opportunities to integrate active events such as 'Cycling Scotland Annual Cycling Challenge' into the work environment. It is likely that some people will not participate in activity out of work and thus could have continued adverse effects on inequality. There would also be no scope for using the event as an opportunity to publicise the local path networks and educate people on their daily active travel options by demonstrating how active travel can be practised.

This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors: **Population and Human Health, Air Quality, Climatic Factors and Material Assets** – Positive impacts are anticipated through the promotion of sports clubs and facilities within workplaces for employers and employees. This action is likely to increase the level of active travel participation, active travel journeys and induce positive behavioural change. Through the promotion of more sustainable choices and transport options through this option it could lead to reductions particularly during peak times in terms of congestion levels and resultant carbon emissions and potentially improving air quality in the vicinity of workplaces in town centre locations (with a particular emphasis on the existing AQMA's in Bearsden and Bishopbriggs).





This approach would directly deliver cycle training to businesses and would increase skills and confidence of employees. This is likely to increase the number of active journeys to work by bicycle and foster long term behavioural change.

This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors:

Population and Human Health, Air Quality, Climatic factors and Material Assets — Positive impacts are anticipated through the direct delivery of cycle training to EDC organisations with a focus on promoting, developing and providing professional Cycle training into EDC organisations to encourage staff to access/commute to workplaces using the existing active travel network (and improved network through this Strategy) and promoting links with public transport interchanges. This action is likely to increase the number of active travel journeys and induce long term positive behavioural change. This approach identifies the fact that employers are private organisations and cannot be forced into adopting measures that facilitate increased active travel. However the direct delivery of a specific training provision and support will ensure that the active travel agenda is driven forward and additional support and assistance will be available for East Dunbartonshire's employers promoting more sustainable forms of transport infrastructure and particularly during peak times reducing congestion levels, carbon emissions and potentially improving air quality in the vicinity of workplaces in town centre locations (with a particular emphasis on the existing AQMA's in Bearsden and Bishopbriggs).

## Alternative Actions for the Active Travel Strategy: Developing Behavioural Change – Marketing, Promotions and Awareness

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option
Proposed Action 2.14	Action 2.14 + X X X X X + + +									
Alternative 1	Proposed Action: Create and promote dedicated Active Travel section on EDC website									
	people would id to assist individu and facilities wh change. As there necessity for add	entify with East uals, employers a nich would likely e is already a we dition publicity t	Dunbartonshire Co and schools with o increase active t ell maintained and o advertise a new	ouncil. It would be relevant informati ravel participation d well used/public website, it is likel	e possible to list on on active trans on on active trans on in East Dunbar ised EDC websit by that a section	ve travel and could links to other helpfore. The website set on the website set on the existing site significant user numbers.	ul websites and ection could produced have a positively incorporate as would serve the	organisations which organisations of the contract of the contr	ch would be able on events, routes term behavioural ction without the ncluding ensuring	
	Quality, Climatic directly related t Increased pa The potentia reduce conge	c Factors and Mato: orticipation levels of contribution to estion levels and on of change to	s of the active travewards modal shift	rel network with re away from car ba eduction in carbon	esultant physical sed travel, with emissions levels	following environm areness raising of tactivity, health and the potential to ims.	he active traveld community we prove air quality	network the likely ellbeing benefits. y levels within East	y impacts will be Dunbartonshire,	
	שוו מוומ טונים א	, o								

# Proposed Action 2.14 Alternative 2

#### **Proposed Action:**

Create and promote a dedicated Active Travel website for EDC.

