

## Appendix 5: SEA Transport Options Assessments

### AREA WIDE

Theme: Public Transport

Options and Alternatives	SEA ENVIRONMENTAL FACTORS									SEA Preferred Option
	Population and Human Health	Cultural Heritage	Biodiversity, Flora and Fauna	Soil and Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	
<b>Option Assessment</b>										
Option 1 Alternative 1 ✓	+/++	X	X	X	X	X	+	+	+/-	✓
<p><b>Proposed Option: Continue to deliver bus stop and shelter improvements across East Dunbartonshire in partnership with SPT.</b> Improvements may include but are not limited to provision of improved footways, high access kerbs, tactile paving and solar lighting units where appropriate.</p>										
<p><b>Assessment Commentary:</b> Bus stop and shelter improvements, in general, will contribute to local bus infrastructure enhancements on a medium to long term basis with direct positive and potentially significantly positive impacts to <b>Population and Human Health</b> as it aims to provide valuable assistance and improvements for the overall passenger experience. This is likely to encourage greater use of bus travel in an area where bus patronage is lower than the national averages, particularly in more rural locations or in areas where access to rail stations are car is limited. This is likely to improve the effectiveness and functionality of bus travel as well as the attractiveness as a sustainable travel mode. There is also likely to be secondary positive impacts on <b>Climatic Factors, Air Quality and Material Assets</b> in terms of encouraging a modal shift in transportation to a more sustainable network and support sustainable travel agendas in its role towards reducing air pollution and improving air quality.</p> <p>Whilst the proposed improvement techniques are relatively small-scale there may be negative impacts to <b>Material Assets</b> in terms of waste and construction impacts and there may be minor short-term disruptions to routes and use of bus stops and shelters.</p>										



Option 1 Alternative 2	+/0	X	X	X	X	X	X	X	X	X
	<b>Proposed Option: Continue to provide essential maintenance and cleaning on bus infrastructure.</b>									
	<b>Assessment Commentary:</b> This option would be carried out as part of an on-going agreement between East Dunbartonshire Council and SPT at a regional and local level which will ensure that bus infrastructure remains at a reasonable standard to ensure that infrastructure does not deteriorate and discourage the use of buses in East Dunbartonshire. However, the benefits to local communities ( <b>Population and Human Health</b> ) is only likely to be minor positive or neutral in nature as the option limits the possibility of improvements which can either discourage or prevent further encouragement of bus patronage. This would also not promote sustainable transport modes in the way improvements to bus stops and shelters would.									
<b>Option Assessment</b>										
Option 2 Alternative 1 ✓	+ / + +	X	X	X	X	X	+ / + +	+	+	
	<b>Proposed Option: Deployment of Real Time Passenger Information (RTPI) systems across East Dunbartonshire.</b>									
	<b>Assessment Commentary:</b> The deployment of Real Time Passenger Information (RTPI) across the area at bus stops and shelters is anticipated to promote bus travel as an attractive sustainable mode of transport which in turn is likely to promote a realistic alternative to private car use. As RTPI will provide enhanced reporting data and bus performances there are minor positive impacts, with the potential for significant positive impacts, to <b>Population and Human Health</b> as buses are likely to become more reliable and each community in East Dunbartonshire will benefit from this intervention. In addition, this option may lead to secondary minor positive impacts to <b>Air Quality, Climatic Factors and Material Assets</b> due to a modal shift towards a more sustainable network, reducing traffic and associated emissions and contributing to local climate change and air quality agendas.									
Option 2 Alternative 2	+	X	X	X	X	X	+ / + +	+	+	
	<b>Proposed Option: Deliver Real Time Passenger Information on the A81 and A803 corridors</b>									
	<b>Assessment Commentary:</b> Similarly to the previous option this alternative is likely to result in minor positive impacts to <b>Population and Human Health</b> by promoting a more reliable and attractive network of sustainable bus travel but with particular benefits to those communities that utilise both the A81 and A803 for leisure and commuting purposes. This is also likely to result in a more reliable bus network, promoting a change in less car-based travel and reducing associated pollutants demonstrating positive impacts to <b>Air Quality, Climatic Factors and Material Assets</b> . There may also be potential significant effects to <b>Air Quality</b> as greater bus use and less car use will help to reduce the risk of poor air quality along these routes which both have a designated AQMA at Canniesburn Toll and Bishopbriggs Cross.									

	<p>Whilst the delivery of the RTP1 system on these two corridors will provide benefits to some of the local communities in Milngavie, Bearsden and Bishopbriggs with some benefits environmentally, this option is limited in that it fails to provide a uniform, reliable service across the whole of East Dunbartonshire; several key routes and local communities will not benefit from increased information provision.</p>									
<b>Option Assessment</b>										
<p>Option 3 Alternative 1 ✓</p>	+	X	X	X	X	X	X	+	+	✓
<p><b>Proposed Option: City Deal Bus Infrastructure Fund</b>          Work with SPT to implement improvements to radial routes where appropriate through funds that become available via the city deal bus infrastructure fund.</p> <p><b>Assessment Commentary:</b>          This option will have a direct impact on continual improvement of bus infrastructure and facilities across the whole of the Council area which will have positive impacts for the local <b>Population and Human Health</b> in terms of increasing the attractiveness of public transport for users and bettering opportunities to be able to travel and access other areas within East Dunbartonshire and elsewhere, such as neighbouring Glasgow. There is also likely to be greater encouragement of the benefits of a more sustainable transport network and contribute towards a cultural change in transport behaviours which will have a minor positive impact on <b>Climatic Factors and Material Assets</b>.</p>										
<p>Option 3 Alternative 2</p>	+	X	X	X	X	X	X	+	+	
<p><b>Proposed Option: Allocate capital funding to improve bus infrastructure</b></p> <p><b>Assessment Commentary:</b>          Similarly to the first Option, this alternative would allow investment in local bus infrastructure which will have will have positive impacts for the local <b>Population and Human Health</b> in terms of increasing the attractiveness of public transport for users and bettering opportunities to be able to travel and access other areas within East Dunbartonshire and elsewhere, such as neighbouring Glasgow. There is also likely to be greater encourage of the benefits of a more sustainable transport network and contribute towards a cultural change in transport behaviours which will have a minor positive impact on <b>Climatic Factors and Material Assets</b>.</p>										

Option Assessment											
Option 4 Alternative 1 ✓	+	X	X	X	X	X	X	?/+	?/+	?/+	✓
	<p><b>Proposed Option: Support greater synchronisation of bus and rail timetables at rail stations.</b></p> <p><b>Assessment Commentary:</b>            In general it is anticipated that this option will promote more seamless transfers between bus and rail transportation which is likely to improve overall passenger experience, inducing a modal shift in transport to a more sustainable network and encouraging greater public transport use with improved connectivity which is likely to offer minor positive benefits to <b>Population and Human Health</b>. Whilst this is also likely to have a minor positive impact on <b>Climatic Factors, Air Quality and Material Assets</b> in terms of encouraging reduced vehicular traffic, emission and contributions to a more sustainable network within East Dunbartonshire the full nature of the effects are unknown at this stage as the nature of the action is such that it will be externally managed and facilitated by transport groups such as Transport Scotland and SPT.</p> <p>It is considered that there are no reasonable alternatives to this option as timetabling of rail and bus services are the responsibility of private commercial operators. Therefore the Council has limited power to influence the option directly but it can contribute to support and highlight the benefits of this option.</p>										
Option Assessment											
Option 5 Alternative 1 ✓	<b>Proposed Option: Edinburgh Glasgow Improvement Programme (EGIP)</b>										✓
	<p><b>Assessment Commentary:</b>            It is anticipated that the EGIP programme of projects will generate multiple benefits for East Dunbartonshire residents and stimulate economic growth in central Scotland generally including journey time savings and increased capacity between Edinburgh and Glasgow and the re-development of Queen Street Station is likely to accelerate modal shift and enhance the passenger experience for rail users. However, this is an option that is driven as a national strategic project so it has been determined that it is not necessary to assess it at this stage and there is no reasonable alternative to this option.</p>										

Theme: Roads

Options and Alternatives	SEA ENVIRONMENTAL FACTORS									SEA Preferred Option
	Population and Human Health	Cultural Heritage	Biodiversity, Flora and Fauna	Soil and Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	

Option Assessment										
Option 6 Alternative 1 	+	X	X	X	X	X	+	+	+	
	<p><b>Proposed Option: Investigate the feasibility of introducing a Car Club in East Dunbartonshire.</b>  A car club is a membership based scheme that provides members access to pay-as-you-drive vehicles. These vehicles can be accessed at any time and are available from dedicated spaces near to residential areas and places of work.</p> <p><b>Assessment Commentary:</b>  The introduction of a Car Club in East Dunbartonshire is likely to have minor positive impacts on <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b> including the following:</p> <ul style="list-style-type: none"> <li>• Greater encouragement of more sustainable travel habits particularly for more infrequent car users;</li> <li>• Promotion of an overall more sustainable network in East Dunbartonshire by highlighting the benefits of a realistic mode of transport to replace car use;</li> <li>• Potential decrease in personal car ownership;</li> <li>• A reduction in shorter and unnecessary car journeys and total number of cars on the road. This can reduce overall traffic and congestion and reduce the impact on air quality. This will be particularly beneficial in areas such as Bearsden and Bishopbriggs where Air Quality Management Areas (AQMA) has been designated; and,</li> <li>• Potential opportunities for Council workers to utilise the Car Club during working hours and public use during evening hours to maximise utilisation of the scheme.</li> </ul>									
Option 6 Alternative 2	?	X	X	X	X	X	?	?	?	
	<p><b>Proposed Option: Increase Council pool car provision</b></p> <p><b>Assessment Commentary:</b>  The overall nature of the effects of this alternative are unknown as they are dependent on factors such as pool car usage, availability of pool cars outwith Council operating hours and the type of pool car provision provided, although it has been determined that the environmental factors likely to be impacted are <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b>. Although the use of pool cars as an alternative to private car usage has the potential to cut down the number of individual cars on the roads, including benefits to reduced traffic levels, congestion and emissions levels, as use of pool cars will encourage car-sharing there are assumptions made that the use of pool cars will be by multiple people for each journey and the overall positive impact is likely to be benefited by the use of electric cars rather than traditional petrol/diesel vehicles. In addition, use of the pool cars is likely to be restricted to work-related journeys, requiring workers still to travel to work either by private car use or public transport.</p>									
Option 6 Alternative 3	+/0	X	X	X	X	X	+/0	+/0	+/0	
<b>Proposed Option: Increase bus service provision in the evenings</b>										

