

## Appendix C –Actions – Options and Reasonable Alternatives Assessment



Environmental Factor	SEA Objective	SEA Criteria Will the action:
Population, Human Health	To improve human health and community wellbeing.	Through new infrastructure provision impact on noise or light pollution in existing settlements?
		Impact on public open space or recreational provision?
		Improve the public realm and provide additional public facilities and opportunities?
		Improve connectivity for residents in urban areas to access the wider countryside?
		Enhance connectivity for people to access amenities and services in East Dunbartonshire and in other local authority areas?
		Encourage active travel and outdoor leisure?
		Promote an environment that is both sustainable and safe?
		Contribute to an improvement in health and wellbeing statistics?
Cultural Heritage	To protect, conserve, and where appropriate enhance the historic environment	Have an impact on any designated built heritage areas, including listed buildings and their setting, Conservation Areas, gardens & designed landscapes, archaeological sites?
		Have an effect on non-designated areas of local built heritage interest, including Townscape Protection Areas?
		Incorporate high standards of appropriate design when located within or adjacent to the historic environment or conservation areas?
Biodiversity Flora and Fauna	To protect, enhance, create and where necessary restore biodiversity and encourage habitat connectivity.	Directly or indirectly impact on designated sites of importance?
		Affect the connectivity of habitats?
		Seek to minimise any adverse impacts on valued biodiversity including non-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, flora and fauna?
Soil & Geology	To protect and, where appropriate, use high quality and sensitive soils in a sustainable manner and conserve recognised geodiversity sites.	Seek to prevent soil degradation and erosion?
		Impact on areas of potentially contaminated land?
		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?
Landscape	To protect, enhance and, where appropriate, restore landscape character, local distinctiveness and scenic value.	Have a significant effect on the landscape character, local distinctiveness, settlement pattern or scenic value of the area?
		Affect areas designated for their landscape character, i.e. Regional Scenic Areas and Special Landscape Areas?
		Impact on greenfield locations, green belt defensibility and/or contribute to community identity?
Water Quality	To prevent deterioration and, where possible, enhance the ecological status of water bodies.	Have a direct or indirect impact on water quality?
		Have an impact on drainage through active travel improvements in close proximity to watercourses?
Air Quality	To prevent deterioration and, where possible, enhance air quality.	Promote the role and use of active travel alternatives?
		Improve the active travel network to reduce the reliance on vehicular based travel?
		Impact on any existing AQMA's?
Climatic Factors	To contribute towards the reduction of Scottish greenhouse gas outputs in line with Government targets.	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 trees?
	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?
Material Assets	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?
		Promote changes to the current transport infrastructure to a more sustainable network?













	<p><b>Assessment Commentary:</b></p> <p>This option is likely to have a positive impact to <b>Population and Human Health</b> 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.</p> <p>It is anticipated that there will be minor positive impacts to <b>Air Quality, Climatic Factors and Material Assets</b> 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.</p> <p>There are potential positive and negative impacts in relation to:</p> <ul style="list-style-type: none"> <li>➤ <b>Cultural Heritage and Biodiversity, Flora and Fauna</b> – 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.</li> </ul> <p>At this stage the impacts to <b>Water Quality and Soil and Geology</b> 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.</p> <p>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 <b>Landscape</b> are likely to be insignificant in terms of settlement character or local distinctiveness.</p> <p><b>Proposed Mitigation:</b></p> <p><b>Population and Human Health</b></p> <ul style="list-style-type: none"> <li>- Use of appropriate lighting and signage to reduce safety risks.</li> </ul> <p><b>Cultural Heritage</b></p> <ul style="list-style-type: none"> <li>- 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.</li> </ul> <p><b>Biodiversity, Flora &amp; Fauna</b></p> <ul style="list-style-type: none"> <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> <p><b>Soil &amp; Geology</b></p> <ul style="list-style-type: none"> <li>- Implement soil erosion prevention measures outlined in good practice guidance</li> </ul> <p><b>Water Quality</b></p> <ul style="list-style-type: none"> <li>- Control and treatment of surface runoff.</li> <li>- Adoption of best practices to avoid pollution of watercourses.</li> </ul>	
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<b>Proposed Action 1.4</b> 	<b>Proposed Action:</b> Bishopbriggs / Forth and Clyde Canal access.	
	<b>Assessment Commentary:</b> 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
<b>Proposed Action 1.5</b>  										
	<b>Proposed Action:</b> East – West Connectivity Improvements – Allander Walkway to Cadder Bridge.									
	<b>Assessment Commentary:</b> 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
<b>Proposed Action 1.6</b>  										
	<b>Proposed Action:</b> A803 Improvements.									
	<b>Assessment Commentary:</b> 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 1.7 Alternative 1	++	X	--	--	X	X	++	++/-	++	
	<b>Proposed Action:</b> Bishopbriggs Relief Road (BRR) / Westerhill Road – Active Travel Corridor.									
	<b>Assessment Commentary:</b> It is anticipated that this action to create an active travel corridor connecting Westerhill Road to the Bishopbriggs Relief Road will present significant positive benefits for <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b> . It is predicted that there will be improved connectivity between settlements in Bishopbriggs as well as improved active travel connections between Strathkelvin Retail Park and surrounding residential developments. It would also promote active travel options and alternatives to car-based travel in the east of Bishopbriggs with potential to promote active travel for both commuter and leisure journeys into Glasgow and Bishopbriggs' town centre. As a viable active travel option for									