### **Assessment Commentary:**

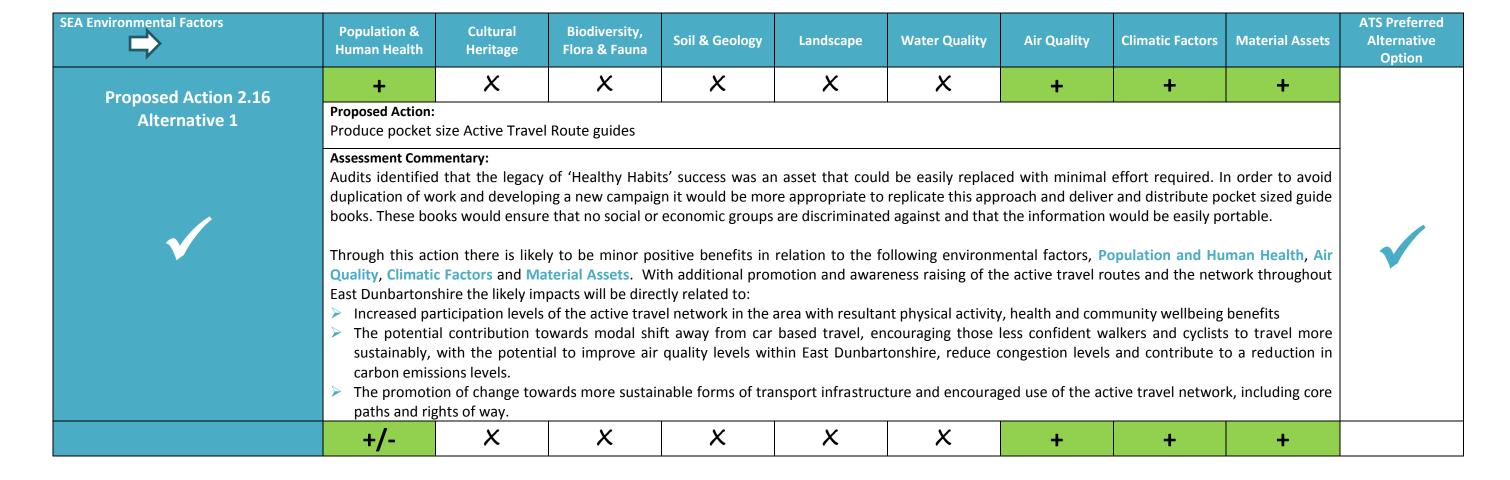
This approach is likely to act as a catch all 'one stop shop' for all things related to active travel and could be identified with an active travel brand or slogan which people would identify East Dunbartonshire with. A single point of reference for active travel information would provide a single source of information for those interested in learning more about active travel in East Dunbartonshire. It would be possible to list links to other helpful websites and organisations which would be able to assist individuals, employers and schools with relevant information on active travel. The website could provide information on events, routes and facilities which would likely increase active travel participation East Dunbartonshire and could have a positive effect on behavioural change.

Through this action there is likely to be minor positive benefits in relation to the following environmental factors, Population and Human Health, Air Quality, Climatic Factors and Material Assets. With additional promotion and awareness raising of the active travel network the likely impacts will be directly related to:

- Increased participation levels of the active travel network with resultant physical activity, health and community wellbeing benefits.
- The potential contribution towards modal shift away from car based travel, with the potential to improve air quality levels within East Dunbartonshire, reduce congestion levels and contribute to a reduction in carbon emissions levels.
- > The promotion of change towards more sustainable forms of transport infrastructure and encouraged use of the active travel network, including core paths and rights of way.

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferred Alternative Option		
Proposed Action 2.15	++	++ X X X X ++ ++ ++										
Alternative 1	Proposed Action: Continue 'Healthy Habits' programme across East Dunbartonshire.											
	Assessment Commentary: Continuing the recent Healthy habits campaign could provide an opportunity to capitalise on recent trends, developments and events such as the Commonwealth Games in order to foster active lifestyles with a contemporary theme. The campaign had some success previously and if continued could inspire some individuals to take up active travel and lead a more active lifestyle. A successful campaign that engages with various social and economic groups could have a positive effect on behaviour and lead to an increase in active journeys. There are already existing branding, logos and a base on which to build it therefore seems good practice to develop the existing brand of Healthy Habits incorporating recent trends and events in order to identify active lifestyles with good health.  Healthy Habits is a well-established, successful brand and programme. By developing and rolling out the programme across East Dunbartonshire there is											
	likely to be significant positive impacts in relation to the following environmental factors:  Population and Human Health – Increased participation in physical activity levels resulting from increased use of the active travel network through the promotion and encouragement to use active travel alternatives to access local amenities and services. Additional health and community wellbeing benefits are also anticipated through this rolling out of the Healthy Habits campaign as active travel is only one part of the brand which also includes healthy eating and exercise elements.  Air Quality and Climatic Factors - The potential contribution towards modal shift away from car based travel, with the potential to improve air quality levels within East Dunbartonshire, reduce congestion levels and contribute to a reduction in carbon emissions levels through the promotion and encouragement of the use realistic active travel alternatives.  Material Assets - The promotion of change towards more sustainable forms of transport infrastructure and encouraged use of the active travel											

