Strathclyde Regional Bus Strategy

Strategic Environmental Assessment (SEA) Report

On behalf of the
Strathclyde Partnership for Transport

SPT

Document Control Sheet

Project Name: Strathclyde Regional Bus Strategy

Project Ref: 332611846

Report Title: SEA Environment Report

Doc Ref: v1.0

Date: 31/01/2025

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Revision	Date	Description	Prepared	Reviewed	Approved

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1   Introduction

1.1   Background

1.1.1   Strathclyde Partnership for Transport (SPT) is developing a Strathclyde Regional Bus Strategy (SRBS) for the Strathclyde region. The goals of the SRBS are for more people to be using buses, and using bus more often, and for more communities to have access to bus for everyday travel needs.

1.1.2   In partnership, Stantec was commissioned alongside SYSTRA in 2023 to develop the SRBS on behalf of SPT. A Case for Change (CfC) was completed in 2024 and recommendations from an options appraisal were consulted in Spring 2024. Work to develop the draft strategy was completed in January 2025 ahead of consultation on the draft strategy planned for March – May 2025.

1.1.3   Separately, in 2024, SPT commissioned Stantec to undertake a multi-stage Strategic Environmental Assessment (SEA) of the emerging SRBS, in accordance with statutory requirements.

1.1.4   The Environmental Assessment (Scotland) Act 2005 requires responsible authorities, including SPT, to assess the likely significant effects on the environment of implementing relevant plans, programmes and strategies (hereafter 'the 2005 Act'). The assessment must also examine the likely significant effects of implementing reasonable alternatives to the plan or strategy under consideration (i.e. the emerging SRBS). The assessment is carried out by following a staged process known as an SEA.

1.1.5   This Environmental Report (ER) has been prepared to accompany the Draft SRBS for public consultation. In accordance with statutory requirements, the ER documents the findings of the SEA which has been carried out in respect of the Draft SRBS. The SEA has been undertaken as a plan-making tool to help shape the emerging SRBS throughout the key stages of its development (see **Section 2.3**) and by iterative working between the transport planning, environmental and equalities assessment teams.

1.2   Overview of SPT and the SRBS

1.2.1   SPT is the statutory Regional Transport Partnership (RTP) for the West of Scotland region, as designated under the Transport (Scotland) Act 2005 and the Regional Transport Partnerships (Establishment, Constitution and Membership) (Scotland) Order 2005. Schedule 1 of this Order defines the extent of the West of Scotland region (hereafter 'the SPT region') by reference to local authority and council ward boundaries. The region encompassing 11 entire local authorities from South Ayrshire in the southwest to North Lanarkshire in the northeast, and also includes two wards within the Argyll and Bute Council area (Helensburgh and Lomond). The extent of the SPT region is shown in **Figure 1.1**.

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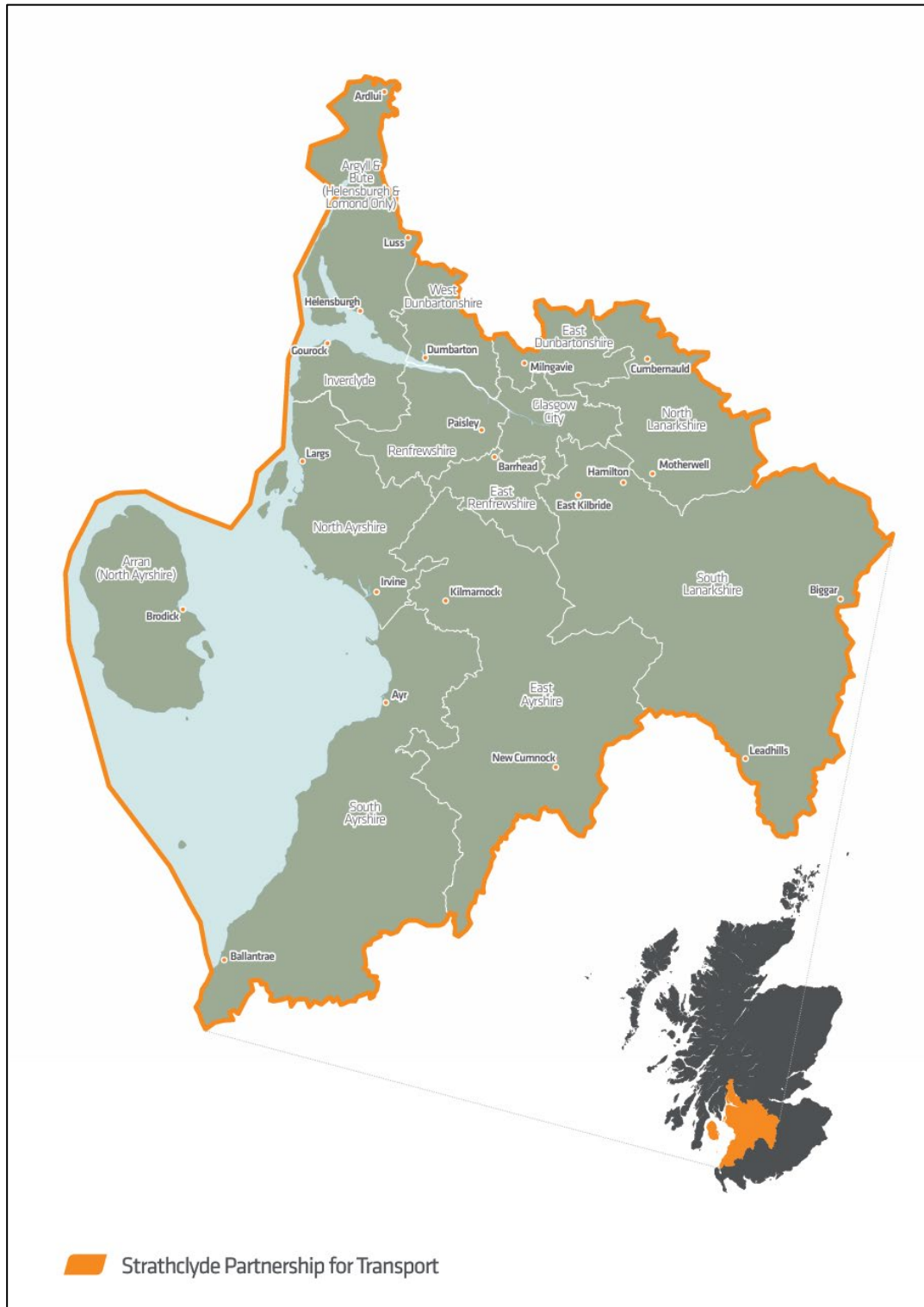
Figure 1.1: SPT Region