	<p>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.</p> <p>There are also potential negative impacts predicted for the following environmental factors:</p> <ul style="list-style-type: none"><li>- <b>Biodiversity, Flora and Fauna, Soil and Geology and Climatic Factors</b> – 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.</li></ul> <p><b>Proposed Mitigation:</b></p> <p><b>Biodiversity, Flora and Fauna</b></p> <ul style="list-style-type: none"><li>- 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.</li><li>- 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’.</li><li>- 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.</li></ul> <p><b>Soil and Geology and Climatic Factors</b></p> <ul style="list-style-type: none"><li>- Implement soil erosion prevention measures outlined in good practice guidance.</li><li>- 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.</li></ul>								
	<div>Proposed Action 1.7 Alternative 2</div>	+/-	? /-	--	--	X	X	+	+
<p><b>Proposed Action:</b> Provide advisory cycle lanes on the existing carriageway of the Bishopbriggs Relief Road (BRR).</p> <p><b>Assessment Commentary:</b> The impacts predicted resulting from this action for the following environmental factors include:</p> <ul style="list-style-type: none"><li>- <b>Population and Human Health</b> - 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.</li><li>- <b>Air Quality and Climatic Factors</b> – 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.</li></ul>									





	<ul style="list-style-type: none"><li>- <b>Water Quality and Climatic Factors</b> – 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.</li><li>- <b>Air Quality and Climatic Factors</b> – 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.</li><li>- <b>Population and Human Health and Material Assets</b> – 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).</li></ul> <p><b>Proposed Mitigation:</b></p> <p><b>Cultural Heritage</b></p> <ul style="list-style-type: none"><li>- 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.</li></ul> <p><b>Biodiversity, Flora and Fauna</b></p> <ul style="list-style-type: none"><li>- 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.</li><li>- 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’.</li><li>- 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.</li></ul> <p><b>Soil and Geology</b></p> <ul style="list-style-type: none"><li>- 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.</li><li>- Implement soil erosion prevention measures outlined in good practice guidance</li></ul> <p><b>Landscape</b></p> <ul style="list-style-type: none"><li>- 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.</li></ul> <p><b>Water Quality</b></p> <ul style="list-style-type: none"><li>- Control and treatment of surface runoff.</li><li>- Adoption of best practices to prevent/minimise adverse impacts to drainage.</li></ul> <p><b>Climatic Factors</b></p> <ul style="list-style-type: none"><li>- Further Flood Risk Assessments to determine extend of flood risk in the area and the implementation of flood risk management measures, if required.</li></ul>								
	<div>Proposed Action 1.8 Alternative 2</div>	<div>++</div>	<div>--</div>	<div>-</div>	<div>-</div>	<div>?/-</div>	<div>-</div>	<div>++</div>	<div>+/-</div>
<p><b>Proposed Action:</b> Provide segregated cycle lanes on the main A807 and A803 carriageways or a shared use footway connecting Torrance and Kirkintilloch.</p>									



**Assessment Commentary:**

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.

















	<p><b>Assessment Commentary:</b></p> <p>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 <b>Population and Human Health</b> 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 <b>Air Quality and Climatic Factors</b> 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 <b>Material Assets</b>, 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.</p> <p>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:</p> <ul style="list-style-type: none"><li>➤ <b>Cultural Heritage</b> – 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:<ul style="list-style-type: none"><li>- Gardens and Designed Landscapes such as around Clachan of Campsie and Lennoxton</li><li>- Townscape Protection Areas such as near Bardowie and Langbank Farm</li><li>- Conservation Areas in Milngavie, Bearsden, Kirkintilloch, Lenzie, Twechar, Bardowie and Clachan of Campsie</li><li>- Antonine Wall and Antonine Wall Buffer Zone</li><li>- Forth and Clyde Canal Scheduled Monument.</li></ul>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.</li><li>➤ <b>Biodiversity, Flora and Fauna and Soil and Geology</b> – 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.</li><li>➤ <b>Landscape</b> – 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.</li><li>➤ <b>Water Quality and Climatic Factors</b> – 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.</li></ul> <p><b>Proposed Mitigation:</b></p> <p><b>Cultural Heritage</b></p> <ul style="list-style-type: none"><li>- 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</li></ul>	
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	<p>their setting.</p> <p><b>Biodiversity, Flora and Fauna</b></p> <ul style="list-style-type: none"><li>- 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.</li><li>- 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’.</li><li>- 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.</li></ul> <p><b>Soil and Geology</b></p> <ul style="list-style-type: none"><li>- 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.</li><li>- Implement soil erosion prevention measures outlined in good practice guidance</li></ul> <p><b>Landscape</b></p> <ul style="list-style-type: none"><li>- Integration of high environmental and design standards that maintain existing landscape distinctiveness and will be consistent with the greenbelt.</li></ul> <p><b>Water Quality and Climatic Factors</b></p> <ul style="list-style-type: none"><li>- Control and treatment of surface runoff.</li><li>- Adoption of best practices to prevent/minimise adverse impacts to drainage.</li><li>- Further Flood Risk Assessments to determine extend of flood risk in the area and the implementation of flood risk management measures, if required.</li><li>- Use of construction SUDS and adoption of best practices to avoid pollution of watercourses.</li></ul> <p><b>Material Assets</b></p> <ul style="list-style-type: none"><li>- Reuse of materials where appropriate/sustainable use of resources.</li><li>- Waste Management Plan implemented to reduce the impact of waste.</li></ul>										
<div>Proposed Action 1.13 Alternative 2</div>	<table><tr><td>++/-</td><td>?/- -</td><td>?/- -/+</td><td>?/- -</td><td>?/-</td><td>?/- -</td><td>+</td><td>+/-</td><td>++/-</td></tr></table> <div><p><b>Proposed Action:</b></p><p>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.</p><p><b>Assessment Commentary:</b></p><p>This action is likely to present significant positive impacts to <b>Population and Human Health</b> 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.</p><p>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 <b>Air Quality and Climatic Factors</b> 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 <b>Material Assets</b>, 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.</p></div>	++/-	?/- -	?/- -/+	?/- -	?/-	?/- -	+	+/-	++/-	
++/-	?/- -	?/- -/+	?/- -	?/-	?/- -	+	+/-	++/-			