	<p><b>Assessment Commentary:</b>          Whilst there is the potential that this alternative option will present minor positive impacts to <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b> in terms of contributing to potential increased connectivity for local communities and better access to other settlements in East Dunbartonshire, and potentially cross-boundary to places such as neighbouring Glasgow. If successful, increased evening provision will contribute to a more sustainable transport network within the local area and to a reduction in emissions and reducing the negative effects of car travel on climate change. However, there are some limitations to this alternative which could also neutralise the environmental effects on these factors. The current commercial bus market supports bus journeys in settlements where there is demand. However, East Dunbartonshire has relatively low bus patronage and evening provision may not suit the demand and also will not contribute to a more sustainable network throughout the day with overall benefits.</p>									
<b>Option Assessment</b>										
Option 7 Alternative 1 ✓	<p><b>Proposed Option: Review of procedures and conditions of taxi firm licensing in East Dunbartonshire</b></p> <p><b>Assessment Commentary:</b>          Although it is recognised that this option could influence smarter driving, less vehicle idling and improved engine/taxi conditions with benefits primarily for a reduction in emissions and impacts to climate change to an extent, it has been determined that at this stage in the assessment this option is not subject to an environmental assessment due to the procedural/operational nature of the option.</p>								✓	
Option 7 Alternative 2	<p><b>Proposed Option: Do minimum</b></p> <p><b>Assessment Commentary:</b>          It has been determined that this alternative option is also not subject to an environmental assessment as it will continue to support current taxi licensing procedures in East Dunbartonshire as a 'do minimum' option.</p>									
<b>Option Assessment</b>										
Option 8 Alternative 1 ✓	+	X	X	X	X	X	+	+	X	✓
	<p><b>Proposed Option: Vehicle Idling Enforcement</b></p> <ul style="list-style-type: none"> <li>• The Council's Environmental Health Officers will continue to carry out regular engine idling patrols and enforcement, including buses and where appropriate issue financial penalties for non-compliance</li> <li>• Regular vehicle idling awareness raising campaigns are undertaken with distribution of leaflets and advice</li> <li>• Continue to investigate complaints and take any action necessary</li> <li>• Continue to take part in joint vehicle idling initiatives with Police Scotland</li> <li>• Continue to erect appropriate signage</li> </ul> <p><b>Assessment Commentary:</b></p>									

	<p>It is considered that ensuring that there is adequate enforcement against vehicle idling throughout the whole of East Dunbartonshire will present minor positive impacts to <b>Population and Human Health, Air Quality and Climatic Factors</b> including the following impacts:</p> <ul style="list-style-type: none"> <li>• Better understanding of the negative impacts associated with vehicle idling including the role it plays in air quality pollution, the localised climate change impacts and poor health;</li> <li>• A potential deterrent for non-domestic vehicles to idle, such as buses, taxis and deliveries, due to patrols and financial penalties; this could be particularly beneficial in town centres, areas of high population and near schools/nurseries; and,</li> <li>• Potential reduction in emissions that contribute to poor air quality, particularly in AQMAs and near schools which in turn can contribute towards a reduction in air pollution related illnesses such as respiratory disease and asthma, for example, and overall improvements to health and wellbeing at a local level as part of a more pleasant environment.</li> </ul>									
<p>Option 8 Alternative 2</p>	<p><b>Assessment Commentary:</b> It is considered that there are no reasonable alternatives as monitoring is current practice and will continue regardless of whether a new option is implemented or not.</p>									
<p><b>Option Assessment</b></p>										
<p>Option 9 Alternative 1</p> <p style="text-align: center;">✓</p>	+	X	X	X	X	X	+	+	X	✓
<p><b>Proposed Option: Vehicle Emissions testing</b> Continue to carry out vehicle emission testing through partnership working with Police Scotland, North Lanarkshire Council and South Lanarkshire Council</p>										
<p><b>Assessment Commentary:</b> It is anticipated that this option will raise an awareness of the environmental impacts of vehicle emissions for reducing the quality of air which in turn can encourage either less use of vehicles or upgrades to vehicles to ensure alignment with emissions standards. In addition, this option will entail fixed penalties to be given to owners of vehicles which are not meeting emissions standards and will further discourage the use of older or polluting vehicles, presenting minor positive impacts to <b>Population and Human Health</b>. Working with North Lanarkshire and Police Scotland will also ensure that the benefits to communities are also promoted on a cross-boundary level. This will likely contribute to secondary minor positive impacts for improving local <b>Air Quality</b> and reducing the negative effects of air pollutants on <b>Climatic Factors</b> such as increased urban heating and increased risk of flooding and surface-water run-off.</p>										
<p>Option 9 Alternative 2</p>	-	X	X	X	X	X	-/-	-/-	X	
<p><b>Proposed Option: Reduce the effort of emissions testing</b></p>										
<p><b>Assessment Commentary:</b> Reducing emissions testing fails to proactively ensure that vehicles in East Dunbartonshire are tested regularly. This could result in further issues related to <b>Air Quality</b> and pollution, negative impacts to <b>Climatic Factors</b> and will discourage positive</p>										

	changes in behaviour in order to address local air quality problems. The negative impacts of air quality will not be dealt with through this option and has the potential to exacerbate the issues.									
<b>Option Assessment</b>										
Option 10 Alternative 1	+	X	X	X	X	X	+	++	X	
✓	<b>Proposed Option: Fleet Replacement Programme</b>									
	<b>Assessment Commentary:</b> The options includes the following measures: <ul style="list-style-type: none"> <li>• Continue to operate a 3-5 year vehicle lease replacement programme with minimum Euro 6 engine standards.</li> <li>• Increase availability of electric fleet vehicles</li> <li>• Increase electric vehicle charging points for fleet vehicles</li> </ul> <p>Through the implementation of these measures it will ensure that the Council's vehicle fleet are high quality, efficient and low emitting vehicles. Increased availability and infrastructure to support electric vehicles offers zero emissions vehicles for short journeys. Overall this options will provide positive impacts on <b>Population and Human Health, Air Quality and Climatic Factors</b> through a reduction in aggregate carbon emissions from Council vehicular travel, improved air quality with a particular relevance at peak times and in existing AQMA's or areas with high congestion issues and reduce risks to health by improving community wellbeing and reducing traffic levels and related emissions.</p>									✓
Option 10 Alternative 2	-	X	X	X	X	X	-	-	X	
	<b>Proposed Option: Replace Council fleet when vehicles fail standard tests.</b>									
	<b>Assessment Commentary:</b> This approach will ensure that fleet vehicles are replaced when they are assessed to be failing standard testing. Through this option there is a risk of higher carbon emissions and less fuel efficient vehicles being used within the Council fleet. Older and inefficient vehicles use more fuel and have higher average costs related to their running maintenance programmes.									
<b>Option Assessment</b>										
Option 11 Alternative 1	+	X	X	X	X	X	+	+	X	
✓	<b>Proposed Option: Fuel efficient driver training</b>									
	<b>Assessment Commentary:</b> This option would be focussed on the provision of fuel efficient driving training sessions for all appropriate Council employees. The training will ensure that Council drivers are aware of potential cost savings, environmental benefit of efficient driving of council vehicles. Benefits include: <ul style="list-style-type: none"> <li>• Typical annual savings of £200-250 for a car driver (more for a van).</li> </ul>									✓



	<ul style="list-style-type: none"> <li>• Reduced likelihood of accidents</li> <li>• Reduced wear and tear on tyres, brakes and clutches</li> <li>• Reduced carbon emissions</li> </ul> <p>Through the anticipated benefits (listed above) it is likely to result in positive impacts in relation to <b>Population and Human Health, Air Quality and Climatic Factors</b> through reduced carbon emissions, fuel consumption and risk of accidents.</p>											
Option 11 Alternative 2	<table border="1"> <tr> <td style="background-color: #92d050;">+</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="background-color: #f08080;">-</td> <td style="background-color: #f08080;">-</td> <td style="text-align: center;">X</td> </tr> </table> <p><b>Proposed Option: Continue only with current testing procedures</b></p> <p><b>Assessment Commentary:</b> This option provides assurance that all Council drivers meet the required standards through examination in terms of safety but it will not educate drivers on fuel efficient driving. This would be a missed opportunity and has the potential to result in negative impacts to <b>Air Quality and Climatic Factors</b></p>	+	X	X	X	X	X	X	-	-	X	
+	X	X	X	X	X	X	-	-	X			
<b>Option Assessment</b>												
Option 12 Alternative 1  ✓	<table border="1"> <tr> <td style="background-color: #92d050;">+</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="background-color: #00b050;">++</td> <td style="background-color: #00b050;">++</td> <td style="text-align: center;">X</td> </tr> </table> <p><b>Proposed Option: Introduce ECO Stars Fleet recognition Scheme<sup>1</sup> for council fleet (large vehicles), commercial HGVs, buses, coaches, vans and taxis operating in East Dunbartonshire.</b></p> <p><b>Assessment Commentary:</b> ECO Stars encourages and helps operators of HGVs, buses, coaches, vans and taxis to run fleets in the most efficient and environmentally friendly way. The scheme provides recognition for best operational practices, and guidance for making improvements. The ultimate aim is to reduce fuel consumption which naturally leads to fewer vehicle emissions and has the added benefit of saving operators money. The scheme also provides incentives to commercial firms operating polluting vehicles in East Dunbartonshire to invest in cleaner engines, driver training, telematics systems to optimise performance and minimise mileage. The accreditation scheme offers positive publicity for commercial firms and potential cost savings and lower emissions and cleaner air in the communities the firms operate in.</p> <p>This option is likely to result in positive impacts in relation to <b>Population and Human Health, Air Quality and Climatic Factors</b> through reduced carbon emissions, fuel consumption and reduced risk to air quality through impacts from the Council managed fleet as well as commercial vehicles operating within East Dunbartonshire. This option will ensure that the Council embraces the scheme and will show the Council leading by example in utilising vehicles with optimum engine standards.</p>	+	X	X	X	X	X	X	++	++	X	✓
+	X	X	X	X	X	X	++	++	X			

<sup>1</sup> <http://www.ecostars-uk.com/> The scheme received a Highly Commended Award in the Sustainability category at the CIHT Awards 2016.