1.2.2   The foundations of a SRBS are embedded in A Call to Action: The Regional Transport Strategy (RTS) for the west of Scotland (2023–2038), and the RTS's vision, priorities, objectives, and clear policy statement setting out the aim for a world class passenger focused public transport system. The RTS was published in 2023, and reinforces national policy ambitions, setting out the following Vision for transport in the region:

1.2.3 "The west of Scotland will be an attractive, resilient and well-connected place with active, liveable communities and accessible, vibrant centres facilitated by high quality, sustainable and low carbon transport shaped by the needs of all."

1.2.1 The RTS is clear that its strategy Vision will not be achieved without improving the quality and integration of the bus network and sets out a policy aiming for a world class passenger focused public transport system. Given this conclusion, the need for the development of the SRBS was recognised with the new powers and opportunities available through the Transport (Scotland) Act 2019 requiring consideration in its development.

1.2.2 The proposed form and content of the emerging SRBS is outlined in **Section 2.4**.

1.3 How to Comment on this Environmental Report

1.3.1 This ER and an associated Non-Technical Summary are being issued for consultation alongside the Draft SRBS and associated documents for a period of 12 weeks. Details of how to participate in the consultation are provided in **Section 7.1** of this report and, in accordance with statutory requirements, will be published in a local newspaper.

1.4 Statutory Requirements

1.4.1 This SEA Report responds to statutory provisions within the Environmental Assessment (Scotland) Act 2005 (hereafter 'the SEA Act') applicable to preparation of the emerging SRBS. The implications of these statutory requirements for this SEA are outlined below.

Strategic Environmental Assessment

1.4.2 The SEA Act requires 'responsible authorities', including regional transport partnerships such as SPT to assess the likely significant effects on the environment of implementing relevant and qualifying plans and programmes, as defined within the Act. This assessment must also examine the likely significant effects of implementing reasonable alternatives to the plan or programme under consideration (i.e. the emerging SRBS). The assessment is carried out by following a staged process of reporting known as SEA based on the Draft Guidance, the statutory requirement for an SEA is likely to apply to all local transport strategies. While local authorities are likely to be familiar with the requirements and guidance on undertaking an SEA, the Scottish Transport Appraisal Guidance (STAG) provides more detailed guidance on its application to transport.

1.4.3 The emerging SRBS is considered to fall within the scope of Section 5(3) of the 2005 Act as requiring an SEA to be carried out. It is a 'relevant' plan for the purposes of this legislation as it is required in response to administrative and legislative provisions and will influence the development and consenting of future policies and projects, including transport related schemes, through other transport provision as part of other development proposals and through influencing the development of and future Local Development Plans (LDPs) and Local Transport Strategies (LTS). The emerging SRBS also satisfies the test of being a 'qualifying' plan, meaning that a SEA is required, as it is being prepared for transport purposes, has the potential to set the framework for future development consent of projects (transport and other development) requiring an Environmental Impact Assessment (EIA), and will apply to the SPT region, rather than only to a small area. As such, **the emerging SRBS is screened as requiring SEA**.