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**

	<ul style="list-style-type: none"> <li>- Integration of high environmental and design standards that maintain existing landscape distinctiveness and will be consistent with the greenbelt.</li> </ul> <p><b>Water Quality and Climatic Factors</b></p> <ul style="list-style-type: none"> <li>- Control and treatment of surface runoff.</li> <li>- Adoption of best practices to prevent/minimise adverse impacts to drainage.</li> <li>- Further Flood Risk Assessments to determine extend of flood risk in the area and the implementation of flood risk management measures, if required.</li> <li>- Use of construction SUDS and adoption of best practices to avoid pollution of watercourses.</li> </ul> <p><b>Material Assets</b></p> <ul style="list-style-type: none"> <li>- Reuse of materials where appropriate/sustainable use of resources.</li> <li>- Waste Management Plan implemented to reduce the impact of waste.</li> </ul>	
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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
<b>Proposed Action 1.14</b> <b>Alternative 1</b>  	<b>++</b>	<b>?/-/+</b>	<b>?/-/+</b>	<b>?/- -</b>	<b>?/-</b>	<b>?/-</b>	<b>++</b>	<b>++/-</b>	<b>+/-</b>	
<p><b>Proposed Action:</b> Improve access by active travel to green network assets/open spaces.</p> <p><b>Assessment Commentary:</b> It is anticipated that this action will present significant positive impacts for the following environmental factors:</p> <ul style="list-style-type: none"> <li>➤ <b>Population and Human Health</b> – This action is likely to present benefits for residents and visitors to East Dunbartonshire as it will enable accessibility to the wider environment which is shown to have health benefits in terms of increased active pursuits, enjoyment of the environment and community wellbeing. Furthermore, this is likely to promote the use of local open spaces as people will be better connected with open spaces. The Open Space Strategy for East Dunbartonshire highlighted inadequacies in how accessible the open space/play parks in East Dunbartonshire were in a number of locations; this action in the ATS will proactively address these issues in a positive manner.</li> <li>➤ <b>Air Quality, Climatic Factors and Material Assets</b> – 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, 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 active travel alternatives.</li> </ul> <p>Open spaces and green network assets in East Dunbartonshire are vast and are protected by several different environmental designations, constraints and as such the impacts on these important assets are uncertain at this stage. However, there is potential for both positive and negative impacts that may arise for the environmental factors including:</p> <ul style="list-style-type: none"> <li>➤ <b>Cultural Heritage</b> – The green network and many open spaces are located on or near the vicinity of historical environment 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 throughout East Dunbartonshire 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.</li> <li>➤ <b>Biodiversity, Flora and Fauna and Soil and Geology</b> – This option has the potential to ensure that connectivity throughout the green network and to/between open spaces is improved, with additional benefits for habitat connectivity. However, there is potential to increase the use of active travel routes and the impact of increased footfall will a potential 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 or disturbance of biodiversity, flora, fauna and geodiversity will result. This could potentially have a direct impact on soil erosion and compaction, and disturbance to peatland or carbon rich soils.</li> <li>➤ <b>Landscape</b> – 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 particularly in rural areas, significant changes to the existing infrastructure may be required including the</li> </ul>										
										