	network, inc	luding core paths	and rights of way	to access local a	menities and ser	vices.							
Proposed Action 2.15	++	X	X	X	X	X	++	++	++				
Alternative 2	Proposed Action: Create a campaign for active travel with a new brand name aimed at increasing active travel in East Dunbartonshire.												
	contemporary the engages with value acknowledged the By developing a following enviro  Population at the promotion facilities/opp  Air Quality alevels within encouragem  Material Ass	n could provide and neme. A new came arious social and that the recent He and rolling out a numental factors: and Human Healt on and encourage portunities.  In East Dunbarton ent of the use reast provided in the course of the use reast provided in the course of the use reast provided in the course of the course of the use reast provided in the course of the course	paign could inspireconomic groups althy habits camp new active travels the Increased pagement to use a shire, reduce coralistic active travels tion of change to	re some individuals could have a popular was relatived brand across Earticipation in physicitive travel alternation towns active travels are alternatives.	als to take up actorsitive effect on all successful and ast Dunbartonshi visical activity lever rnatives to accessful and contribute to stainable forms	tive travel and lead behaviour and lead lead lead lead lead lead lead lea	ealth Games in ordered a more active life and to an increase may represent unit to be significant particles, services, employees, services, with the carbon emissions leastructure and encodered astructure and encode as the carbon emissions leastructure and encode active life active lif	estyle. A succession active journed necessary duplicated ossitive impacts in the active traveloyment, leisure the potential to indevels through the succession of the potential to indevels through the potential to indevel the potential the potential to indevel the potential the potential the potential to indevel the potential the p	ful campaign that eys. However it is ation.  in relation to the network through and recreational approve air quality e promotion and				



## Proposed Action 2.16 Alternative 2

#### **Proposed Action:**

Produce interactive mapping web tool as an Active Travel route guide for all towns.

#### **Assessment Commentary:**

This approach would provide a cost effective method of providing active travel information over the web. Information on active travel routes and events could be provided quickly and cheaply and changes implemented almost in real time as users interact using the tool. There is also scope for better defect reporting on active travel routes allowing for improved response time in dealing with defects on routes. There is a risk that some groups who are less confident using technology could feel disenfranchised and disengage from active travel in the area. Some groups who have no access to the internet could even feel discriminated against and a lack of provision for these groups could be perceived negatively by various groups and the press media.

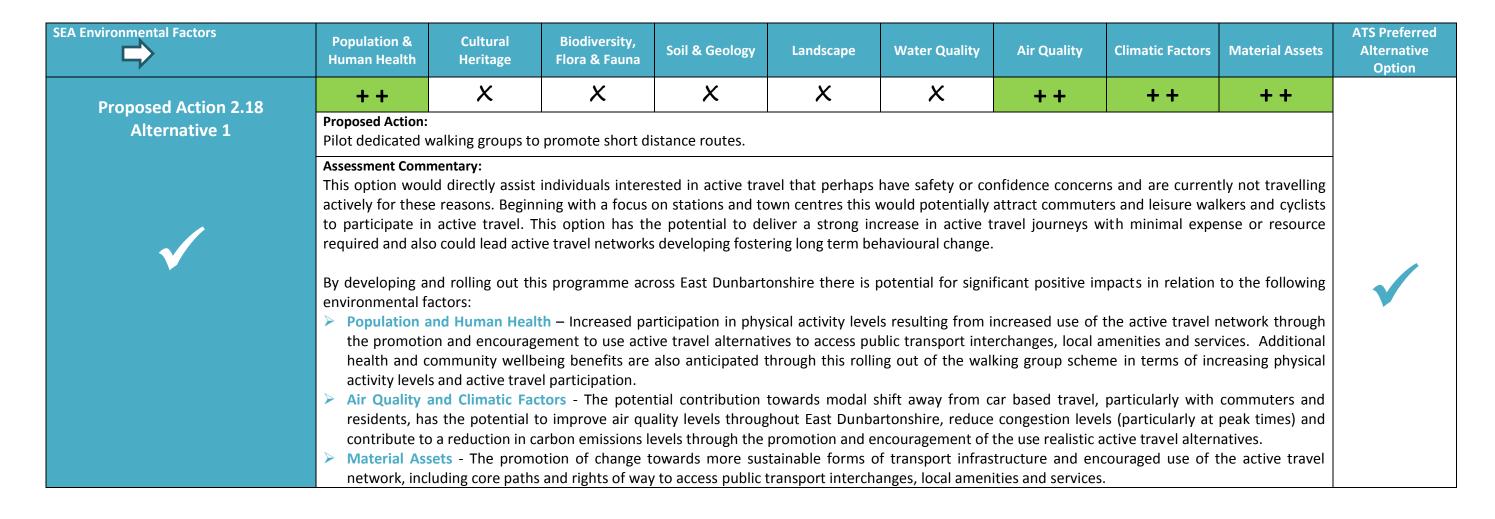
Through this action there is likely to be minor positive benefits in relation to the following environmental factors, **Population and Human Health**, **Air Quality**, **Climatic Factors** and **Material Assets**. With additional promotion and awareness raising of the active travel routes and the network throughout East Dunbartonshire the likely impacts will be directly related to:

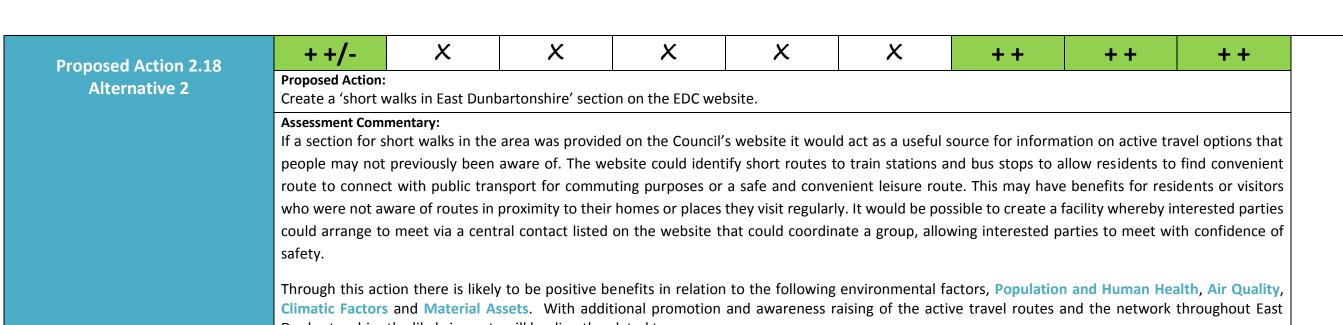
- Increased participation levels of the active travel network in the area with resultant physical activity, health and community wellbeing benefits
- The potential contribution towards modal shift away from car based travel, encouraging those less confident walkers and cyclists to travel more sustainably, with the potential to improve air quality levels within East Dunbartonshire, reduce congestion levels and contribute to a reduction in carbon emissions levels.
- The promotion of change towards more sustainable forms of transport infrastructure and encouraged use of the active travel network, including core paths and rights of way.

There is potential for an adverse impact on **Population and Human Health** from an equalities perspective which could also potentially limit the positive impacts on **Air Quality, Climatic factors and Material Assets**. There is a risk through this action that some groups who are less confident using technology could feel disenfranchised and disengage from active travel in the area. Some groups who have no access to the internet could even feel discriminated against and a lack of provision for these groups could be perceived negatively by various groups and the press media.

EA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	ATS Preferro Alternative Option
Proposed Action 2.17	++	X	X	X	X	X	+	+	+	
Alternative 1	Proposed Action: Develop an annual 'Programme of Active Travel Events' calendar.									
	provision. Event stimulate intere- and establishme travel actively. I	es such as bike be st in active trave ent of an active of Developing a ca	breakfasts and DR el for commuting a community which of llendar of events i	bike session whe and leisure purpo could create a sup is likely to attract	ere free mainten ses. There is sco portive network people who do	nance is provided in the properties of walkers and cyling not usually walk	is likely to attrag momentum and clists that could or cycle to do s	n the private or voluct extra active transfer med campaigns for meet and encoura so for either charit stone for inducing	vel journeys and nore active travel age each other to ty or fun events,	
	Population and travel events thr intended to ext	Human Health, roughout East Do tend beyond th	Air Quality, Clima unbartonshire. Ad ne events themsel	atic Factors and M Iditional promotio Ives and promote	laterial Assets – n and awareness e active travel a	Positive impacts a s raising of the acti is a realistic alter	are anticipated b ive travel netwo native to vehicu	g environmental fac by developing and pork and active trave cular based journed astructure there is	promoting active alternatives are ys for residents,	