1.4.4 Under the 2005 SEA Act, once the need for SEA of a plan or programme has been established (see above), a three-stage process is required:

- **SEA Scoping** (Section 15 of 2005 SEA Act): Responsible authorities must provide the SEA Consultation Authorities with sufficient information to enable them to consider the proposed

scope, level of detail and consultation period for an Environmental Report to accompany the emerging plan or programme under consideration. **The SEA Scoping Report submitted in October 2024 has responded to this legislative requirement**.

- **Preparation of and Consultation regarding an Environmental Report**: The relevant responsible authority must prepare an Environmental Report (ER) to "*identify, describe and evaluate the likely significant effects on the environment of implementing*" the emerging plan or programme and its reasonable alternatives. As above, the scope, level of detail and consultation period of the SEA should first be defined through scoping. To ensure the SEA process is integrated within the SRBS development, the SEA team shall review the SRBS as it develops, with findings discussed with SPT and the consultants working to develop the strategy, on an iterative basis. SEA findings shall be presented in an ER to accompany the draft SRBS consultation. The level of detail in the ER will be proportionate to the level of detail included within the corresponding document and the likely environmental impact.

- **Preparation of a Post Adoption SEA Statement**: Following modifications as necessary to respond to representations submitted regarding the Draft SRBS, Scottish Ministers will approve and publish the finalised SRBS. Following the publication of the SRBS, a statement must be prepared to set out, amongst other matters, how environmental considerations have been taken into account in the finalised SRBS and how any likely significant effects of the SRBS on the environment (as predicted through this SEA) will be monitored.

Addressing Statutory Requirements

1.4.5 To satisfy statutory requirements it is necessary for this ER to provide certain information. The approach to addressing relevant requirements is shown in **Table 1.1** below.

Table 1.1 How Requirements of the 2005 Act are met in this SEA ER

SEA Requirement	ER Section
a) An outline of the contents, main objectives of the plan or programme and relationships with other relevant plans and programmes	Section 2
b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme	Section 3 Appendix A
c) The environmental characteristics of areas likely to be significantly affected	
d) Any existing environmental problems which are relevant to the plan or programme	
e) The environmental protection objectives, established at international, community or national level which are relevant to the plan or programme and the way those objectives and any environmental consideration have been taken into account during its preparation	Section 2.4 Appendix B
f) The likely significant effects of the plan or programme on the environment	Section 5 Appendix D, E and F
g) The measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse effects on the environment of implementing the plan or programme	Section 6
h) An outline of the reasons for selecting the alternatives dealt with and a description of how the assessment was undertaken, including any difficulties encountered in compiling the required information	Section 4
i) A description of measures envisaged concerning monitoring	Section 6 Appendix D

SEA Requirement	ER Section
j) A non-technical summary of the information provided under the above headings	Refer to separate Non-Technical Summary Report
k) Taking the environmental report and the results of the consultations into account in decision-making	Sections 3, 4, 5, 6

Other Impact Assessments

This SEA is being carried out alongside the application of relevant 'equalities duties' prescribed through relevant statutory and policy requirements. The proposed approach to integrating the Impact Assessment (IA) and SEA of the SRBS is detailed in **Sections 4** and **5** of this report, and further details regarding the proposed approach to undertaking the IA has been set out within a separate **IA Interim Report**.

1.5 Report Structure

1.5.1 This ER is structured as follows:

- **Section 2** explains the key stages in the development of the Draft SRBS and provides a summary of its proposed content and purpose

- **Section 3** outlines the environmental baseline which has informed this SEA. This section is supported by further baseline details and a review of relevant plans, programmes and strategies which are provided in **Appendices A and B**

- **Section 4** provides an overview of the SEA process undertaken to date including consultations and it describes how the SEA of the Draft SRBS has been carried out

- **Section 5** presents the key findings of the SEA undertaken for the Draft SRBS. Detailed results from the environmental assessment of Draft SRBS policies, delivery options and actions are also provided in **Appendix D, E and F** respectively

- **Section 6** discusses environmental mitigation and the proposed framework for monitoring the environmental effects of implementing the SRBS

- **Section 7** sets out the next steps in the SRBS and SEA process

1.5.2 The report is supported by the following Appendices:

- Appendix A: Environmental Baseline Review

- Appendix B: Review of Plans and Programmes

- Appendix C: Responses to Comments on SEA Scoping Report

- Appendix D: Environmental Assessment of SRBS Policies

- Appendix E: Environmental Appraisal of SRBS Transport Options

- Appendix F: Environmental Appraisal of SRBS Actions

2 SRBS Context and Proposed Content

2.1 Introduction

2.1.1 This section describes the context in which a new SRBS is being prepared for SPT and outlines its proposed form and content, all of which requires to be assessed through this SEA.