	<p>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.</p> <p>➤ <b>Air Quality, Climatic Factors and Material Assets</b> – 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.</p> <p>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:</p> <p>➤ <b>Cultural Heritage</b> – 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.</p> <p>➤ <b>Biodiversity, Flora and Fauna and Soil and Geology</b> – 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.</p> <p>➤ <b>Water Quality and Climatic Factors</b> – 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.</p> <p>➤ <b>Material Assets</b> – 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.</p> <p><b>Proposed Mitigation:</b></p> <p><b>Cultural Heritage</b></p> <ul style="list-style-type: none"> <li>- 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.</li> </ul> <p><b>Biodiversity, Flora and Fauna</b></p> <ul style="list-style-type: none"> <li>- 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.</li> <li>- 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'.</li> <li>- 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.</li> </ul> <p><b>Soil and Geology</b></p> <ul style="list-style-type: none"> <li>- 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.</li> <li>- Implement soil erosion prevention measures outlined in good practice guidance</li> </ul> <p><b>Water Quality and Climatic Factors</b></p> <ul style="list-style-type: none"> <li>- Control and treatment of surface runoff.</li> <li>- Adoption of best practices to prevent/minimise adverse impacts to drainage.</li> </ul>	
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	<ul style="list-style-type: none"><li>- Use of construction SUDS and adoption of best practices to avoid pollution of watercourses.</li></ul> <b>Material Assets</b> <ul style="list-style-type: none"><li>- Reuse of materials where appropriate/sustainable use of resources.</li><li>- Waste Management Plan where necessary.</li></ul>									
Proposed Action 1.14 Alternative 3	+/ -	? - / +	? - / +	? / - -	? / -	? / -	++	+ / -	+ / -	
	<b>Proposed Action:</b> Improve access by active travel to green network assets/open spaces in rural areas only.									
	<b>Assessment Commentary:</b> The anticipated positive impacts for the following environmental factors include: <ul style="list-style-type: none"><li>- <b>Population and Human Health</b> – 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 Colquhoun Park. This would represent a significant missed opportunity for those living in rural areas to access assets in urban areas.</li><li>- <b>Air Quality, Climatic Factors and Material Assets</b> – 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.</li></ul>									
	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: <ul style="list-style-type: none"><li>- <b>Cultural Heritage</b> – 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.</li><li>- <b>Biodiversity, Flora and Fauna and Soil and Geology</b> – 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.</li><li>- <b>Landscape</b> – 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.</li><li>- <b>Water Quality and Climatic Factors</b> – Flood risk areas have been identified in rural areas such as Twechar, Milton of Campsie and Lennoxton, 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.</li><li>- <b>Material Assets</b> – 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.</li></ul>									
<b>Proposed Mitigation:</b> <b>Cultural Heritage</b>										




	<ul style="list-style-type: none"> <li>- 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.</li> </ul> <p><b>Biodiversity, Flora and Fauna</b></p> <ul style="list-style-type: none"> <li>- 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.</li> <li>- 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'.</li> <li>- 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.</li> </ul> <p><b>Soil and Geology</b></p> <ul style="list-style-type: none"> <li>- 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.</li> <li>- Implement soil erosion prevention measures outlined in good practice guidance.</li> </ul> <p><b>Landscape</b></p> <ul style="list-style-type: none"> <li>- Integration of high environmental and design standards that maintain existing landscape distinctiveness and will be consistent with the greenbelt.</li> </ul> <p><b>Water Quality and Climatic Factors</b></p> <ul style="list-style-type: none"> <li>- Control and treatment of surface runoff.</li> <li>- Adoption of best practices to prevent/minimise adverse impacts to drainage.</li> <li>- Use of construction SUDS and adoption of best practices to avoid pollution of watercourses.</li> </ul> <p><b>Material Assets</b></p> <ul style="list-style-type: none"> <li>- Reuse of materials where appropriate/sustainable use of resources.</li> <li>- Waste Management Plan where necessary.</li> </ul>	
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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 Alternative 1  	++	+	+	X	X	X	+	+	+	
	<b>Proposed Action:</b> Cycling in EDC parks.									
	<b>Assessment Commentary:</b> The anticipated effects of this action are likely to be positive in nature to the following environmental factors: ➤ <b>Population and Human Health, Cultural Heritage, Biodiversity, Material Assets, Air Quality and Climatic factors</b> – This approach will allow people to cycle through parks in EDC, providing additional off-road, traffic free options to reach another destination e.g. through Lennox Park to access Milngavie train Station. This will provide new additions to the active travel networks for cyclists and provide enhanced connections to open spaces, town centres, public transport interchanges and other attractions. Operating on a ‘Share with care’ principle, possibly with separating lines on paths where appropriate, this option will increase viability and acceptance of cyclists as a mode. Provision of cycle parking in parks will also allow people to access the park by active travel and securely lock their bicycles should they wish to continue into the park on foot, proving additional options for people to enjoy the parks more flexibly. 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.									
	+	0/+	0/+	X	X	X	+	+	+	





	who wish to cycle more.									
	This option fails to acknowledge and cater for other trip attractors like town centres, services and amenities such as leisure centres, doctors and libraries, and seems to focus solely on commuters which could limit the positive impacts anticipated through this action.									
Proposed Action 1.16 Alternative 2	+	X	X	X	X	X	+	+	X	
	<b>Proposed Action:</b> Secure cycle storage at town centres only – provision of sheltered cycle parking racks at all town centres in EDC.									
	<b>Assessment Commentary:</b> It is likely that this option would present positive impacts to <b>Population and Human Health, Air Quality and Climatic Factors</b> as it will ensure that enhanced facilities for cyclists in Lenzie, Kirkintilloch, Bishopbriggs, Bearsden and Milngavie town centres. This is likely to encourage people to increase active travel journeys by allowing people to safely secure bikes to enable short trips for social purposes and for commuting. It is anticipated that increasing active travel journeys will contribute to improving air quality (particular in Bearsden and Bishopbriggs which are currently designated as an AQMA) and reducing emissions, along with the promotion of sustainable transport infrastructure. However, the impacts are minor in nature as cycle storage is limited to town centres only, which has the potential to limit active travel for commuters including connections with trains for longer journeys limiting the positive impacts anticipated through this action.									