	action to reduce car based journeys throughout East Dunbartonshire, improving air quality level and reduce resultant carbon emissions.								
Proposed Action 2.17	+	X	X	X	X	X	+	+	+
Alternative 2	Proposed Action:								
	100 subscribers groups and cycli  This action is like Population and updates on ever and active trave journeys for res	to the LDP newsl ng/walking organ ely to have minor Human Health, nts, potentially led I alternatives are idents, commute	etter and it is like isations.  positive impacts  Air Quality, Clir ading to an incre intended to exters and visitors to	related to its imp natic Factors and ase in active travend beyond the everyone transfer one	of events would be lementation. Spend Material Assets and its least themselves as shire. Through the	cific impacts are in a Positive impactional promotion and promotion of	s with relevant eventher interested parther interested parterested to the followants are anticipated and awareness rave travel as a realismore sustainable roving air quality less than the sustainable r	arties including wing environmed through the ising of the actistic alternative to forms of transp	ental factors: Council providing ve travel network to vehicular based port infrastructure
	• •	<u> </u>			ganisation of taild on to have a long l		st Dunbartonshire ravel behaviour.	. There is a risk	that without the





Dunbartonshire the likely impacts will be directly related to:

Increased participation levels of the active travel network in the area with resultant physical activity, health and community wellbeing benefits

The potential contribution towards modal shift away from car based travel, encouraging those less confident walkers and cyclists to travel more sustainably, with the potential to improve air quality levels within East Dunbartonshire, reduce congestion levels and contribute to a reduction in carbon emissions levels.

The promotion of change towards more sustainable forms of transport infrastructure and encouraged use of the active travel network, including core paths and rights of way.

There is potential for an adverse impact on Population and Human Health from an equalities perspective which could also potentially limit the positive impacts on Air Quality, Climatic factors and Material Assets. There is a risk through this action that some groups who are less confident using technology could feel disenfranchised and disengage from active travel in the area. Some groups who have no access to the internet could even feel discriminated against and a lack of provision for these groups could be perceived negatively by various groups and the press media.

SEA Environmental Factors	Population & Human Health	Cultural Heritage	Biodiversity, Flora & Fauna	Soil & Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	A7
Proposed Action 2.19	++	+/-	+/-	?/-	+	./-	++	++	++	
Alternative 1	Proposed Action: Encourage schools, businesses and community groups to 'befriend'; sections of local Active Travel Routes.									
	Assessment Commentary:  Provision of an online facility to enable groups to maintain routes could help coordinate this activity without placing unnecessary time and resource burdens on school staff. If assistance is provided by other stakeholder organisations it is possible this could stimulate higher membership rates of school children with active organisations and foster long term behavioural change. If assistance is provided with maintenance, there is scope for school groups in partnership with other organisations to develop greater community interaction and sense of empowerment. Participation in community clean up and maintenance events has been demonstrated to increase active travel behaviour in other local authorities and is likely to stimulate interest in school children to travel more actively.									
	Population a	nd Human Heal	th, Material Asset	ts, Landscape, Air	<b>Quality and Clin</b>	ularly related to the natic factors – This o maintain and en	concept is inter	nded to give local o	communities and	

enhancement could be in the form improvement to surfacing of routes, lighting and fencing which positively impact on the safety of active travel route users. This action could provide a safe and secure active travel network for residents, commuters and visitors and enable users to connect and access the wider countryside, open spaces, amenities and services while contributing to a modal shift away from vehicular based travel and promoting the role and use of active travel alternatives.

There are likely to be both positive and negative potential effects in relation to:

- Cultural Heritage and Biodiversity, Flora & Fauna Through this action positive impacts are likely through increased and improved provision of active travel access to East Dunbartonshire natural and historic environmental assets. There is also potential for adverse impacts through active travel infrastructure improvements in the vicinity of sensitive and vulnerable protected / designated sites of importance in terms of direct impacts on the sites or their setting.
- > Soil & Geology and Water Quality The impacts of this action on soil and water quality are uncertain at this stage, however, there is potential for adverse impacts particularly in relation to maintenance and resurfacing of the network which could have multiple impacts, including:
  - Erosion or damage to soil, land contamination, soil compaction from heavy machinery
  - Temporary discharges, run off or drainage issues if necessary works are carried out in close proximity to watercourses.