2.2 Emerging Regional Bus Strategy for Strathclyde - Key Facts

2.2.1 The key facts relating to the emerging SRBS for Strathclyde are detailed in **Table 2.1** below.

Table 2.1: The emerging SRBS for SPT Region

Criteria	Details
Responsible Authority	SPT
SEA Assessor on behalf of the Responsible Authority	Stantec UK Ltd
Strategy Title	Strathclyde Regional Bus Strategy
Expected Adoption Date	2025
Plan Subject:	Transport
Reason for the Strategy:	The RTS is clear that its strategy Vision will not be achieved without improving the quality and integration of the bus network and set out a policy aiming for a world class passenger focused public transport system". Given this conclusion, the need for the development of a SRBS was recognised with the new powers and opportunities available through the Transport (Scotland) Act 2019 requiring consideration in the development of the SRBS.
Area covered by the Strategy	The West of Scotland region ('the SPT region') as designated under the Regional Transport Partnerships (Establishment, Constitution and Membership) (Scotland) Order 2005 as amended. The SPT region covers the following local authorities: • Argyll and Bute Council (Helensburgh and Lomond wards only); • East Ayrshire Council; • East Dunbartonshire Council; • East Renfrewshire Council; • Glasgow City Council; • Inverclyde Council; • North Ayrshire Council; • North Lanarkshire Council; • Renfrewshire Council; • South Ayrshire Council; • South Lanarkshire Council; and, • West Dunbartonshire Council.

2.3 SRBS Development Process

2.3.1 The development of the emerging SRBS is principles of Scottish Transport Appraisal Guidance.

2.3.2 The first stage of SRBS development was the development of the **Case for Change**, which was commenced in June 2023.

2.3.3   The Case for Change set out the key problems to be tackled, the desired transport outcomes, and the objectives, and core policy areas to deliver on these. The Case for Change report has been published by SPT on its website.

2.3.4   Following the Case for Change, the core policy areas were developed further, including the formulation of initial policies, which would be necessary in order to undertake the Options Appraisal workstream to follow.

2.3.5   Following the Case for Change and development of initial SRBS policies, the Options Appraisal considered options for enhancements to how bus services can be delivered in the west of Scotland using the Transport (Scotland) Act 2019.

2.3.6   The aim of the appraisal was to identify a recommended operational model for bus services in the region, with the development and refinement of the SRBS building upon that preferred model into a strategy for delivery, including responding to consultation feedback.

2.3.7   The options appraisal was undertaken in accordance with the Scottish Transport Appraisal Guidance (STAG) process, which provides a framework to assess the performance of transport options to address identified problems and present the results in a consistent manner to inform decision makers. A proportionate approach was taken, appropriate in the context of strategy development.

2.3.8   The appraisal was completed on both a quantitative and qualitative basis and drew upon the quantitative data collected as part of the Case for Change, previous studies where appropriate, relevant strategy and policy documents and design guidance, and knowledge and experience of planning, appraising and delivering transport options similar to those considered here.

2.3.9   The options were appraised against the STAG criteria of Environment; Climate Change; Health, Safety and Wellbeing; Economy; and Equality and Accessibility. They were also appraised against the Transport Planning Objectives (TPOs) developed as part of the Case for Change.

2.3.10   Finally, the options were appraised in terms of feasibility, affordability, and public acceptability, as well as an assessment of risk and uncertainty.

2.3.11   The Options Appraisal report has been published by SPT on its website.

2.3.12   Following completion of the Options Appraisal, SPT published a consultation document setting out:

- The SRBS process and timescales.

- A summary of the challenges and goals for the bus network, drawing upon the Case for Change.

- An overview of the features of a better bus network

- The options available to deliver a future network.

- A set of recommendations to guide the development of the SRBS, drawing upon the recommendations of the Options Appraisal.

2.3.13   The consultation document requested feedback on the recommendations ahead of further development of the SRBS.

2.3.14   Following the consultation period, a consultation report was prepared presenting the results and findings of the process.

2.3.15   The consultation feedback was considered by SPT, leading to updating of the recommendations which were approved by the SPT Strategy and Programme Committee in September 2024.

2.3.16   SPT has published the consultation document and consultation report on its website. SPT Committee agendas and minutes are also available on SPT's website.

2.3.17   Following this, for the purpose of the development of the draft SRBS, the outcomes/goals, objectives, policies and measures were refined and consolidated to ensure they were suitable for a strategic document to be consumed by a wide audience and to facilitate further assessment of the measures against the updated objectives.

2.3.18   A delivery plan was also developed to demonstrate how the elements of the strategy will be delivered, including the transition to a franchise model for the bus network and an initial action plan.