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 										
	<b>Proposed Action:</b> Planning Policy and Development Management.									
	<b>Assessment Commentary:</b> The Sustainable Transport Policy within the Local Development Plan along with the Local Transport Strategy have been through or are currently being assessed through the SEA process. This action relates to the delivery of active travel throughout East Dunbartonshire from a planning perspective. The active travel element within these documents ensures that sustainable transport is taken into consideration from a planning perspective and as such this action does not require additional 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 1.18 Alternative 1 										
	<b>Proposed Action:</b> Town Centre Strategies.									
	<b>Assessment Commentary:</b> The production of Town Centre Strategies and their long-term vision incorporating active travel and public realm improvements will be assessed through the SEA of the Local Development Plan – Supplementary Guidance / Planning Guidance.									

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
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<div> <div>Proposed Action 1.19</div> <div>  </div> </div>										<div>  </div>
	<div> <div>Proposed Action:</div> <div>20 MPH Zones.</div> </div>									
	<div> <div>Assessment Commentary:</div> <div> <p>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.</p> </div> </div>									

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 1.20 Alternative 1  ✓	+	X	X	X	X	X	+	+	+	✓
	<b>Proposed Action:</b> Signage Review: Continue to roll out Healthy Habits signage to ensure consistency of provision across the area.									
	<b>Assessment Commentary:</b> Initial audits identified that having no uniform signage scheme has the potential to create visitor confusion. A lack of information also acts as barrier in some locations. Kirkintilloch and Bishopbriggs already has a coherent network of Healthy habits signage and rather than duplicate work by providing a new network area wide it represents better option to continue the rollout of the existing Healthy habits theme. This will ensure uniform provision with easily recognisable colour scheme and information so users know immediately they are using the EDC active travel network. Using the existing branding of Healthy habits throughout East Dunbartonshire will provide a strong base of support and local knowledge about the initiative which should increase awareness of the active travel network and reap the befits of further active travel promotion.  There is likely to be a minor positive impact in relation to <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b> 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.									
Proposed Action 1.20 Alternative 2	+	X	X	X	X	X	+	+	+	
	<b>Proposed Action:</b> Carry out a full review and audit of every sign in East Dunbartonshire and use audit results to inform development of comprehensive signage strategy which ensures consistency of provision across all settlements. The strategy should deliver enhanced signage and consistent provision, defects repaired and a regular audit schedule developed.									
	<b>Assessment Commentary:</b> This option would represent a large scale enhancement to signage provision. The full review would identify defects, ensure repair and would also identify inconsistencies in order to deliver a fully consistent suite of active travel signage. This would improve information available to people walking and cycling and is likely to increase the number of active journeys.  However there is already good provision of Healthy Habits signage across various areas in East Dunbartonshire and it would represent a more sustainable and efficient option to continue the branding and active travel promotion through healthy habits and improve the existing provision of signage. The recent audit identified strong provision in Kirkintilloch and Bishopbriggs therefore it seems sensible to continue roll out of healthy habits signage to enhance consistency. There is a lack of available resource to carry out a full review without neglecting other areas and causing unnecessary adverse impact on other access issues.									














**Assessment Commentary:**

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

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
<div>Proposed Action 2.1 Alternative 1</div> <div></div>	++	X	X	X	X	X	++	++	+	<div></div>
	<b>Proposed Action:</b> Ensure all Primary and Secondary Schools provide School Travel Plans or Active Travel Co-ordinator.									
	<b>Assessment Commentary:</b> This action offers a more pragmatic approach to the provision of travel plans acknowledging that it is challenging to ensure all schools have a travel plan or dedicated co-ordinator. This action could be implemented through the provision and circulation of travel plan data directly to schools, parents and pupils or provided along with assistance by a co-ordinator post. This promotion of active travel alternatives includes combinations with public transport so that families can incorporate some element of active travel into their school journey regardless of how far they live from the school. This option represents an opportunity to develop positive healthy habits early in school life through primary and secondary school which may be engrained habits by the time children reach adulthood.  This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors: ➤ <b>Population and Human Health, Air Quality, Climatic factors and Material Assets</b> – Positive impacts are anticipated through the provision of school travel plans and / or an Active Travel Co-ordinator to encourage pupils and parents to access school services and facilities using the existing active travel network (and improved network through this Strategy). This along with some funding to ensure physical facilities like sheltered secure bike parking would represent an improvement on the current state, facilitate more active journeys and promote more sustainable forms of transport infrastructure (including linkages with the public transport network and interchanges) 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).									
<div>Proposed Action 2.1 Alternative 2</div>	++	X	X	X	X	X	+	+	+	
	<b>Proposed Action:</b> Ensure all primary schools provide a School Travel Plan or Active Travel Co-ordinator									
	<b>Assessment Commentary:</b> This action is intended to ensure that all children at primary 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. Focussing solely on primary school pupils and locations could limit the potential of this ATS by limiting the number of pupils and parents receiving such bespoke travel planning knowledge and lose momentum of active travel support as children progress through to secondary school.  This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors: <b>Population and Human Health, Air Quality, Climatic factors and Material Assets</b> – Positive impacts are anticipated through the provision of school travel plans and / or an Active Travel Co-ordinator for all primary 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.									
	++	X	X	X	X	X	+	+	+	





