Option 12 Alternative 2	+	X	X	X	X	X	+/-	+/-	X		
	<b>Proposed Option: Do minimum – continue to carry out the current committed transport schemes and projects but not focus on commercial firms emissions</b>										
	<b>Assessment Commentary:</b> This option is likely to present similar impacts to those described in the assessment for Alternative 1. However, continuing without a focus on commercial emissions is likely to reduce the significant nature of the positive effects for <b>Air Quality and Climatic Factors</b> with the potential to result in negative impacts depending on the overall emissions rates of commercial firms in East Dunbartonshire.										
<b>Option Assessment</b>											
Option 13 Alternative 1  ✓	+	X	X	X	X	X	+	+	+	✓	
	<b>Proposed Option: Promote EDC Liftshare scheme</b>										
	<b>Assessment Commentary:</b> Implementing a Liftshare scheme amongst Council employees will help to reduce traffic levels to work, congestion, journey times, parking pressures, travel costs and car wear-and-tear. This will primarily have minor positive impacts on <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b> by contributing to local air quality improvements and encouraging more sustainable modes of transport through a change in behaviour. The significance of effects will be dependent on the uptake of this scheme amongst employees.										
Option 13 Alternative 2	X	X	X	X	X	X	X	X	X		
	<b>Proposed Option: Do minimum</b>										
	<b>Assessment Commentary:</b> Doing minimum (not promoting a Council Liftshare scheme) will result in a missed opportunity to help reduce car-related emissions and a behavioural change towards a more sustainable approach. However, the effects of a 'do minimum' approach are unlikely to result in any effects to the environmental factors.										
<b>Option Assessment</b>											
Option 14 Alternative 1  ✓	+	X	X	X	X	X	X	X	+	✓	
	<b>Proposed Option: On-going road maintenance including;</b> - winter service provision - auditing and maintenance of the road network (carriageways and footways) - Road Asset Management Plan (RAMP)										
	<b>Assessment Commentary:</b>										

	<p>In general, it is anticipated that this option will have no effects on the local environment. However there is the potential for minor positives on <b>Population and Human Health</b> as winter service provision will enable the roads to be as safe as possible for travelling around East Dunbartonshire. This option will also help to manage bus and train operation where possible and enable communities to continue to commute.</p> <p>Furthermore, auditing and maintenance of the road network - As the road managing authority for non-trunk roads, the Council is responsible for annual auditing of the road network. From the auditing programme a scoring system rates roads according to potential safety risks and a programme of annual maintenance is developed prioritising the greatest safety risks. This will present minor positive impacts for <b>Population and Human Health and Material Assets</b> in terms of ensuring that the road network within East Dunbartonshire is safe for use and maintained to a standard that does not reduce the functionality of the existing transport network. The Road Asset Management Plan (RAMP) will contribute to further management of a safe and usable road network across East Dunbartonshire.</p> <p>This is a statutory requirement and it is therefore considered that there are no reasonable alternatives.</p>									
<b>Option Assessment</b>										
<p>Option 15 Alternative 1</p> <p>✓</p>	+	X	X	X	X	X	X	X	+	✓
<p><b>Proposed Option: Respond to road defect reports in a timeous manner.</b></p> <p><b>Assessment Commentary:</b> Through the investigation of road defects reported by individuals within East Dunbartonshire, the Council will be able to carry out and rectify defects in a timeous manner. This will present minor positive impacts for <b>Population and Human Health and Material Assets</b> in terms of ensuring that the road network within East Dunbartonshire is safe for use and maintained to a standard that does not reduce the functionality of the existing transport network.</p>										
<p>Option 15 Alternative 2</p>	+/0	X	X	X	X	X	X	X	+/0	
<p><b>Proposed Option: Investigate a proportion of reports based on assessment of seriousness of defect</b></p> <p><b>Assessment Commentary:</b> The anticipated effects of this option are likely to be similar to those of alternative 1. However, not all defects will be dealt with and will only be prioritised depending on how serious they are. This may reduce the positive nature of the effects as taking action on the issues will be dependent on individual perception and not all defects will be addressed in a timely manner, if at all. This could result in duplicated or constant reporting of defects making the Council service less efficient.</p>										

Option Assessment											
Option 16 Alternative 1  ✓	+	X	X	X	X	X	X	X	X	X	✓
	<p><b>Proposed Option:</b> Carry out a 'Pothole Blitz' programme on an ad hoc basis, to fill in potholes and ensure safety of road surfaces, when budget constraints allow.</p> <p><b>Assessment Commentary:</b> Carrying a 'Pothole Blitz' will ensure that all reported potholes are removed in a systematic approach through a dedicated programme. The concentrated nature of operation will ensure economies of scale are delivered. This will have a minor positive impact on <b>Population and Human Health</b> by contributing to a safer road network whereby incidents such as car damage are reduced.</p>										
Option 16 Alternative 2	+	X	X	X	X	X	X	X	X	X	
	<p><b>Proposed Option:</b> Carry out pothole repairs when the roads maintenance programme allows.</p> <p><b>Assessment Commentary:</b> This approach would address some potholes to be repaired whilst other work programmes are running concurrently. Whilst this alternative will present similar impacts as alternative 1 the positive nature of the effects are likely to be reduced by the fact that minor potholes reported might be ignored or not considered a priority. This can cause additional road defects and is likely to be less cost-effective over time.</p>										
Option Assessment											
Option 17 Alternative 1  ✓	+	X	X	X	X	X	?/+	?/+	?/+	✓	
	<p><b>Proposed Option:</b> Provision of low level cycle signals at traffic signals at carriageway crossings where appropriate</p> <p><b>Assessment Commentary:</b> Implementing low level cycle signals at traffic signals at carriageway crossings will primarily benefit cyclists as well as pedestrians within East Dunbartonshire by contributing to a safer environment. These signals will give cyclists priority on the roads which will help to integrate cycling infrastructure with other road-based infrastructure. This is likely to encourage greater participation in cycling as a means of active travel, demonstrating minor positive impacts to <b>Population and Human Health</b>. There is the potential that this option could result in positive impacts to <b>Air Quality, Climatic Factors and Material Assets</b> in terms of the potential outcomes of this in promoting a more sustainable transport network including less frequent car use.</p>										
Option 17 Alternative 2	+	X	X	X	X	X	?/+	?/+	?/+		
	<p><b>Proposed Option:</b> Implement toucan crossings at all signalised junctions or crossing where width allows</p> <p><b>Assessment Commentary:</b> As above commentary for Option 17 Alternative 1.</p>										

Option Assessment											
Option 18 Alternative 1	+	X	X	X	X	X	X	?/+	?/+	?/+	✓
	<p><b>Proposed Option: Provision of Advanced Stop Lines (ASLs), with lead in Cycle Lanes at signal controlled junctions where appropriate</b></p> <p><b>Assessment Commentary:</b> Through the provision of Advanced Stop Lines (ASLs) and lead in cycle lanes at new control junctions, it will primarily benefit cyclists as well as pedestrians within East Dunbartonshire by contributing to a safer and healthier environment. These proposed improvements will provide advantages for cyclists in the form of a visible and clear route to bypass queuing traffic and provide a safer positioning point for cyclists turning right at junctions. It will also give cyclists priority on the roads which will help to integrate cycling infrastructure with other road-based infrastructure. This is likely to encourage greater participation in cycling as a means of active travel, demonstrating minor positive impacts to <b>Population and Human Health</b>. There is also the potential that this option could result in positive impacts to <b>Air Quality, Climatic Factors and Material Assets</b> in terms of the potential outcomes of this in promoting a more sustainable transport network including less frequent car use.</p>										
Option 18 Alternative 2	?/-	X	X	X	X	X	X	?/-	?/-	?/-	
	<p><b>Proposed Option: Do minimum</b></p> <p><b>Assessment Commentary:</b> Through this proposed option, it will essentially retain the current business as usual for junction development going forward. This option will not be in line with encouraging active travel alternatives, healthy habits and outdoor leisure and is likely to encourage additional vehicular travel. As a result, there is potential for minor negative impacts on <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b> in terms of potential outcomes.</p>										
Option Assessment											
Option 19 Alternative 1	<p><b>Proposed Option: Continue to support trunk road improvements out-with the EDC area and highlight benefits to East Dunbartonshire residents</b></p> <p><b>Assessment Commentary:</b> Whilst this option has the potential to generate multiple benefits for East Dunbartonshire residents and stimulate economic growth in central Scotland generally and encourage journey time savings and increase the competitiveness of the region more widely with knock on benefits for local economies, the option is related to areas out with the EDC boundary and will focus on continual support of programmed options. Therefore it has been determined that this option will not require to be assessed at this stage and there are no reasonable alternatives.</p>										✓

Option Assessment											
Option 20 Alternative 1  ✓	+	X	X	X	X	X	X	X	X	X	✓
	<p><b>Proposed Option: Promote road safety through schools</b> Encouraging young people to become Junior Road Safety Officers (JRSO)</p> <p><b>Assessment Commentary:</b> Promoting road safety in schools as part of Junior Road Safety Officer (JRSO) Projects will directly benefit <b>Population and Human Health</b> with a particular focus on younger people by giving them the knowledge and understanding of good practice associated with walking and cycling which is also likely to encourage safe behaviour.</p>										
Option 20 Alternative 2	?/+	X	X	X	X	X	X	X	X	X	
	<p><b>Proposed Option: Provide signage near schools warning drivers of children crossing</b></p> <p><b>Assessment Commentary:</b> This alternative option would provide visual warnings to drivers to consider road safety and take consideration of children that might be in the vicinity. This will be particularly important in areas where there are schools. However, this option is reliant on responsible driving and fails to educate young people of road safety, reducing the potential for positive impacts for <b>Population and Human Health</b>.</p>										
Option Assessment											
Option 21 Alternative 1  ✓	+	X	X	X	X	X	+	+	+	✓	
	<p><b>Proposed Option: Establish a pool bike scheme for EDC employees</b></p> <p><b>Assessment Commentary:</b> A pool bike scheme for employees will enable employees to be able to access other Council offices, carry out site visits, attend meeting etc. without having to rely on personal vehicle use, pool car use or public transport. This has the potential to result in minor positive impacts to <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b> due to the following predicted impacts:</p> <ul style="list-style-type: none"> <li>• Potential improvements to health and wellbeing due to access to bikes for exercise and access to the wider environment;</li> <li>• A reduction in emissions from cars resulting in improvements to air quality, especially in AQMAs, which in turn demonstrates positive effects for the overall impacts of climate change at a local level; and,</li> <li>• A shift in behaviour towards more sustainable modes of transport. This could impact on personal lives as well as within the work culture.</li> </ul> <p>It is considered that there are no reasonable alternatives as this option has been funded by Cycling Scotland.</p>										

Option Assessment											
Option 22 Alternative 1	?/+	X	X	X	X	X	X	X	X	?/+	
✓	<b>Proposed Option: Electronic information signs to warn drivers of delays, accidents or closures.</b>										
	<b>Assessment Commentary:</b> In general, this option is anticipated to have no significant environmental impacts. However, there is the potential that implementing electronic information signs where appropriate will present minor positive impacts on <b>Population and Human Health and Material Assets</b> in terms of contributing to an efficient transport network within East Dunbartonshire which allows people to continue with their travel plans with minimum disruption and through the intervention of useful information.  It is considered that there are no reasonable alternatives to this existing option as this is an established, effective option.										✓
Option Assessment											
Option 23 Alternative 1	+	X	X	X	X	X	+/++	+/++	+		
✓	<b>Proposed Option: Continue to roll out Urban Traffic Control Systems, such as SCOOT, to improve traffic management</b>										
	<b>Assessment Commentary:</b> Continuing the roll out of Urban Traffic Control Systems in the rest of the East Dunbartonshire area, where appropriate, will have a direct influence on traffic flow which in turn will directly positively impact on <b>Air Quality, Climatic Factors, Material Assets and Population and Human Health</b> in terms of reducing congestion and associated emissions which contribute to urban heating and poor air quality, especially in areas such as Bishopbriggs and Bearsden where an AQMA is designated, improving journey times and contributing to efficient transport networks. SCOOT systems can also help to detect incidents which can increase safety on the roads and further ensure that the transport network operates with minimum issues. For bus travel, this option will help to give buses priority on the road which will help to improve bus journey times and increase the attractiveness of bus as a sustainable mode of transport.										✓
Option 23 Alternative 2	+	X	X	X	X	X	+	+	+		
	<b>Proposed Option: Implement MOVA systems at individual junctions across the authority area</b>										
	<b>Assessment Commentary:</b> Whilst this alternative is likely to present some minor positive impacts to <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b> in terms of increasing traffic flow at individual junctions in East Dunbartonshire, where appropriate, which can contribute to a more efficient transport network, the option does not respond to wider traffic patterns unlike alternative 1 which reduces opportunities to improve traffic flow particularly at pressure points which can limit the positive nature of the impacts.										