2.3.19   A monitoring plan was also developed to demonstrate how the strategy goals and objectives will be monitored.

2.3.20   SPT will publish a technical report setting out further details of the above processes.

2.3.21   In parallel with the above activities, this multi-stage **SEA** will be completed, in line with the Environmental Assessment (Scotland) Act (2005) and the SEA Guidance. In addition, comprehensive **IAs** are being undertaken. The IA process contains:

-   Equality Impact Assessment (EQIA)

-   Fairer Scotland Duty (FSD) Impact Assessment

-   Island Communities Impact Assessment (ICIA)

-   Children's Rights and Wellbeing (CRW) Impact Assessment

2.3.22   The SEA and the IA process will integrate with the SRBS development process. The SEA will be developed, and the relevant equalities duties will be applied in tandem with the SRBS development, with SEA and IA feeding into the overall shape and content of the final document.

2.3.23   The key stages of the process are set out in **Table 2.2** to illustrate the activities from the two strands of work and to explain how SEA outputs inform the SRBS process.

Table 2.2 SRBS and SEA Processes

SRBS Process	SEA Process
Development of Case for Change.	Collation of a detailed environmental baseline including review and identification of relevant key plans and programmes. Analysis of baseline environmental issues and discussions with the SRBS transport planning and policy development teams to ensure environment, climate change and sustainability issues were captured in the problems analysis process. Development of an initial SEA framework to provide the basis for environmental assessment of the key emerging components of the SRBS. Key SEA output: SEA Scoping Report (Oct 2024)

SRBS Process	SEA Process
	Input to the policy development process including initial testing of the compatibility of the SRBS strategic framework with the developing SEA framework and objectives.
	Given that only limited funding models (i.e. five with business as usual) were identified. Environmental inputs were provided in the options appraisal stages.
Option Appraisal	Environmental assessment of options was carried out in line with STAG to provide environment and climate change analysis of options and inform the understanding of the effectiveness of options in addressing the identified problems. Initial proposals for mitigation were identified from the environmental appraisals and taken forward in this SEA.
Refinement of transport policies / measures and development of delivery plan	Completion of the detailed environmental assessment of the SRBS polices / measures on each the SEA objectives and preparation of the SEA Report. Key SEA output: Draft SRBS SEA Report (Feb 2025) (This document)

2.4   Proposed Form and Content of the Emerging SRBS

Background

2.4.1   As noted above, the development of a SRBS has its foundations embedded in SPT's *A Call to Action: The Regional Transport Strategy for the west of Scotland (2023 – 2038)* (or 'RTS'), and its vision, priorities and objectives, and clear policy statement setting out the aim for a world class passenger focused public transport system.

2.4.2   The RTS was published in 2023, and reinforces national policy ambitions, setting out the following Vision for transport in the region:

"The west of Scotland will be an attractive, resilient and well-connected place with active, liveable communities and accessible, vibrant centres facilitated by high quality, sustainable and low carbon transport shaped by the needs of all."

2.4.3   The RTS recognises the need to invest in transformative public transport ensuring a sufficiently attractive 'offer' to move more people by more sustainable transport modes rather than by car. Therefore, a key theme within the strategy encompasses enhancing the quality and integration of public transport with a specific objective to make public transport a desirable and convenient travel choice for everyone.

2.4.4   The RTS Vision is unlikely to be achieved without improving the quality and integration of the bus network and set out a policy aiming for a world class passenger focused public transport system. Given this, the need for the development of a SRBS was recognised, with the new powers and opportunities available through the Transport (Scotland) Act 2019 requiring consideration in the development of the SRBS.

SRBS Components

2.4.5   The draft SRBS will comprise the following substantive components:

- The Case for Change – This chapter makes the case for change in the bus network by setting out the opportunity of bus in delivering better social, economic and environmental

outcomes and outlining the problems with the current bus network and the bus 'cycle of decline.'

■ The Bus Network We Need – This chapter introduces the strategic framework of the strategy, outlines the strategy goals and objectives and describes the bus network that is needed to grow patronage and improve access to bus through a set of policies and measures.

○ The goals are: (1) More people using buses, and using buses more often; and, (2) More communities have access to bus for everyday travel. The goals set the long-term strategic outcomes for the strategy and are linked to the RTS framework and wider policy drivers underpinning the RTS.

○ The strategy objectives: Aim for a consistent and improved level of service across the region, ensuring communities are connected quickly and efficiently to key destinations and services; Aim for bus travel to be affordable, safe and accessible for all; Aim for an attractive, integrated and sustainable bus network

○ The policies are the principles that should be applied by SPT and partners in decision-making processes affecting bus in the region, while the measures describe the activities and outputs that are needed to support the policies. The policies and measures are structured within a series of seven key policy themes in the Draft SRBS with a narrative provided on the over-arching context and intention of each theme and further description of the individual policies within each theme. The themes are:
  ■ Buses where they are needed, when they are needed
  ■ Reliable and quicker bus journeys
  ■ Affordable and attractive fares and ticketing
  ■ Accessible and safer bus journeys
  ■ A trusted and recognisable bus network
  ■ A seamless and integrated bus network
  ■ A more environmentally sustainable, resilient and adaptable bus network and fleet

■ The Delivery Plan – This chapter sets out the rationale for taking forward a franchising model in the region, the key issues and risks to be considered in the development and implementation of franchising, and the process to develop and implement franchising. This chapter also sets out an action plan including initial actions for the development of franchising, actions to support the management of the pre-franchising period, and actions to deliver bus infrastructure, traffic management, and a more 'bus friendly' environment.