	<p><b>Assessment Commentary:</b></p> <p>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.</p> <p>This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors:  <b>Population and Human Health, Air Quality, Climatic factors and Material Assets</b> – 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.</p>	
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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>Proposed Action:</b> Assist employers to support/designate an Active Travel Ambassador or a Workplace Cycling Instructor									
	<b>Assessment Commentary:</b> 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: <b>Population and Human Health, Air Quality, Climatic factors and Material Assets</b> – 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 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 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	++	++	+	

<b>Proposed Action 2.10</b> <b>Alternative 2</b>  	<b>Proposed Action:</b> Provide dedicated officer to work as Active Travel ambassador or a workplace Cycling Instructor.	
	<b>Assessment Commentary:</b> This approach would provide employers with a dedicated member of staff who would be able to visit workplaces 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: <b>Population and Human Health, Air Quality, Climatic factors and Material Assets</b> – 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
Proposed Action 2.11 Alternative 1	?/+ +	X	X	X	X	X	?/+ +	?/+ +	?/+	
	<b>Proposed Action:</b> Promote adult and commuter cycle training to businesses									
	<b>Assessment Commentary:</b> This approach points employers in the direction of on how to provide or advice on cycle training for less experienced cyclists. This assistance could lead to employers delivering training to employees which should have a beneficial effect on the number of active travel journeys. Providing this assistance is also likely to induce long term positive behavioural change if take up was high. However this approach places the initiative with employers and therefore the effects are uncertain at this stage.  This action is likely to have positive impacts related to its implementation. These impacts are uncertain at this stage until employers take the initiative and use the information provided to install behaviour change into their organisations. Specific potential impacts are related to the following environmental factors: <b>Population and Human Health, Air Quality, Climatic factors and Material Assets</b> – 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 implement the suggested training 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 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	++	++	++	

<div> <div> Proposed Action 2.11 Alternative 2 </div> <div>  </div> </div>	<p><b>Proposed Action:</b> Provide adult cycle training to businesses directly.</p>	
	<p><b>Assessment Commentary:</b> 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.</p> <p>This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors:  <b>Population and Human Health, Air Quality, Climatic factors and Material Assets</b> – 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).</p>	




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
<b>Proposed Action 2.12</b> <b>Alternative 1</b>  	++	X	X	X	X	X	+	+	+	
	<b>Proposed Action:</b> Promote dedicated workplace active challenges to local employers.									
	<b>Assessment Commentary:</b> This approach provides an opportunity to publicise local active travel networks and educate people on their daily active travel options by demonstrating how active travel can be practised. This approach also ensures that all children have access to participate in events like this rather than depending on parents to assist out of school hours. This reduces the risk of some children not participating and reduces the effects of inequality on activity in school children by ensuring universal access to these events.  This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors: <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b> – Positive impacts are anticipated through the promotion of active travel challenges, the active travel network and provide education on active travel alternatives as realistic choices throughout East Dunbartonshire for more sustainable travel for work, leisure or recreation purposes. This action is likely to increase the number of active travel journeys and induce positive long term behavioural change through promotion of the active travel network. Through the promotion of more sustainable forms of transport infrastructure 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).									
<b>Proposed Action 2.12</b> <b>Alternative 2</b>	+	X	X	X	X	X	+	+	+	
<b>Proposed Action:</b> Provide information on and promote local active travel and sports clubs events to local employers.										








	<p><b>Assessment Commentary:</b> 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.</p> <p>This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors: <b>Population and Human Health, Air Quality, Climatic factors and Material Assets</b> – 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).</p>	
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### 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 Alternative 1  	+	X	X	X	X	X	+	+	+	
	<b>Proposed Action:</b> Create and promote dedicated Active Travel section on EDC website									
	<b>Assessment Commentary:</b> This approach would provide a source of information for all things related to active travel and could be identified with an active travel slogan which people would identify with East Dunbartonshire Council. 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 section could provide information on events, routes and facilities which would likely increase active travel participation in East Dunbartonshire and could have a positive effect on long term behavioural change. As there is already a well maintained and well used/publicised EDC website which could easily incorporate an active travel section without the necessity for addition publicity to advertise a new website, it is likely that a section on the existing site would serve the same purpose including ensuring that the webpages will be seen and advertised on an well-established website with significant user numbers and for members of the public and interested stakeholders.  Through this action there is likely to be minor positive benefits in relation to the following environmental factors, <b>Population and Human Health</b> , <b>Air Quality</b> , <b>Climatic Factors</b> and <b>Material Assets</b> . With additional promotion and awareness raising of the active travel network the likely impacts will be directly related to: <ul style="list-style-type: none"><li>➤ Increased participation levels of the active travel network with resultant physical activity, health and community wellbeing benefits.</li><li>➤ 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.</li><li>➤ 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.</li></ul>									
	+	X	X	X	X	X	+	+	+	