### **Proposed Mitigation:**

#### **Cultural Heritage**

- Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or their setting.

#### **Biodiversity, Flora & Fauna**

- Minimise tree, vegetation or topsoil removal.
- Potential Protected Species Surveys, Licences or mitigation if considered necessary to avoid adverse impacts.

?/-

- Control and treatment of surface runoff.

#### Soil & Geology

- Implement soil erosion prevention measures outlined in good practice guidance
- Minimise topsoil removal.
- Pre-construction surveys and application of good practice.

#### **Water Quality**

Control and treatment of surface runoff.

+/-

Use of construction SUDS and the adoption of best practices to avoid pollution of watercourses.

## Proposed Action 2.19 Alternative 2

## Proposed Action:

Assign sections of active travel routes to school and provide time during school hours for pupils to commence maintenance of routes with assistance from Council officers.

?/-

#### **Assessment Commentary:**

This approach would ensure that pupils are provided with assistance to start their own adoption of local routes and instill a sense of 'pride of place' in their communities. Provision of assistance would ensure school children gain skills and training is provided in a safe and secure environment. Regular maintenance on routes could attract school children and their families to use the routes more often and increase active journeys and induce long term behavioural change. There is a risk however that school may not be able to guarantee the time required to commence such programmes and the time constraint is too great. There is further risk that schools may not be willing to devote adequate staff resource to this and that perception of a safety risk deters participation.

The anticipated effects of this action are likely to be mainly positive in nature, particularly related to the following environmental factors:

Population and Human Health, Material Assets, Landscape, Air Quality and Climatic factors – This concept is intended to give local communities and provide opportunities for school pupils to maintain and enhance active travel routes and provide further education regarding active travel and safety.

This maintenance and enhancement is intended to positively impact on the safety of active travel route users. This action could provide a safe and secure active travel network for residents, commuters and visitors and enable users to connect and access the wider countryside, open spaces, amenities and services while contributing to a modal shift away from vehicular based travel and promoting the role and use of active travel alternatives. The significance of these positive impacts is likely to be reduced without a high number of schools taking part in the scheme and offering this element as part of their curriculum during school hours.

There are likely to be both positive and negative potential effects in relation to:

- ➤ Cultural Heritage and Biodiversity, Flora & Fauna Through this action positive impacts are likely through increased and improved provision of active travel access to East Dunbartonshire natural and historic environmental assets. There is also potential for adverse impacts through active travel infrastructure improvements in the vicinity of sensitive and vulnerable protected / designated sites of importance in terms of direct impacts on the sites or their setting.
- > Soil & Geology and Water Quality The impacts of this action on soil and water quality are uncertain at this stage, however, there is potential for adverse impacts particularly in relation to maintenance and resurfacing of the network which could have multiple impacts, including:
  - Erosion or damage to soil, land contamination, soil compaction from heavy machinery
  - Temporary discharges, run off or drainage issues if necessary works are carried out in close proximity to watercourses.

#### **Proposed Mitigation:**

#### **Cultural Heritage**

- Minimise and monitor any ground disturbance and incorporate design measures in order for required infrastructure improvements and maintenance to be carried out in a sensitive and sustainable manner to avoid or minimise any impacts on the historic environmental assets or their setting.

### **Biodiversity, Flora & Fauna**

- Minimise tree, vegetation or topsoil removal.
- Potential Protected Species Surveys, Licences or mitigation if considered necessary to avoid adverse impacts.
- Control and treatment of surface runoff.

#### Soil & Geology

- Implement soil erosion prevention measures outlined in good practice guidance
- Minimise topsoil removal.
- Pre-construction surveys and application of good practice.

#### **Water Quality**

- Control and treatment of surface runoff.
- Use of construction SUDS and the adoption of best practices to avoid pollution of watercourses.