**Option Assessment**

Option 24 Alternative 1	+ / + +	? / -	? / -	? / -	+	? / -	+ / + +	+ / + +	+ / -
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**Proposed Option: Road options to enforce/reduce speeds and enhance appeal of sustainable travel including:**

- Carriageway marking / localised narrowing,
- Place making initiatives to town centre environments (Options include 20mph zones, appropriate street furniture, street lighting and walking) and cycling facilities at and to new developments)

**Assessment Commentary:**  
 There are likely to be a number of minor positive impacts across the East Dunbartonshire Council-wide area as a result of delivering this option for **Population and Human Health, Landscape, Air Quality, Climatic Factors and Material Assets**, such as the following:

- Carriageway marking and localised narrowing would help to naturally discourage speeding which could be particularly beneficial for improving safety for pedestrians, especially in busier town environments or where path provision is not as well integrated into the road network. Improved safety for pedestrians and cyclists could also contribute to an increase in active travel participation as an alternative to car travel.
- Provision of appropriate street furniture, street lighting and cycling facilities in town centres and to/from new developments will help to contribute to a shift towards a more sustainable transport network with appropriate provision and infrastructure available to enable individuals to participate more regularly in active travel. These place making initiatives are also likely to have a direct influence on creating a more pleasant and visually appealing environment, especially for local, shorter journeys. This can have secondary positive impacts to tourism, active travel participation and economic growth.
- As this option is anticipated to encourage greater active travel participation and a shift towards a more sustainable transport network, the option is likely to demonstrate a commitment to reducing localised air and noise pollution associated with vehicular transport and idling especially in town centre locations and near to East Dunbartonshire’s two AQMA (Bishopbriggs and Bearsden Cross). This will also promote a change in culture and behaviour to address the risks of climate change at a local level including the urban heat island effect, increased risk of pluvial and fluvial flooding and air pollution which could be significantly beneficial.

Although this option has the potential to result in positive environmental benefits there is also the possibility of negative impacts to arise as a result. Further information will be required to determine the full nature of the impacts, but there is the potential that alterations to the width of carriageways will require changes to the existing infrastructure which has the potential to create construction waste, remove and/or disrupt habitats and species, increase the risk of habitat fragmentation,





	disturb valued soil assets such as peat and impact on water due to pollution run off in the process. Impacts in Conservation Areas or near cultural heritage assets should also be considered.									
Option 24 Alternative 2	+	X	X	X	X	X	+/-	+/-	X	
	<b>Proposed Option: Introduce 20 mph zones along the majority of the A81 and A803 corridors.</b>									
	<p><b>Assessment Commentary:</b>  This approach would contribute to slowing down traffic and help to reduce noise pollution, contributing towards minor positive impacts to <b>Air Quality and Climatic Factors</b>. In addition, reduced speeds along these main corridors would help to improve safety and redress the balance of priority for different road users as well as improve the pedestrian environment in town centres with positive impacts to <b>Population and Human Health</b>. However, the benefits of 20mph zones along the A81 and A803 have the potential to be counter-productive in comparison to the benefits of reduced speed limits in residential, town centre and school zones as this may increase traffic congestion, especially at pinch points and peak times, and increase journey times. This could reduce the positive nature of the effects to <b>Air Quality and Climatic Factors</b> or even have a negative impact due to potential increased pollution.</p>									

Theme: Parking

Options and Alternatives	SEA ENVIRONMENTAL FACTORS									SEA Preferred Option	
	Population and Human Health	Cultural Heritage	Biodiversity, Flora and Fauna	Soil and Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets		
<b>Option Assessment</b>											
Option 25 Alternative 1  ✓	+ / + +	?	?	?	?	?	+ / + +	+ / + +	+ / + +		
	<p><b>Proposed Option: Assess and improve the current availability of electric vehicle charging infrastructure within East Dunbartonshire</b></p> <p><b>Assessment Commentary:</b>  The number of electric vehicles is expected to increase in the coming decades. Assessing the current infrastructure and ways to improve it can help build a platform for future growths expected in this market and ensuring an adequate number of EV charging points are available to ED residents. This will present minor positive impacts to <b>Material Assets, Population and Human Health, Climatic Factors and Air Quality</b>, with the potential for significant impacts, including:</p> <ul style="list-style-type: none"> <li>A modal shift towards sustainable transport options. Development of the necessary infrastructure throughout East Dunbartonshire is more likely to encourage a change from fuel-powered vehicles to electric.</li> </ul>										✓

	<ul style="list-style-type: none"> <li>Greater access to electric vehicle and related infrastructure has the potential to improve localised air quality particularly in areas of high pollutant levels such as Bearsden Cross and Bishopbriggs, which in turn will contribute to reducing the negative effects of climate change at a local level. This has secondary positive impacts to health and wellbeing.</li> </ul> <p>At this stage in the assessment, the nature of the impacts on the other environmental factors is unknown. This will be dependent on the type and number of infrastructure changes required as well as their location. Factors such as proximity to water bodies, cultural assets, soil assets and natural designations will need to be considered.</p>										
Option 25 Alternative 2	<table border="1"> <tr> <td>0/+</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>+</td> <td>+</td> <td>0/+</td> </tr> </table> <p><b>Proposed Option: Maintain the current Electric Vehicle charging infrastructure</b></p> <p><b>Assessment Commentary:</b> In comparison to Alternative 1, this option is less likely to result in benefits to the environment to the same extent. While maintaining the current infrastructure allows for it to be kept in good working order and keeping up with the latest technology; it fails to take in to account predicted future rises in electric vehicle ownership. This could mean in future that the infrastructure in public spaces is unable to cope with the rise in demand for electric vehicle charging, especially for those who cannot access charging points within their own homes. Therefore positive impacts to <b>Air Quality and Climatic Factors</b> are likely to be minor and impacts to <b>Population and Human Health and Material Assets</b> neutral.</p>	0/+	X	X	X	X	X	+	+	0/+	
0/+	X	X	X	X	X	+	+	0/+			
<b>Option Assessment</b>											
Option 26 Alternative 1	<table border="1"> <tr> <td>?/+</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>+</td> <td>+</td> <td>+</td> </tr> </table> <p><b>Proposed Option: Monitor and review the parking charges brought in to 7 car parks within ED town centres</b></p> <p><b>Assessment Commentary:</b> The anticipated effects of this option are likely to result in minor positive impacts to <b>Air Quality, Climatic Factors and Material Assets</b> as charges in specific Council owned car parks across East Dunbartonshire, which will be during certain operating hours on weekdays, can encourage people to use cars less which in turn can help to reduce traffic levels particularly in town centres, encourage a modal shift towards more sustainable transport and therefore reduce associated pollutants in the atmosphere.</p> <p>At this stage, the level of change expected is unknown and will be dependent on the car parks selected for change. However, there is the potential that increased parking charges will not only generate an income to supplement Decriminalised Parking Enforcement in East Dunbartonshire but encourage long-term parkers to find alternative options such as park &amp; ride or public transport. As this option will still maintain free short-term parking and is likely to discourage long-term parking during the week, shoppers will be encouraged to park and this can help to support local town centre businesses. This could result in minor positive impacts for <b>Population and Human Health</b> in terms of the local economy.</p>	?/+	X	X	X	X	X	+	+	+	✓
?/+	X	X	X	X	X	+	+	+			

Option 26 Alternative 2	-	X	X	X	X	X	-	-	-		
	<b>Proposed Option: Maintain free parking across the authority area</b>										
	<b>Assessment Commentary:</b> In contrast to Alternative 1, this option has the potential to continue to encourage users to drive into towns, particularly on a longer-term basis for work. This can contribute to further emissions and air pollution and discourage a change towards a more active travel and sustainable transport culture. This also has the potential to limit parking space for shoppers and therefore have a negative impact on local businesses.										

BEARSDEN & MILNGAVIE

Theme: Active Travel


Options and Alternatives	SEA ENVIRONMENTAL FACTORS									SEA Preferred Option
	Population and Human Health	Cultural Heritage	Biodiversity Flora and Fauna	Soil and Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	
<b>Option Assessment</b>										
Option 27 Alternative 1  ✓	+++	+	?/+/-	?/-	X	?/-	+	+	+	✓
<p><b>Proposed Option: Increased walking access to Mugdock Country Park</b>                      Investigate the feasibility of creating a new walkable access link from Milngavie to Mugdock Country Park, situated to the north of the town</p>										
<p><b>Assessment Commentary:</b>                      Creating an access link to Mugdock Country Park from Milngavie has the potential to present many positive impacts including following predicated effects:</p> <ul style="list-style-type: none"> <li>• <b>Population and Human Health, Biodiversity, Flora and Fauna and Cultural Heritage</b> – better access to Mugdock Country Park will give local people the opportunity to utilise this greenspace for recreation and leisure whilst encouraging active travel with benefits towards health and wellbeing improvements. Furthermore, there will be links to the West Highland Way which will be beneficial for local tourism and the economy. This option will also provide better opportunities to access our local natural environment. There is the potential for significant effects for <b>Population and Human Health</b> due to the wide range of benefits including access to open space and the wider environment, health related advantages of walking and secondary impacts associated with improvements to the tourism economy locally.</li> <li>• <b>Air Quality, Climatic Factors and Material Assets</b> – walkable routes to the Park will help to promote sustainable modes of transport and reduce the use of cars to access the park. This can help to reduce car-related emissions and impact positively on the local effects of climate change.</li> </ul> <p>Although there are positive impacts likely for the <b>Biodiversity, Flora and Fauna</b> factor, there is the potential for negative impacts to result from access to the environment and potential disturbance or deterioration to important assets such as the</p>										

	SSSI located in the southern 1/3 of the Park. Similar negative impacts for <b>Soil and Geology and Water Quality</b> may occur due to increased footfall and potential deterioration of soil and erosion, affecting the quality of water as a result.									
Option 27 Alternative 2	0	X	0	0	X	X	X	X	X	
	<b>Proposed Option: Maintain current walking infrastructure in Milngavie</b> <b>Assessment Commentary:</b> Maintenance of the existing walking routes in Milngavie is unlikely to have any effects on most of the environmental factors with the potential for neutral impacts to <b>Population and Human Health, Biodiversity, Flora and Fauna and Cultural Heritage</b> . Maintaining routes will provide some opportunities for local people and visitors to access the natural environment, including the West Highland Way, as well as historic assets. However effects are likely to be neutral as this option reduces the effort to improve connectivity and expand on existing networks to encourage better use.									