■ Monitoring Plan – This chapter sets out how the strategy will be monitored against the strategy goals and objectives.

2.4.6 Each substantive component of the emerging SRBS will need to be subject to SEA in line with the approach set out within the SEA Scoping Report.

2.5 Relationship with Other Plans and Programmes

2.5.1 In accordance with the 2005 SEA Act, a review of the relationship between the emerging SRBS and other relevant plans and programmes (including legislation, policies and strategies at all spatial scales) has been carried out, as detailed fully in **Appendix B**. This review has identified key requirements objectives and priorities of relevant plans and their implications for both the emerging SRBS itself and for this SEA.

2.5.2 From the review of relevant plans and strategies provided in **Appendix B**, it is clear the emerging SRBS should:

- Align with relevant existing and emerging policies and proposals within relevant national, regional and local plans and strategies. In particular, the emerging SRBS must support the delivery of the National Transport Strategy 2 (2020), as well as the implementation of the approved RTS, the approved Clydeplan Strategic Development Plan (SDP), and the adopted and emerging LDPs and SDPs within SPT region.

- Ensure the avoidance of likely significant adverse effects from the implementation of the plan on sites designated at international and national levels for reasons of biodiversity conservation or ecological importance.

- Minimise and appropriately mitigate likely adverse effects on sites designated at the local level for their ecological importance.

- Minimise the environmental impacts of transport provision and infrastructure, including in terms of reducing carbon and greenhouse gas emissions and using natural resources sustainably.

- Reduce congestion and improve air quality, including but not limited to implementing existing Air Quality Action Plans covering Air Quality Management Areas (AQMAs) within the SPT region, and improving areas with known poor air quality.

- Underpin the development of a safe, secure, efficient, reliable and integrated bus transport system across the SPT region.

- Support improvements in journey times and connectivity to and from key destinations.

- Encourage measures that reduce the need to travel and allow communities in different locations to flourish.

- Ensure the conditions are in place to allow a widespread uptake of sustainable modes of bus transport for all demographic groups and communities.

- Improve the accessibility of the bus transport system, ensuring that bus transport is accessible to all and does not contribute to social exclusion or disadvantage, whether through severance or unaffordability.

- Enable the efficient, effective and sustainable movement of people to increase economic productivity, competitiveness and opportunities for all.

- Secure economic growth and inward investment by supporting the delivery of new and upgraded bus infrastructure to increase connectivity and improve access to high quality employment and economic opportunities.

- Minimise the amenity impacts of bus transport, including in terms of reducing noise and vibration.

- Ensure the avoidance of unacceptable human health impacts from bus transport, in particular impacts on air quality.

- Seek to protect and enhance the health and wellbeing of the resident and working population, including through facilitating access to healthcare, safeguarding physical health and providing opportunities to enhance mental health and social wellbeing.

2.5.3   As with the key issues identified in part from analysis of the environmental and socio-economic baseline (see **Section 3**), these key policy issues needed to be addressed within the emerging SRBS itself to effectively tackle pertinent transport problems, support the implementation of other existing and emerging plans and policies.

3 Key Baseline and Policy Issues

3.1 Introduction

3.1.1 This section summarises the approach to developing the environmental baseline within the area likely to be affected by the emerging SRBS, in particular the SPT area. **Section 3.2** presents a summary of the environmental baseline drawing on information collated on key environmental designations and from a detailed baseline review in **Appendix A**. A commentary on the likely evolution of the environmental baseline in the absence of the proposed policy (the Draft SRBS) is then set out in **Section 3.3**.

3.1.2 The SEA Scoping Report presented an initial review of the relevant aspects and characteristics of the environment, including those likely to be significantly affected by the outcome of the refreshed RTS. This included the identification of sites designated at international or national levels for reasons of biodiversity conservation, geological importance, heritage, or landscape values which have the potential to be affected by the emerging SRBS.

3.1.3 This report has developed the baseline taken from the SEA Scoping Report and both updated the environmental baseline, in light of recent publications, and synthesised the baseline to focus on existing problems and issues in the SPT region. A detailed review of environmental baseline information in the SPT area and policy are set out in **Appendix A** and **B** respectively.