#### **Appendix D: Consultation Authority Scoping Responses and Council Actions**

#### Historic Scotland

#### **HS Comments EDC Response and Action Taken** Scope and Level of Detail It is my understanding that East Dunbartonshire Council's Active Travel Strategy 2015 will aim to Comments noted and scoping in of Cultural promote active travel and deliver a connected Heritage confirmed. network of active routes. I note that the historic environment (under cultural heritage) has been scoped into the assessment. On the basis of the information provided, I am content with this approach and am satisfied with the scope and level of detail proposed for the assessment, subject to the detailed comments provided in the attached annex. **Consultation period for the Environmental Report** Section 4: Next Steps indicates that there will be a minimum consultation period of six to eight Comments noted and consultation period weeks for the draft Environmental Report, and I timescales and procedures confirmed within am content with this timescale. Please note that, ER. for administrative purposes, Historic Scotland consider that the consultation period commences on receipt of the relevant documents by the SEA Gateway. Environmental issues relevant to the active travel strategy and the scoping in / out of environmental issues I note that you have identified the potential for both negative and positive effects for the historic Comments noted and scoping in of Cultural environment through increased access to Heritage confirmed. heritage assets, and that consequently you propose to scope cultural heritage into the assessment. **Assessment Framework** Table 4 is very helpful in setting out which elements of the Strategy will be assessed, and Comments noted and a further integration of the methods that will be used, and I am content mitigation measures have been included within with the approach which is outlined. I am also the assessment process for the CLS Strategy broadly content with the draft assessment from modifications to actions, to avoidance, matrix provided at appendix 2, although I reduction or enhancement mitigation measures. suggest that you could consider also using the matrix to record / discuss mitigation measures.

### SEA Objectives and Sub-criteria / questions

I am content with the proposed SEA objective. However, the draft questions and indicators focus predominantly on visitor access to heritage assets. Consequently I do not consider that these questions alone will enable the

Assessment criteria and questions were amended to take into consideration a wider scope of effects on the historic environment and cultural heritage assets and their setting

assessment process to identify potential direct (physical) or indirect (setting) effects on heritage assets themselves. As you have identified the potential for such effects to occur, I recommend that you consider refining the draft questions and indicators to ensure that any such effects (and appropriate mitigation) can be identified. There is also scope to consolidate the existing draft questions, as there is considerable overlap between several of them. This would help to streamline and simplify the assessment. If you would like further advice on this, or would like to seek comments on a revised set of questions / indicators, please do not hesitate to contact me.

throughout East Dunbartonshire, with a particular emphasis on direct (physical) or indirect (setting) effects.

## Scottish Environment Protection Agency

SEPA Comments	EDC Response and Action Taken
Alternatives	
We are satisfied with the alternatives outlined. These should be assessed as part of the SEA process and the findings of the assessment should inform the choice of the preferred option. This should be documented in the Environmental Report.	All reasonable alternatives to the CLS Strategy were considered and assessed within the ER, along with reasonable alternatives within the Strategy in terms of the Aspiration, Aims and Actions.
Scoping In / Out of Environmental Topics	
It is noted that all environmental factors will be scoped into the assessment we agree with this approach.	Comment noted and scoping factors confirmed.
Methodology for assessing environmental eff	ects each each each each each each each each
We would expect all aspects of the PPS which could have significant effects to be assessed.	Comment noted and assessments within the ER ensure significant environmental effects have been identified and assessed.
We support the use of SEA objectives as assessment tools as they allow a systematic, rigorous and consistent framework with which to assess environmental effects. We are content with the proposed SEA objectives to be used in the assessment.	Comment noted and assessment methodology and objectives confirmed.
When it comes to setting out the results of the assessment in the Environmental Report enough information should be provided to clearly justify the reasons for each of the assessments presented.	Comment noted and assessment reasoning and justification clearly provided within each level of the assessment process (appendices) and elements brought forward into the main body of the ER.
Mitigation and Enhancement	
We would encourage you to be very clear in the Environmental Report about mitigation measures which are proposed as a result of the assessment. It is noted that the Council propose	Comments noted all mitigation measures including those which result in a modification to the Strategy are clearly illustrated within the

to follow the mitigation hierarchy (avoid, reduce, remedy or compensate).

One of the most important ways to mitigate significant environmental effects identified through the assessment is to make changes to the plan itself so that significant effects are avoided. The Environmental Report should therefore identify any changes made to the plan as a result of the SEA.

assessment appendices.

#### **Monitoring**

Although not specifically required at this stage, monitoring is a requirement of the Act and early consideration should be given to a monitoring approach particularly in the choice of indicators. It would be helpful if the Environmental Report included a description of the measures envisaged to monitor the significant environmental effects of the plan.

Comment confirmed and monitoring framework included with the corresponding ER.