Theme: Public Transport

Options and Alternatives	SEA ENVIRONMENTAL FACTORS									SEA Preferred Option
	Population and Human Health	Cultural Heritage	Biodiversity, Flora and Fauna	Soil and Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	
<b>Option Assessment</b>										
Option 28 Alternative 1  ✓	<b>Proposed Option: A81 Quality Bus Corridor</b>									
	<b>Assessment Commentary:</b> This option was assessed as part of the environmental assessment of the A81 Route Corridor Study and, as the environmental baseline has not changed significantly, it has been determined that this option will not be subject to an assessment at this stage in order to reduce duplication of assessments.									
Option 28 Alternative 2	+	?	?	?	?	?	+	+	+/-	✓
	<b>Proposed Option: Bus park and ride on a site alongside the A81</b> <b>Assessment Commentary:</b> Creating a bus park and ride alongside the A81 in Bearsden will provide a means to reduce traffic levels around Bearsden and into Glasgow, potential congestion and associated emissions due to the introduction of a more sustainable mode of transport. In addition, a park and ride facility in Bearsden will help to fill the existing gap in terms of access to public transport provision									


	<p>in relation to the current residential properties and planned development at Kilmardinny near Mosshead Road. This has the potential to reduce existing traffic levels along the A81, especially following an influx of people in relation to the Kilmardinny development, and will help to reduce air pollution and emissions levels. Overall, it is anticipated that this proposal would present minor positive environmental effects for <b>Population and Human Health, Material Assets, Climatic Factors and Air Quality</b>. However, this option will require new or changes to infrastructure within a primarily residential area which can disrupt current transport links and significant increase the risk of construction waste, construction traffic and surface-water run-off and release of pollutions to waterbodies and the air, presenting potential negative effects for <b>Material Assets</b>.</p>									
<b>Option Assessment</b>										
<p>Option 29 Alternative 1</p> <p>✓</p>	+/-	-	X	X	-	X	-/+	-/+/-	+	<p>✓</p>
<p><b>Proposed Option: Investigate the design and implementation requirements of parking options at rail stations on the A81 corridor, including:</b></p> <ul style="list-style-type: none"> <li>- increasing the provision of parking spaces at rail stations via decking and at off-site locations</li> <li>- options for increasing parking at rail stations including decking at Milngavie, Westerton and Bearsden and additional parking at Hillfoot for south Kilmardinny per the 2015 &amp; 2018 A81 route corridor studies</li> </ul>										
<p><b>Assessment Commentary:</b></p> <p>The full nature of effects are likely to be dependent on the chosen location for parking both on and off-site. However, there are likely to be negative impacts to <b>Cultural Heritage, Landscape, Air Quality and Climatic Factors</b> in terms of the following effects:</p> <ul style="list-style-type: none"> <li>• Potential detraction from the adjacent Conservation Area status and Townscape Protection Area which is within close proximity of Milngavie railway station car park and the Old Bearsden Conservation Area in which the Bearsden railway station is located due to the visual impact of decking in the town centre area;</li> <li>• Encouragement of car use to access the train station for onward travel, resulting in an increase of localised emissions in all locations and contributing to localised effects of climate change;</li> <li>• Discouragement of the use of core paths nearby both the Bearsden and Westerton stations;</li> </ul> <p>Furthermore, the impacts to Hillfoot station may present both positive and negative effects; this option will encourage use of train for onward travel by helping to encourage connectivity for <b>Population and Human Health</b>, particularly where parking provision was an issue restricting use previously, this option is likely to increase private vehicle use, further contributing to poor <b>Air Quality</b> locally and increasing the negative effects for <b>Climatic Factors</b>. Furthermore, the site is located within a flood risk area, which may result in significant effects to <b>Climatic Factors</b> by increasing the risks for future flooding in this area, with secondary impacts to train service efficiencies. The impacts to air quality and flood risks has the potential for secondary health-related impacts for <b>Population and Human Health</b> as there will be an enhanced risk of exposure to transport emissions.</p>										

	<p>Although the proposed option will promote changes to the current transport network to some extent in terms of encouraging sustainable options for onward travel, the option does not entirely promote sustainable transport networks and therefore the effects for <b>Material Assets</b> are likely to be neutral.</p> <p>However, there is the potential to present positive impacts for <b>Population and Human Health and Material Assets</b> in relation to all locations by enhancing connectivity for people to access essential services, employment and leisure opportunities, particularly where parking was a constraints for using the rail network for onward travel. However, the mentioned impacts to air quality has the potential to affect health negatively as a result of emissions in the air, particularly for vulnerable people.</p>									
<p>Option 29 Alternative 2</p>	+ / + +	-	X	X	X	X	+	+	+	
<p><b>Proposed Option: Extension of segregated Bears Way cycleway (phases 2 and 3)</b></p>										
<p><b>Assessment Commentary:</b>  The proposal to extend phase 1 of the Bearsway from Hillfoot to Kessington and Kessington to Garscube will contribute to encouraging greater use of cycling as a means of active travel for both leisure and commuting into Glasgow. This will be beneficial for <b>Population and Human Health</b>, with the potential for significant effects, as it will give people the opportunity to utilise a safer environment for active travel as well as to benefit from the health benefits of cycling. In addition, the Bearsway has the potential to contribute to a shift towards a more sustainable transport network which in turn can be used as an alternative to vehicle use, reducing local emissions and helping to improve air quality and limiting the negative impacts associated for climate change. This will present minor positive impacts to <b>Air Quality, Climatic Factors and Material Assets</b>. However, part of the route for Phase 2 passes through a conservation area. Although the proposal will not involve significant changes to the existing road network, there is the potential that the proposal will impact on this asset by detracting from its value with minor negative impacts to <b>Climatic Factors</b>.</p>										

Theme: Roads

Options and Alternatives	SEA ENVIRONMENTAL FACTORS									SEA Preferred Option
	Population and Human Health	Cultural Heritage	Biodiversity, Flora and Fauna	Soil and Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	
<b>Option Assessment</b>										
Option 30 Alternative 1  ✓	<p><b>Proposed Option: Junction improvements – A81</b></p> <ul style="list-style-type: none"> <li>Options include gyratory at Boclair Rd, Roman Drive and Milngavie Road.</li> <li>ASDA Bearsden/West Chapelton Avenue junction remodelling Bearsden. Reallocation road space to increase capacity.</li> </ul> <p><b>Assessment Commentary:</b> This option was assessed as part of the environmental assessment of the A81 Route Corridor Study and, as the environmental baseline has not changed significantly, it has been determined that this option will not be subject to an assessment at this stage in order to reduce duplication of assessments. As this option has been committed to through another study it is considered that there is no reasonable alternative.</p>									✓
<b>Option Assessment</b>										
Option 31 Alternative 1  ✓	+	X	X	X	X	X	+/++	+	+	✓
	<p><b>Proposed Option: Bearsden Cross Junction Improvements</b></p> <p><b>Assessment Commentary:</b> This proposed option will upgrade the existing traffic light system to manage the traffic flows in and around Bearsden Cross junction. The new traffic system is intended to provide a significant improvement to the identified congestion problem and improve the efficiency of the light phases which will contribute towards reducing congestion levels, particularly at peak times. Improvements to the flow of traffic, levels of queues and the resulting pollutants could also improve the air quality issues already relevant to the area which is a designated AQMA. Overall, it is anticipated that this proposal would present minor positive environmental effects for <b>Population and Human Health, Material Assets, Climatic Factors and Air Quality</b>.</p>									✓
<b>Option Assessment</b>										
Option 32 Alternative 1  ✓	+	X	X	X	X	X	+/++	+	+/-	✓
	<p><b>Proposed Option: Canniesburn Toll</b></p> <p>Adaptive signal control and footway/pedestrian improvements. Examine options for improving function of roundabout and overall environment for all modes.</p>									✓



	<p><b>Assessment Commentary:</b>          In order to address current traffic build up at Canniesburn Toll, especially at peak times, this option involving the implementation of adaptive signal control with enhanced pedestrian and cycling provision as well as potential reallocation of crossings would have a direct positive impact on <b>Climatic Factors, Air Quality, Material Assets and Population and Human Health</b>. Improvements to the pedestrian environment will help to dispel barriers to walking and cycling therefore increase active travel participation and would also help to reduce congestion, journey times are likely to be reduced, the overall efficiency of the road network improvements and the associated impacts of idling and traffic on air quality improved. This could be particularly beneficial as this area in Bearsden is designated as an Air Quality Management Area (AQMA); improvements to localised air quality as a result of this option has the potential to result in significant positive effects for <b>Air Quality</b>. Additional benefits of delivering this option include improved access and parking for nearby businesses. However, there is scope within the option to improve the function of the roundabout at Canniesburn Toll; this has the potential to result in negative impacts to <b>Material Assets</b> in terms of requiring infrastructure changes which may disrupt the existing network and result in construction waste.</p>									
<p>Option 32 Alternative 2</p>	+/-	X	X	X	X	X	X	X	+/-	
<p><b>Proposed Option: Re-design roundabout at Canniesburn Toll</b></p>										
<p><b>Assessment Commentary:</b>          Although final designs of the roundabout at Canniesburn Toll are not finalised, discussions of the design include:</p> <ul style="list-style-type: none"> <li>• part signalling of the roundabout</li> <li>• removal of pedestrian path round the outside of the roundabout</li> <li>• redesign the area outside the front of the shops (no clear design decided yet for this, possible options include a bypass road directly outside the row of shops.</li> </ul> <p>This option has the potential to result in minor positive impacts to both <b>Population and Human Health and Material Assets</b> as it will provide positive infrastructure changes to help improve connectivity throughout Bearsden and wider to Glasgow in a way that encourages safe travel. However, there is also the potential for minor negative to <b>Population and Human Health</b> in terms of possible fragmentation of the existing paths for walking and cycling. There may also be short-term disruption for local businesses.</p>										
<p><b>Option Assessment</b></p>										
<p>Option 33 Alternative 1</p>	<p><b>Proposed Option: Continue to monitor air quality in Bearsden Town Centre in line with obligations for an Air Quality Management Area (AQMA)</b></p> <p><b>Assessment Commentary:</b></p>									