<b>Proposed Action 2.14</b> <b>Alternative 2</b>	<b>Proposed Action:</b> Create and promote a dedicated Active Travel website for EDC.	
	<b>Assessment Commentary:</b> <p>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.</p> <p>Through this action there is likely to be minor positive benefits in relation to the following environmental factors, <b>Population and Human Health</b>, <b>Air Quality</b>, <b>Climatic Factors</b> and <b>Material Assets</b>. With additional promotion and awareness raising of the active travel network the likely impacts will be directly related to:</p> <ul style="list-style-type: none"> <li>➤ Increased participation levels of the active travel network with resultant physical activity, health and community wellbeing benefits.</li> <li>➤ 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.</li> <li>➤ 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.</li> </ul>	

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
<b>Proposed Action 2.15</b> <b>Alternative 1</b>  	<b>++</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>++</b>	<b>++</b>	<b>++</b>	
	<b>Proposed Action:</b> Continue 'Healthy Habits' programme across East Dunbartonshire.									
	<b>Assessment Commentary:</b> 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: <ul style="list-style-type: none"> <li>➤ <b>Population and Human Health</b> – 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.</li> <li>➤ <b>Air Quality and Climatic Factors</b> - 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.</li> <li>➤ <b>Material Assets</b> - The promotion of change towards more sustainable forms of transport infrastructure and encouraged use of the active travel</li> </ul>									

	network, including core paths and rights of way to access local amenities and services.									
Proposed Action 2.15 Alternative 2	++	X	X	X	X	X	++	++	++	
	<b>Proposed Action:</b> Create a campaign for active travel with a new brand name aimed at increasing active travel in East Dunbartonshire.									
	<b>Assessment Commentary:</b> A new campaign could provide an opportunity to capitalise on recent events such as the Commonwealth Games in order to foster active lifestyles with a contemporary theme. A new campaign 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. However it is acknowledged that the recent Healthy habits campaign was relatively successful and a new campaign may represent unnecessary duplication.  By developing and rolling out a new active travel brand across East Dunbartonshire there is likely to be significant positive impacts in relation to the following environmental factors: ➤ <b>Population and Human Health</b> – 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, services, employment, leisure and recreational facilities/opportunities. ➤ <b>Air Quality and Climatic Factors</b> - 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. ➤ <b>Material Assets</b> - 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 to access local amenities and services.									

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 2.16 Alternative 1  	+	X	X	X	X	X	+	+	+	
	<b>Proposed Action:</b> Produce pocket size Active Travel Route guides									
	<b>Assessment Commentary:</b> Audits identified that the legacy of ‘Healthy Habits’ success was an asset that could be easily replaced with minimal effort required. In order to avoid duplication of work and developing a new campaign it would be more appropriate to replicate this approach and deliver and distribute pocket sized guide books. These books would ensure that no social or economic groups are discriminated against and that the information would be easily portable.  Through this action there is likely to be minor positive benefits in relation to the following environmental factors, <b>Population and Human Health</b> , <b>Air Quality</b> , <b>Climatic Factors</b> and <b>Material Assets</b> . 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: <ul style="list-style-type: none"><li>➤ Increased participation levels of the active travel network in the area with resultant physical activity, health and community wellbeing benefits</li><li>➤ 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.</li><li>➤ 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.</li></ul>									
	+/-	X	X	X	X	X	+	+	+	