3.2 Environmental Baseline

Constraints and Designations

3.2.1 The SPT region covers a very large area in west central Scotland, extending to approximately 7,000 square kilometres and with a great variation in topography and character. With a population of over 2.2 million people, a large part of the region is heavily urbanised with the wider built area of the Glasgow conurbation extending west along the banks of the River Clyde and east into the populous areas of parts of North and South Lanarkshire.

3.2.2 The northern and southern parts of the region are more rural in character with the area around Loch Lomond in the north forming a high-quality mountainous landscape, part of the Loch Lomond and Trossachs National Park, which is important for a range of national and international conservation objectives. The coastal area in the west of the region is also extensive and provides a varied landscape setting including for the islands and peninsulas in the lower Firth of Clyde. Amongst these the Isle of Arran is notable for its geology, topography and extensive range of terrestrial and marine designations. The River Clyde and its catchment forms the largest watercourse in the region, although there is a series of other river systems in the south and north of the region which rise from upland areas particularly those which characterise much of South and East Ayrshire.

3.2.3 An overview of the designations in the SPT area is shown in **Figure 3.1** Region Wide Environmental Constraints and Designations. **Figure 3.1** and further details of the designations in the region classified by SEA topic, is presented in **Appendix A.**
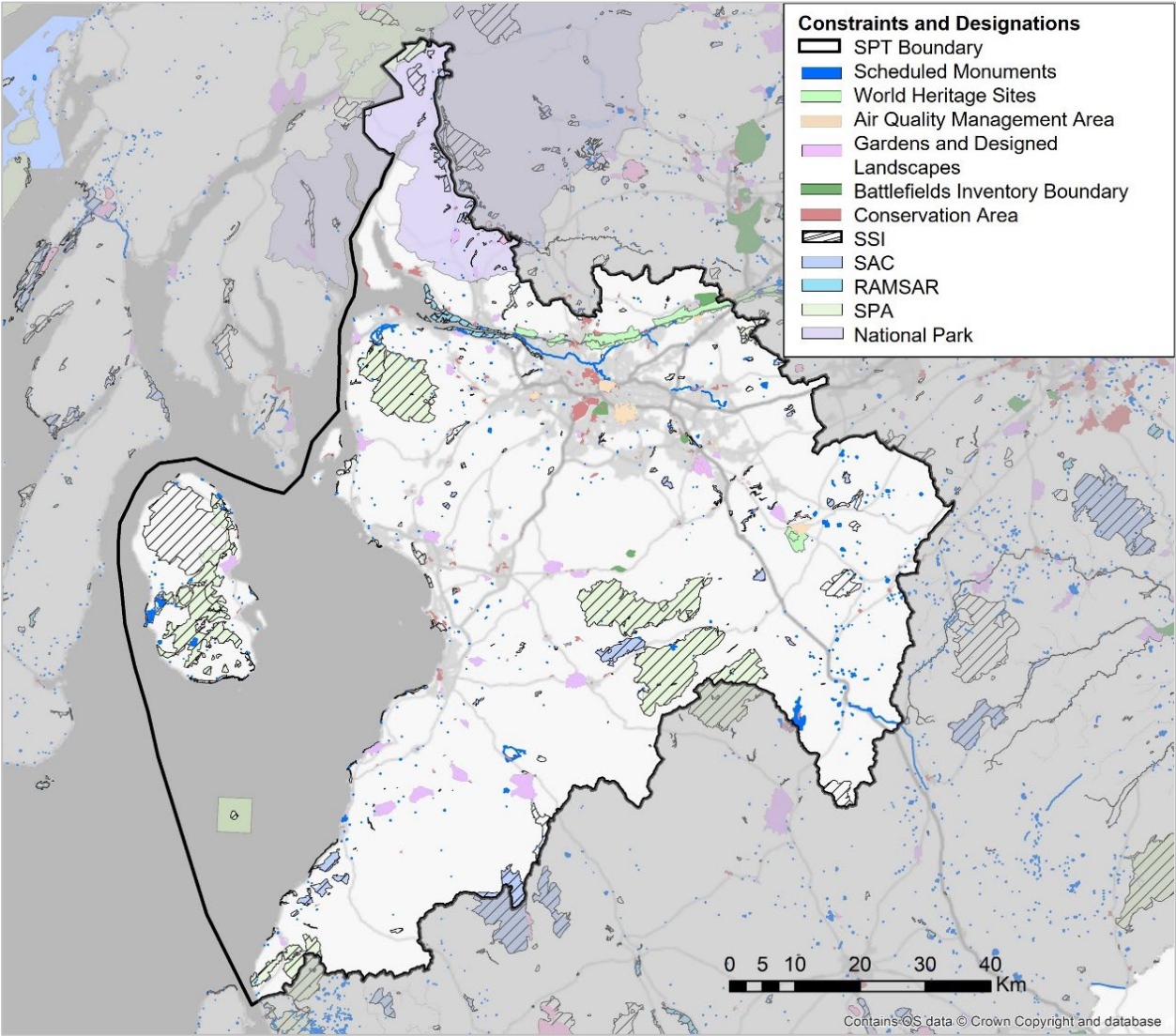
Figure 3.1: Region Wide Environmental Constraints and Designations