✓	The monitoring of air quality in designated AQMAs in East Dunbartonshire is a statutory requirement. The most recent Bishopbriggs Air Quality Management Plan has previously been subject to SEA (Screening) where it was determined that the Plan was unlikely to result in significant positive or negative environmental impacts. Therefore this option will not be subject to SEA at this stage and consequently, there are no reasonable alternatives.									
<b>Option Assessment</b>										
Option 34 Alternative 1	+	X	X	X	X	X	X	X	X	
✓	<p><b>Proposed Option: Continue to deliver road safety measures in relation to the A809</b> Implement high frictions surfaces at appropriate locations, renewed road lining, signage and LED studs.</p> <p><b>Assessment Commentary:</b> The implementation of this option would ensure that improved road safety measures will be implemented along the A809 within identified accident hotspots. This option is likely to have a minor positive impact on <b>Population and Human Health</b> through improvements to road safety, health and community wellbeing within the vicinity of the A809.</p> <p>It is considered that there are no reasonable alternatives. The Council has a statutory duty to implement improvements and demonstrate progress towards road safety.</p>									✓

Theme: Town Improvements

Options and Alternatives	SEA ENVIRONMENTAL FACTORS									SEA Preferred Option
	Population and Human Health	Cultural Heritage	Biodiversity Flora and Fauna	Soil and Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	
<b>Option Assessment</b>										
Option 35 Alternative 1  ✓	<p><b>Proposed Option: Deliver the actions in the emerging Bearsden and Milngavie Town Centre Strategies</b></p> <p><b>Assessment Commentary:</b> Each of the Town Centre Strategies has recently been considered for SEA and consequently a Screening Report was submitted to the SEA Gateway. After reviewing the responses, the Consultation Authorities were in agreement with the Council that the Town Centre Strategies are unlikely to have significant environmental effects. East Dunbartonshire Council made a determination under Section 8(1) of the Environmental Assessment (Scotland) Act 2005 that the Town Centre Strategies are unlikely to have significant environmental effects. Therefore, the document will not be subject to a Strategic Environmental Assessment at this stage.</p>									✓

**BISHOPBRIGGS, TORRANCE, BALMORE AND BARDOWIE**

Theme: Active Travel



Options and Alternatives	SEA ENVIRONMENTAL FACTORS									SEA Preferred Option
	Population and Human Health	Cultural Heritage	Biodiversity Flora and Fauna	Soil and Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	
<b>Option Assessment</b>										
Option 36 Alternative 1 ✓	+	X	X	X	X	X	+	+	+	✓
	<b>Proposed Option: Bishopbriggs Path Improvements</b> <b>Assessment Commentary:</b> Improving the path network throughout Bishopbriggs will help to improve connectivity to existing paths and networks and greenspaces and the wider natural environment. In turn this has the potential to encourage active travel and allow for easier travel in town. This will present direct positive impacts to <b>Population and Human Health, and Material Assets</b> with the potential for secondary benefits to <b>Air Quality and Climatic Factors</b> in terms of the potential promoting active travel has on reduce associated emissions.									
Option 36 Alternative 2	0	X	0	X	X	X	X	X	X	
	<b>Proposed Option: Maintain current core path network</b> <b>Assessment Commentary:</b> While maintenance of the current path network ensures they are at kept at a consistent standard, it fails to build on their connections to the wider active travel links throughout Bishopbriggs. Therefore effects to <b>Population and Human Health, and Biodiversity, Flora and Fauna</b> are likely to be neutral due to limitations of expanding the existing network.									
<b>Option Assessment</b>										
Option 37 Alternative 1 ✓	+	X	X	X	X	X	+	+	+	✓
	<b>Proposed Option: Promote the Wester Way through active travel events, signage and social media</b> <b>Assessment Commentary:</b> Promoting the Wester Way as a viable active travel route is likely to have positive impacts on <b>Population and Human Health</b> in terms of encourage a change in behaviour towards less car use and active travel. This can have positive effects for health and wellbeing by giving people additional options for connecting to the wider environment. This has the potential to present									


	secondary positive effects to other environmental factors including <b>Material Assets, Air Quality and Climatic Factors</b> in terms of a shift towards a more sustainable transport network, with contributions to reducing vehicle emissions, air pollution and longer term benefits to reduce the associated negative effects of climate change at a local level.									
	The means of promotion is wide-ranging and has the potential to reach a large number of people.									
Option 37 Alternative 2	+	X	X	X	X	X	+	+	+	
	<b>Proposed Option: Promote the Wester Way through installing appropriate signage</b>									
	<b>Assessment Commentary:</b> This option is likely to have similar effects as those described in Option 37, Alternative 1. However, the means of promotion might be restrictive in terms of the number of people that might see the signage.									

Theme: Public Transport

Options and Alternatives	SEA ENVIRONMENTAL FACTORS									SEA Preferred Option
	Population and Human Health	Cultural Heritage	Biodiversity Flora and Fauna	Soil and Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	
<b>Option Assessment</b>										
Option 38 Alternative 1 ✓	<b>Proposed Option: Bus Park and Ride adjacent to the Bishopbriggs Relief Road (BRR)</b>									✓
	<b>Assessment Commentary:</b> This option was assessed as part of the environmental assessment of the A803 Route Corridor Study and, as the environmental baseline has not changed significantly, it has been determined that this option will not be subject to an assessment at this stage in order to reduce duplication of assessments.									
Option 38 Alternative 2	+	X	X	X	X	X	+	+	+/-	
	<b>Proposed Option: Bus Park and Ride in the vicinity of the B757/KLR</b>									
	<b>Assessment Commentary:</b> Creating a bus park and ride in the vicinity of the B757/KLR will provide a means to reduce traffic levels around the A803/806 and into Glasgow although not directly situated in the Bishopbriggs, Torrance, Balmore and Bardowie area. There is the potential to reduce congestion and associated emissions due to the introduction of a more sustainable mode of transport. Overall, it is anticipated that this proposal would present minor positive environmental effects for <b>Population and Human Health, Material Assets, Climatic Factors and Air Quality</b> . However, this option will require new or changes to infrastructure									

	within the area which can disrupt current transport links and significant increase the risk of construction waste, construction traffic and surface-water run-off and release of pollutions to waterbodies and the air, presenting potential negative effects for <b>Material Assets</b> .									
<b>Option Assessment</b>										
Option 39 Alternative 1  ✓	<b>Proposed Option: A803 Quality Bus Corridor (QBC) Package</b> Measures could include: <ul style="list-style-type: none"> <li>• Provision of real time information at bus stops along A803</li> <li>• Improvements to bus stops and shelters</li> <li>• Bus priority/congestion bypasses at key points on the network</li> <li>• Bus detection included within SCOOT</li> </ul>									✓
	<b>Assessment Commentary:</b> This option was assessed as part of the environmental assessment of the A803 Route Corridor Study and, as the environmental baseline has not changed significantly, it has been determined that this option will not be subject to an assessment at this stage in order to reduce duplication of assessments.									
Option 39 Alternative 2	+/+ +	X	X	X	X	X	+	+	+/-	
	<b>Proposed Option: Continue to develop bus infrastructure through reliance on annual SPT capital programme for stop and shelter improvements</b> <b>Assessment Commentary:</b> Bus stop and shelter improvements, in general, will contribute to local bus infrastructure enhancements on a medium to long term basis with direct positive and potentially significantly positive impacts to <b>Population and Human Health</b> as it aims to provide valuable assistance and improvements for the overall passenger experience. This is likely to encourage greater use of bus travel in an area where bus patronage is lower than the national averages, particularly in more rural locations or in areas where access to rail stations is limited. These improvements are likely to improve the effectiveness and functionality of bus travel as well as improve its attractiveness as a sustainable travel mode. There is also likely to be secondary positive impacts on <b>Climatic Factors, Air Quality and Material Assets</b> in terms of encouraging a modal shift in transportation to a more sustainable network and support sustainable travel agendas in its role towards reduction air pollution and improving air quality. Whilst the proposed improvement techniques are relatively small-scale there may be negative impacts to <b>Material Assets</b> in terms of waste and construction impacts and there may be minor short-term disruptions to routes and use of bus stops and shelters.									
<b>Option Assessment</b>										
Option 40	+	X	X	X	X	X	+	+	+	
<b>Proposed Option: Bishopbriggs – Integrated Transport Hub</b>										

<p>Alternative 1</p> 	<p>Integrated Transport Hub and associated public realm works in Bishopbriggs Town Centre. Potential locations for the hub are currently under review.</p>									
<p><b>Assessment Commentary:</b>  An Integrated Transport Hub and associated public realm works (as part of the Bishopbriggs Town Centre Strategy) in Bishopbriggs Town Centre will enable local residents to have better access to multi-modal transport options. This will likely result in positive impacts to <b>Population and Human Health</b> by providing better opportunities for people to access their local town centre and use a range of transport options for further travel, for example into Glasgow. This will encourage sustainable travel and improve connectivity, resulting in minor positive impacts to <b>Material Assets</b>. Furthermore, this option has the potential to reduce car journeys through Bishopbriggs Town Centre with benefits to <b>Air Quality and Climatic Factors</b> by reducing associated emissions. This will have longer-term benefits for the overall air pollution levels at Bishopbriggs Cross which is currently designated as an Air Quality Management Area (AQMA). It is unlikely that this option will have any impacts on the other environmental factors.</p>										
<p>Option 40 Alternative 2</p>	+	?/-	?/-	?/-	X	?/-	+/-	+/-	+/-	
<p><b>Proposed Option: Segregated cycleway on A803</b></p>										
<p><b>Assessment Commentary:</b>  Creating a segregated cycleway along the A803 that runs through Bishopbriggs is likely to present a range of different positive environmental impacts to <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b> including the following effects:</p> <ul style="list-style-type: none"> <li>• A modal shift towards a more sustainable transport network through the promotion of cycling which is likely to contribute towards a reduction in car-related emissions which can reduce the resulting negative impacts to air pollution and climate change. This is particularly beneficial as an AQMA has been designated in Bishopbriggs Cross;</li> <li>• A safer environment for cyclists as the cycleway will be segregated from traffic along this busy route that connects Glasgow to Bishopbriggs and the rest of East Dunbartonshire;</li> <li>• Contributions towards improving health and wellbeing inequalities if rates of cycling increase due to the role of active travel for improving both mental and physical health including cardio-vascular illnesses and stress;</li> <li>• Better connectivity between Strathkelvin Retail Park, Bishopbriggs Town Centre and Bishopbriggs Rail Station; and,</li> <li>• A segregated cycleway has the potential to reduce speeding due to a reduction in the road width.</li> </ul> <p>Whilst this option will generate positive benefits for the local community and environment, there are also a number of direct or secondary negative impacts that may result for <b>Cultural Heritage, Biodiversity, Flora and Fauna, Soil and Geology, Water Quality, Air Quality, Climatic Factors and Material Assets</b> including the following:</p>										