<p><b>Proposed Action 2.16</b> <b>Alternative 2</b></p>	<p><b>Proposed Action:</b> Produce interactive mapping web tool as an Active Travel route guide for all towns.</p> <p><b>Assessment Commentary:</b> 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.</p> <p>Through this action there is likely to be minor positive benefits in relation to the following environmental factors, <b>Population and Human Health</b>, <b>Air Quality</b>, <b>Climatic Factors</b> and <b>Material Assets</b>. 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:</p> <ul style="list-style-type: none"> <li>➤ Increased participation levels of the active travel network in the area with resultant physical activity, health and community wellbeing benefits</li> <li>➤ 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.</li> <li>➤ 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.</li> </ul> <p>There is potential for an adverse impact on <b>Population and Human Health</b> from an equalities perspective which could also potentially limit the positive impacts on <b>Air Quality</b>, <b>Climatic factors</b> and <b>Material Assets</b>. 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.</p>	
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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
<b>Proposed Action 2.17</b> <b>Alternative 1</b>  	<b>++</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>+</b>	<b>+</b>	<b>+</b>	
	<b>Proposed Action:</b> Develop an annual 'Programme of Active Travel Events' calendar.									
	<b>Assessment Commentary:</b> This approach ensures that active travel events are delivered by the council in East Dunbartonshire without reliance on the private or voluntary sector for provision. Events such as bike breakfasts and DR bike session where free maintenance is provided is likely to attract extra active travel journeys and stimulate interest in active travel for commuting and leisure purposes. There is scope for developing momentum and campaigns for more active travel and establishment of an active community which could create a supportive network of walkers and cyclists that could meet and encourage each other to travel actively. Developing a calendar of events is likely to attract people who do not usually walk or cycle to do so for either charity or fun events, showing the potential for participating more regularly. A regular programme of events could be an excellent stepping stone for inducing long term active travel choices.  This action is likely to have positive impacts related to its implementation. Specific impacts are related to the following environmental factors: <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b> – Positive impacts are anticipated by developing and promoting active travel events throughout East Dunbartonshire. Additional promotion and awareness raising of the active travel network and active travel alternatives are intended to extend beyond the events themselves and promote active travel as a realistic alternative to vehicular based journeys for residents, commuters and visitors to East Dunbartonshire. Through the promotion of more sustainable forms of transport infrastructure there is potential for this									







	<p>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.</p> <p>There are likely to be both positive and negative potential effects in relation to:</p> <ul style="list-style-type: none"><li>➤ <b>Cultural Heritage and Biodiversity, Flora &amp; Fauna</b> – 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.</li><li>➤ <b>Soil &amp; Geology and Water Quality</b> – 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:<ul style="list-style-type: none"><li>- Erosion or damage to soil, land contamination, soil compaction from heavy machinery</li><li>- Temporary discharges, run off or drainage issues if necessary works are carried out in close proximity to watercourses.</li></ul></li></ul> <p><b>Proposed Mitigation:</b></p> <p><b>Cultural Heritage</b></p> <ul style="list-style-type: none"><li>- 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.</li></ul> <p><b>Biodiversity, Flora &amp; Fauna</b></p> <ul style="list-style-type: none"><li>- Minimise tree, vegetation or topsoil removal.</li><li>- Potential Protected Species Surveys, Licences or mitigation if considered necessary to avoid adverse impacts.</li><li>- Control and treatment of surface runoff.</li></ul> <p><b>Soil &amp; Geology</b></p> <ul style="list-style-type: none"><li>- Implement soil erosion prevention measures outlined in good practice guidance</li><li>- Minimise topsoil removal.</li><li>- Pre-construction surveys and application of good practice.</li></ul> <p><b>Water Quality</b></p> <ul style="list-style-type: none"><li>- Control and treatment of surface runoff.</li><li>- Use of construction SUDS and the adoption of best practices to avoid pollution of watercourses.</li></ul>										
<div>Proposed Action 2.19 Alternative 2</div>	<table><tr><td>+</td><td>+/-</td><td>+/-</td><td>?/-</td><td>+</td><td>?/-</td><td>+</td><td>+</td><td>+</td></tr></table> <p><b>Proposed Action:</b> 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.</p> <p><b>Assessment Commentary:</b> 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.</p> <p>The anticipated effects of this action are likely to be mainly positive in nature, particularly related to the following environmental factors:</p> <ul style="list-style-type: none"><li>➤ <b>Population and Human Health, Material Assets, Landscape, Air Quality and Climatic factors</b> – 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.</li></ul>	+	+/-	+/-	?/-	+	?/-	+	+	+	
+	+/-	+/-	?/-	+	?/-	+	+	+			

	<p>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.</p> <p>There are likely to be both positive and negative potential effects in relation to:</p> <ul style="list-style-type: none"><li>➤ <b>Cultural Heritage and Biodiversity, Flora &amp; Fauna</b> – 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.</li><li>➤ <b>Soil &amp; Geology and Water Quality</b> – 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:<ul style="list-style-type: none"><li>- Erosion or damage to soil, land contamination, soil compaction from heavy machinery</li><li>- Temporary discharges, run off or drainage issues if necessary works are carried out in close proximity to watercourses.</li></ul></li></ul> <p><b>Proposed Mitigation:</b></p> <p><b>Cultural Heritage</b></p> <ul style="list-style-type: none"><li>- 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.</li></ul> <p><b>Biodiversity, Flora &amp; Fauna</b></p> <ul style="list-style-type: none"><li>- Minimise tree, vegetation or topsoil removal.</li><li>- Potential Protected Species Surveys, Licences or mitigation if considered necessary to avoid adverse impacts.</li><li>- Control and treatment of surface runoff.</li></ul> <p><b>Soil &amp; Geology</b></p> <ul style="list-style-type: none"><li>- Implement soil erosion prevention measures outlined in good practice guidance</li><li>- Minimise topsoil removal.</li><li>- Pre-construction surveys and application of good practice.</li></ul> <p><b>Water Quality</b></p> <ul style="list-style-type: none"><li>- Control and treatment of surface runoff.</li><li>- Use of construction SUDS and the adoption of best practices to avoid pollution of watercourses.</li></ul>	
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