#### **Consultation Period**

We are satisfied with the proposal for a six to eight week consultation period for the Environmental Report. Comment noted and consultation period confirmed.

### Scottish Natural Heritage

SNH Comments	EDC Response and Action Taken
Scope of assessment and level of detail	
Subject to the specific comments set out below and in the annex to this letter, SNH is content with the scope and level of detail proposed for the environmental report.	Comment noted and level of scope confirmed within the ER.
Consultation Period for the Environmental Re	port
SNH notes that a period of 6-8 weeks is proposed for consultation on the Environmental	Unfortunately due to internal Committee

SNH notes that a period of 6-8 weeks is proposed for consultation on the Environmental Report. The standard consultation period for Environmental Report's is 8 weeks and SNH recommend this timescale is used.

Unfortunately due to internal Committee deadlines the consultation for the Strategy and corresponding ER will be over a 6 week period. If SNH or any of the other Consultation Authorities require clarification on this or a possible extension to provide their comments and responses then please contact the Councils SEA Technical Officer, Neil Samson on 01415788615.

## **Concluding Remarks**

I hope that these points are of assistance to you. Please note that this response is in the context of the Environmental Assessment (Scotland) Act 2005 and our role as a Consultation Authority. We understand that we will be separately consulted on our views regarding the Environmental report and on the Active Travel

Comment noted.

#### Strategy.

#### Plans, Programmes & Strategies

The Scottish Government's 'Fitting Landscapes' policy should be included in the Plans, Programmes & Strategies. Fitting Landscapes sets out a commitment to quality in aspects of landscape design and management in connection with transport infrastructure. Therefore this policy is highly relevant to the Active Travel Strategy.

Comment noted and 'Fitting Landscapes Policy' has been incorporated into the PPS consideration within the ER.

SPT's Regional Transport Strategy and its corresponding Walking and Cycling Action Plan will be of relevance to the Active Travel Strategy (ATS).

A Catalyst for Change: The Regional Transport Strategy for the west of Scotland 2008-2021 and SPT Walking and Cycling Action Plan have been incorporated into the PPS for consideration within the ER.

#### **Environmental Baseline**

Under Material Assets (p26) the environmental implications shouldn't just focus on agriculture in terms of new active travel routes encroaching onto land. New active travel routes have the potential to encroach on all types of land and any potential adverse effects needs to be explored.

Comment noted and environmental implication amended within the ER.

#### **Environmental Issues**

Material Assets (p36) needs to look at the linkages to the Green Network Strategy as well as the Open Space Strategy.

SNH would encourage East Dunbartonshire Council to make sure green infrastructure opportunities are incorporated, where possible, into a new or upgraded active travel routes and the Green Network Strategy will help make this linkage.

Comments noted and amendments made within the environmental issues section of the ER and taken into consideration during the production of the ATS and corresponding ER.

#### Scoping In / Out of Environmental Factors

We agree with the topics that have been scoped in.

Comment noted and scoping of environmental factors confirmed.

#### Proposed SEA Objectives, Assessment Questions and Indicators

Landscape (p51) – the objective should also look at enhancing the landscape therefore we suggest the following wording: "To protect, enhance and, where appropriate, restore landscape character, local distinctiveness and scenic value."

Landscape objective was altered to take account of the recommended SNH modification.

One of the landscape indicators looks at the number of actions in the ATS that are linked to the actions in the Local transport Strategy and Core Path Plan. There should also be links to actions with the emerging Green Network

Comment noted - amendments have been incorporated into the indicators within the monitoring section of the ER as a result.

Strategy and we recommend you include it into this section.	
Biodiversity, Flora & Fauna (p49) – not sure and indicator on quality and connectivity of active travel is needed in this section.  The following indicators appear in the scoping report for the Green network Strategy and might be relevant to include in this section:  - Ecosystem specific indicators, such as area of woodland habitats improved/changes.  - Loss/expansion/enhancement of woodland/forestry in East	Comment noted and indicator removed.  Comment noted — Additional indicators incorporated related to Biodiversity, Flora and Fauna within the monitoring section of the ER as a result.
Dunbartonshire.	
Material Assets (p53) – One of the indicators looks at access and use of public transport networks. Ideally you want this indicator to include number of new paths to/from public transport interchanges and amount of cycle parking installed at key public transport interchanges.	Comment noted – Additional indicator incorporated related to Material Assets within the monitoring section of the ER as a result.