	<ul style="list-style-type: none"> <li>Although the work likely to be required to create a segregated cycleway along the A803 will be minimum in terms of scale of construction, there is the potential that any intervention of the existing road network could increase the risk of congestion along the A803 which in turn can enhance the risk of traffic emissions and poor air quality at a localised level;</li> <li>Rookery Plantation LNCS for biodiversity is located to the west of the A803 – consideration will need to be given to the impact of creating a segregated cycleway on biodiversity value; and,</li> </ul> <p>There may also be secondary impacts of construction on soil erosion and surface-water run-off on the surrounding green belt environment.</p>									
<b>Option Assessment</b>										
<p>Option 41 Alternative 1</p> <p>✓</p>	+ / + +	X	X	X	X	X	+ / + +	+ / + +	+ / + +	
<p><b>Proposed Option: Auchinairn Bus Hub</b></p> <p><b>Assessment Commentary:</b> It is anticipated that this option would present overall positive environmental impacts for the local communities, air quality and climate change benefits. In particular, the proposed option may present minor positive effects to <b>Population and Human Health, Air Quality, Material Assets and Climatic Factors</b>, with the potential for significant effects, as it would actively enhance integrated travel networks between cycling, walking and bus use. This will provide more opportunities for locals to travel within East Dunbartonshire. It will also specifically benefit those who are socially excluded or don't have regular access to a car. Furthermore, this proposal is likely to encourage a modal shift in transport to a more sustainable network within Auchinairn and Bishopbriggs, in particular, and the improved bus use will help to reduce emissions and air pollution, and reduce the negative impacts of transport on climate change.</p>										
<p>Option 41 Alternative 2</p>	+	X	X	X	X	X	+	+	+	
<p><b>Proposed Option: Implement RTPi in Bishopbriggs and Lenzie alone</b></p> <p><b>Assessment Commentary:</b> Similarly to Area Wide Option 2 Alternative 1, this alternative option has the potential to present positive impacts to <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b>. However, effects are more likely to be minor in comparison to those effects described in the assessment of Area Wide Option 2 Alternative 1. While greater real time information in our town centres will have multiple benefits, to only have these units in the town centres reduces the benefits for the wider population of East Dunbartonshire.</p>										

Theme: Roads

	<b>SEA ENVIRONMENTAL FACTORS</b>	
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Options and Alternatives	Population and Human Health	Cultural Heritage	Biodiversity Flora and Fauna	Soil and Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	SEA Preferred Option
<b>Option Assessment</b>										
Option 42 Alternative 1	+	-	--	--	-	?	+/-	-/-	-	
✓	<p><b>Proposed Option: Support the delivery of phase 5 of the Bishopbriggs Relief Road (BRR)</b></p> <p><b>Assessment Commentary:</b></p> <p>The delivery of Phase 5 of the BRR will result in the development of a new road connecting northern Bishopbriggs and Torrance with the M80 to the south. Overall, the delivery of this option will help to relieve congestion and journey times from Bishopbriggs town centre and the A803 which will help to enhance connectivity and will help to relieve impact on AQMA in Bishopbriggs and potentially improve connections between Bishopbriggs and Glasgow city centre, especially if the route allows for public transport provision. However, there are a number of negative impacts associated with the delivery of this option including the following:</p> <ul style="list-style-type: none"> <li>• <b>Cultural Heritage</b> – The proposed route is in line with the line of the Antonine Wall north and east of Low Moss Prison and Cadder Roundabout, which is part of the proposed route, is also on the line of the Antonine Wall. The construction of the BRR has the potential to damage and reduce the value of this historical asset.</li> <li>• <b>Biodiversity, Flora and Fauna and Soil and Geology</b> – A number of biodiversity and geodiversity designations are located within the vicinity of the proposed phase 5 route including a LNCS for geodiversity north of Low Moss Prison, peat land around Low Moss LNCS and Low Moss Prison which has previously been highlighted in historical surveys, Moss Plantation LNCS that runs west, south and east of the proposed new route. The construction of the BRR phase 5 has the potential to impact negatively on these natural assets by reducing their value and resulting in potential habitat fragmentation and disturbance to species.</li> <li>• <b>Water Quality, Air Quality and Climatic Factors</b> – Sections of the road are in close proximity to areas of flood risk which could result in possible diversion of flood risk areas and the impact of construction could generate additional flood risks for the local area. In addition encouraging more traffic and increased road capacity will increase the risk of additional emissions that will contribute to the negative impacts of climate change such as increased heating and flood risks as well as air pollution. Similarly, whilst there is the potential that this phase of the BRR will relocate traffic from Bishopbriggs town centre to the BRR, could potentially divert or transfer air pollution to another area. The full nature of effects to water quality will need to be investigated further, release of carbon from peatland should also be investigated and considered further.</li> </ul>									



	<ul style="list-style-type: none"> <li>• <b>Landscape</b> – The proposed new route of the BRR has the potential to visually impair this open rural setting and influence a change in settlement patterns for eastern Bishopbriggs.</li> <li>• <b>Material Assets</b> – The proposed route does not support existing Active Travel Strategy for EDC and does not promote active travel and sustainable modes of transport.</li> </ul>										
<p>Option 42 Alternative 2</p>	0/-	X	0	0	-	?	-	-	-/-		
<p><b>Proposed Option: Leave Phase 4 of the BRR as the final phase.</b> The BRR after phase 4 as completed will connect central and western Bishopbriggs to the BRR via Westerhill Road.</p>											
<p><b>Assessment Commentary:</b> Leaving Phase 4 of the BRR as the final phase will present positive and negative effects to the local environment. The anticipated effects are detailed below:</p> <ul style="list-style-type: none"> <li>• <b>Population and Human Health</b> – No further phases of the BRR will limit access between northern Bishopbriggs and Torrance to the M80 in the south. Therefore, in comparison to Alternative 1, connectivity will not be improved.</li> <li>• <b>Cultural Heritage</b> – Not continuing to the next phase of the BRR will limit any impacts on the line of the Antonine Wall and buffer zone further north, helping to protect and maintain its integrity as a historic asset.</li> <li>• <b>Biodiversity, Flora and Fauna and Soil and Geology</b> – The route of Phase 4 does not directly impact on any natural designations. However, Cadder Yard LNCS is located to the north of the Route. It is unlikely however that use of this part of the BRR will impact on this designation with any effects on its value. The effects on this will have been mitigated and managed through the development of the BRR Phase 4.</li> <li>• <b>Water Quality, Air Quality and Climatic Factors</b> – This option could encourage more traffic and increased road capacity which could increase the risk of additional emissions related to vehicle use that will contribute to the negative impacts of climate change such as increased heating and flood risks as well as air pollution. Similarly, whilst there is the potential that this phase of the BRR will relocate traffic from Bishopbriggs town centre there is still the risk of congestion and increased travel times. This could still cause issues in the Bishopbriggs AQMA or in close proximity to it. The full nature of effects to water quality will need to be investigated further.</li> <li>• <b>Landscape</b> – The route of the BRR has the potential to visually impair this open rural setting and influence a change in settlement patterns for eastern Bishopbriggs.</li> <li>• <b>Material Assets</b> – Route does not support existing Active Travel Strategy for EDC and does not promote active travel and sustainable modes of transport.</li> </ul>											
<p><b>Option Assessment</b></p>											
<p>Option 43 Alternative 1</p>	<p><b>Proposed Option: Continue to monitor air quality in Bishopbriggs Town Centre in line with obligations for an Air Quality Management Area (AQMA)</b></p>										
<p><b>Assessment Commentary:</b></p>											

✓	The monitoring of air quality in designated AQMAs in East Dunbartonshire is a statutory requirement. The updated Bearsden Air Quality Management Plan (2017) has previously been subject to SEA (Screening) where it was determined that the Plan was unlikely to result in significant positive or negative environmental impacts. Therefore this option will not be subject to a SEA at this stage and consequently, there are no reasonable alternatives.	
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Theme: Town Improvements

Options and Alternatives	SEA ENVIRONMENTAL FACTORS									SEA Preferred Option
	Population and Human Health	Cultural Heritage	Biodiversity Flora and Fauna	Soil and Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	
<b>Option Assessment</b>										
Option 44 Alternative 1  ✓	<p><b>Proposed Option: Deliver the actions in the emerging Bishopbriggs Town Centre Strategy</b></p> <p><b>Assessment Commentary:</b> Each of the Town Centre Strategies has recently been considered for SEA and consequently a Screening Report was submitted to the SEA Gateway. After reviewing the responses, the Consultation Authorities were in agreement with the Council that the Town Centre Strategies are unlikely to have significant environmental effects. East Dunbartonshire Council made a determination under Section 8(1) of the Environmental Assessment (Scotland) Act 2005 that the Town Centre Strategies are unlikely to have significant environmental effects. Therefore, the document will not be subject to a Strategic Environmental Assessment at this stage.</p>									✓

KIRKINTILLOCH, LENZIE, WATERSIDE AND TWECHAR



Theme: Public Transport

Options and Alternatives	SEA ENVIRONMENTAL FACTORS									SEA Preferred Option
	Population and Human Health	Cultural Heritage	Biodiversity, Flora and Fauna	Soil and Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	
<b>Option Assessment</b>										
Option 45 Alternative 1 ✓	<b>Proposed Option: A803 Quality Bus Corridor (QBC) Package</b>									✓
	See Bishopbriggs Option 2, Alternative 1.									
<b>Option Assessment</b>										
Option 45 Alternative 2	<b>Proposed Option: Continue to develop bus infrastructure through reliance on annual SPT capital programme for stop and shelter improvements.</b>									
	See EDC Wide Option 1, Alternative 1.									
<b>Option Assessment</b>										
Option 46 Alternative 1 ✓	+/++	-	X	X	X	X	+/++	+/++	+/+ +/-	✓
	<b>Proposed Option: Kirkintilloch Town Centre Bus Improvements – incorporate in to the refresh of the Kirkintilloch Town Centre Masterplan</b>  <b>Assessment Commentary:</b> It is anticipated that this option would present, in general, positive environmental impacts for local communities, air quality and climate change benefits. In particular, the proposed option may present minor positive effects to <b>Population and Human Health, Air Quality, Material Assets and Climatic Factors</b> , with the potential for significant effects, as it would actively enhance integrated travel networks between cycling, walking and bus use. This will support wider regeneration plans for Kirkintilloch town centre, such as complimenting the Kirkintilloch Town Centre Masterplan improvements, as well as providing more opportunities for locals to travel within East Dunbartonshire. It will also specifically benefit those who are socially excluded or don't have regular access to a car. For pedestrians, this option will contribute to improved safety due to reduced									

	<p>traffic speeds and wider footways to discourage speeding and car use in general. Furthermore, this proposal is likely to encourage a modal shift in transport to a more sustainable network within Kirkintilloch specifically, and the promotion of slower speeds and improved bus use will help to reduce emissions and air pollution, and reduce the negative impacts of transport on climate change.</p> <p>However, changing the carriageway to give priority to pedestrians using the footways and bus infrastructure/waiting facilities changes will require new or enhanced infrastructure. This could present minor adverse impacts to <b>Material Assets</b> in terms of potential construction waste and surface-water run-off, with potential impacts to water quality in nearby courses such as the Forth and Clyde Canal. In addition, the line of the Antonine Wall World Heritage Site and its buffer zone runs directly through Kirkintilloch Town Centre. Any changes to the current infrastructure, although bringing benefits to the local community, has the potential to impact on this <b>Cultural Heritage</b> asset such as deterioration of its value and it will be vital that the design and use of materials for infrastructural changes should be in line with the Antonine Wall Management Plan to integrate with this historical and tourist attraction.</p>											
<b>Option Assessment</b>												
<p>Option 47 Alternative 1</p> <p>✓</p>	<p><b>Proposed Option: Kirkintilloch/Lenzie bus service improvements</b> Investigate ways of providing a service between Kirkintilloch, Lenzie and Woodilee, including altering existing services in partnership with operators.</p> <p><b>Assessment Commentary:</b> This option was assessed as part of the environmental assessment of the A803 Route Corridor Study and, as the environmental baseline and action have not changed significantly, this option has been screened out and the assessment will not be duplicated at this stage.</p> <p><b>Proposed Mitigation Measures:</b></p>	<p>✓</p>										
<p>Option 47 Alternative 2</p>	<table border="1" data-bbox="383 999 1865 1046"> <tr> <td>?/+</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>?/+</td> <td>?/+</td> <td>?/+</td> </tr> </table> <p><b>Proposed Option: Do nothing and allow the deregulated bus market to provide services on a commercial basis</b></p> <p><b>Assessment Commentary:</b> Whilst the deregulated bus market currently does not provide bus services along the Kirkintilloch Link Road (KLR) between Lenzie and Kirkintilloch with access to other locations in East Dunbartonshire and outwith, for example Glasgow, there is the potential that implementation of such services will present some minor positive impacts. Whilst the full nature of the effects is unclear at this stage and will be dependent on factors such as the routes provided, compliance with the bus market, frequency of services and uptake, minor positive impacts may result for <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b> due to the following:</p> <ul style="list-style-type: none"> <li>• Better provision for local residents to utilise public transport and therefore travel to other locations;</li> </ul>	?/+	X	X	X	X	X	X	?/+	?/+	?/+	
?/+	X	X	X	X	X	X	?/+	?/+	?/+			

	<ul style="list-style-type: none"> <li>Potential reductions in car use and associated emissions with benefits to localised air quality and effects of climate change; and,</li> <li>A shift towards more sustainable modes of transport.</li> </ul>	
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Theme: Town Improvements

Options and Alternatives	SEA ENVIRONMENTAL FACTORS									SEA Preferred Option
	Population and Human Health	Cultural Heritage	Biodiversity, Flora and Fauna	Soil and Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	
<b>Option Assessment</b>										
Option 48 Alternative 1 	+/++	-	X	X	X	X	+/++	+/++	+/++	
<b>Proposed Option: Lenzie Improvements Project</b> <ul style="list-style-type: none"> <li>Deliver improvements to Lenzie village centre and station area.</li> <li>Improving connections between bus and rail and improving access to the town centre and station for pedestrians and cyclists.</li> </ul>										
<b>Assessment Commentary:</b> This option will primarily present future minor positive impacts, with the potential for significant effects, for <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b> which will help to encourage a change in behaviour to a more sustainable transport network, whereby multi-modal journeys across Lenzie and wider can be explored, particularly using rail for onward and cross-boundary journeys. Furthermore, there is likely to be better sustainable transport facilities, such as bus waiting facilities, and layout at the station for different modes of transport. Whilst improvements to Lenzie village to and from the station area is likely to encourage sustainable journeys to the station and integration between modes, there is the potential that, without appropriate design, there could be minor negative impacts to the village centre due to its Conservation Area and Townscape Protection Area designations.										
Option 48 Alternative 2	+	?	?	X	X	X	+/0	+/0	+/-	
<b>Proposed Option: Increase parking at Lenzie Rail Station</b> Provide a parking deck at the north side of the car park										
<b>Assessment Commentary:</b>										

	<p>Increasing parking provision through the means of a parking deck at the north side of Lenzie Rail Station has the potential to encourage more frequent use of rail travel, particularly for commuting and leisure to places such as Glasgow and Stirling by ensuring that there is parking provision for those who would normally not use rail travel due to their proximity to the station and inadequate parking provision. Whilst this can present minor positive impacts to <b>Climatic Factors, Air Quality, Material Assets and Population and Human Health</b> in terms of promoting a more sustainable transport network for East Dunbartonshire, particularly for the Lenzie community, with benefits towards reducing air pollution, traffic and congestion along the A806 and M80, and associated health and wellbeing inequalities, the outcome of this option can result in increased traffic and possible congestion in Lenzie village centre as well as continue to encourage car use over more sustainable modes of transport. This may reduce the positive nature of the effects to neutral in terms of the impacts to <b>Climatic Factors and Air Quality</b>, especially in areas where traffic, congestion and pollution levels are already relatively high, such as at peak times.</p> <p>It is also predicted that this option will result in infrastructure changes to facilitate a parking deck, which in turn has the potential to result in negative impacts to <b>Material Assets</b>. The addition of a parking deck is likely to result in construction waste as well as possible disruptions to the existing transport infrastructure through additional traffic and reduced parking availability during construction.</p> <p>Lenzie Rail station is situated within a Conversation Area and Townscape Protection Area. The full nature of the effects on <b>Cultural Heritage</b> is unknown at this stage and the impacts are likely to be dependent on the scale of the option. There is the potential that the provision of a parking deck will detract from the setting of these historical assets and reduce their value. Similarly, the impacts on <b>Biodiversity, Flora and Fauna</b> are unknown at this stage but will need to take into the account that the deliverability of this option could impact on the value of Lenzie Moss and Local Nature Reserve which is adjacent to the site.</p>									
<b>Option Assessment</b>										
<p>Option 49 Alternative 1</p> <p>✓</p>	+ / + +	X	X	X	X	X	?	?	+ / + +	<p>✓</p>
<p><b>Proposed Option: Foster strong partnership working with community groups and an external consultant to improve the layout and associated transport infrastructure at Townhead, Kirkintilloch</b></p>										
<p><b>Assessment Commentary:</b> This initiative will be facilitated by EDC but will be community led as community groups will work directly with the consultant throughout this process. The main transport impacts this initiative will have is to address the main Townhead junction in order for it to cope better with the volume of traffic currently passing through it. This has the potential to pose benefits to <b>Population and Human Health</b> in terms of improved safety from traffic and potential speeding. There is also scope to investigate improved connectivity between cycle routes. This has the potential to promote a change in transport modes with</p>										

	<p>benefits to <b>Material Assets</b> whilst also encouraging active travel with benefits to health and wellbeing. The nature of the impacts on <b>Air Quality and Climatic Factors</b> will be dependent on the outcomes of this consultation exercise with community groups.</p> <p>This option is being facilitated by the regeneration team within the Council and funding is already in place to recruit a consultant and, therefore, there is no reasonable alternative.</p>	
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LENNOXTOWN, MILTON OF CAMPSIE, HAUGHHEAD AND CLACHAN OF CAMPSIE

Theme: Public Transport

Options and Alternatives	SEA ENVIRONMENTAL FACTORS									SEA Preferred Option
	Population and Human Health	Cultural Heritage	Biodiversity, Flora and Fauna	Soil and Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	
<b>Option Assessment</b>										
Option 50 Alternative 1 ✓	+	X	X	X	X	X	+	+	+	✓
<b>Proposed Option: Work with operators and SPT to ensure continuation of X85 service from Campsie Glen to Glasgow</b>										
<p><b>Assessment Commentary:</b>                      Ensuring the continuation of this bus service will be beneficial for local people, giving them greater access to Glasgow for both commuting and leisure purposes and in turn will help to meet air quality improvement agendas at a local level, encourage greater use of public transport as a more sustainable option and reduce emissions.</p> <p>As the powers for provision of bus services, commercial or subsidised, generally lie with operators and SPT, the Council is unlikely to be able to provide an alternative service, should this be withdrawn. Therefore it is considered that there are no reasonable alternatives.</p>										



Theme: Town Improvements

Options and Alternatives	SEA ENVIRONMENTAL FACTORS									SEA Preferred Option
	Population and Human Health	Cultural Heritage	Biodiversity, Flora and Fauna	Soil and Geology	Landscape	Water Quality	Air Quality	Climatic Factors	Material Assets	
<b>Option Assessment</b>										
Option 2 Alternative 1 ✓	+/+ +	X	X	X	X	X	+/+ +	+/+ +	+/+ +	✓
<p><b>Proposed Option: Deliver the transport related actions in Lennoxton that have been raised through the charrette process and will be outlined in the forthcoming Lennoxton Place Plan.</b></p> <p><b>Assessment Commentary:</b>                      The delivery of transport related actions in Lennoxton include street design, active travel links to reduce road speed and improved safety and connections in Lennoxton. These options are likely to present positive impacts to <b>Population and Human Health, Air Quality, Climatic Factors and Material Assets</b>, with the potential for significant effects, as they can help to improve safe travel through the village, improve connectivity locally to elsewhere in East Dunbartonshire and further-afield to places such as Glasgow, and encourage sustainable options to be utilised for travel. This can result in reduced emissions to improve air quality and reduce the negative effects of climate change.</p> <p>It is considered that there are no reasonable alternatives to this option. Work is ongoing to deliver improvements that were identified as part of the Lennoxton Charrette and Place Plan process.</p>										