Overview of Baseline Characteristics

3.2.4   With reference to the environmental topics prescribed within Schedule 3 of the SEA Act and the duties set out within the Transport (Scotland) Act 2005, a summary of the key issues identified in **Appendix A** which need to be addressed within the emerging SRBS and taken account of in the associated SEA is provided in **Table 3.1** below. The identification of key issues has also been informed by consideration of the likely evolution of baseline conditions in the absence of the emerging SRBS, as detailed in **Appendix A**.

Table 3.1: Key issues relevant to the SEA of the Emerging SRBS

Grouped Baseline Topics	SEA Environmental Aspects	Key Issues
Air and Climate	• Air Quality • Climatic Factors	• The need to maintain and improve air quality for the benefit of human health and the environment, particularly in light of the increased level of housing to be provided. • The need to reduce noise exposure in some communities and protect quiet areas where noise quality is good in other communities. • The need to mitigate climate change including through promoting sustainable land use patterns and the decarbonisation of the transport sector. • The need to ensure that transport infrastructure and facilities are resilient to adverse weather and adaptable to the effects of climate change.
Physical Environmental	• Biodiversity, Flora & Fauna • Soil • Water • Cultural Heritage • Landscape	• The need to conserve and enhance biodiversity interests including sites designated for their ecological importance. • The need to maintain, restore and expand valued habitats and to safeguard protected species. • The need to protect and enhance green infrastructure assets. • The need to prioritise the redevelopment of previously developed (brownfield) land. • The need to protect sites designated for their geological interest. • The need to protect and enhance the quality of water sources and the water environment. • The need to locate new development including transport infrastructure away from areas of flood risk, and for such infrastructure to be resilient to flooding (and adverse weather more widely). • The need to protect and enhance cultural heritage assets and their settings. • The need to conserve and enhance landscape character and to protect visual amenity.
Social and Economic	• Population (including relevant socio-economic issues) • Human Health • Material Assets	• The need to align with and support the implementation of adopted relevant national policies, including the NTS2 (Scottish Government, 2020) and the Strategic Transport Projects Review 2 (STPR2) and the National Planning Framework 4 (NPF4). • The need to align with and support the implementation of current and emerging statutory Development Plans and other relevant regional and local policies applicable to SPT region. • The need to develop an integrated and efficient transport system which meets identified needs and supports projected population growth whilst effectively managing travel demand. • The need to support the growth of key economic sectors and to deliver sustainable and inclusive economic growth. • The need to tackle deprivation and severance and to improve access to key amenities and economic opportunities for all demographic groups and communities. • The need to provide transport services appropriate to meet the needs of the projected ageing population.

3.3 Evolution of the Baseline in the Absence of the Emerging SRBS

3.3.1 In the absence of the emerging SRBS, it is predicted that transport infrastructure and provision in the SPT region would struggle to cope with changing transport demands including the need to support emissions reductions, accessible public transport and the delivery of inclusive economic growth.

3.3.2 In relation to the environmental topics prescribed in Schedule 2 of the 2005 Act, it should be noted that environmental impacts from individual transport infrastructure projects would depend on their locational, design and operational characteristics, as would be assessed through the consenting of each project rather than through the emerging SRBS. However, in the absence of the new SRBS and if the resident and workplace populations of the SPT region increase in line with projections, the following changes to the environmental / SEA baseline might be predicted:

3.3.3 **Population**: Assuming a return to pre-Covid travel patterns, demand for transport would outstrip supply, leading to overcrowding of transport infrastructure, increased congestion and delays on the transport network. This could impede the delivery of inclusive growth and stifle economic productivity, as well as resulting in physical environmental and health impacts (see below). It could also lead to a requirement for new major bus transport infrastructure (e.g. bus depots, bus stations, bus interchanges and mobility hubs) to cope with increased demand, which if not co-ordinated could itself have a range of environmental impacts.

3.3.4 **Health**: Demand for, and use of, road transport would potentially increase in line with population growth, whilst opportunities to encourage transport modal shift to public transport and the associated active travel would be lost. There would be some deterioration in respiratory health if road traffic levels continue to rise.

3.3.5 **Biodiversity, Flora & Fauna**: If not carefully co-ordinated (i.e., through the emerging SRBS), the need for new major bus transport infrastructure (e.g. bus depots, bus stations, bus interchanges and mobility hubs) to cope with increased mobility demands could put pressure on biodiversity, including the loss and fragmentation of habitats and effects from increased traffic including disturbance from noise and habitat degradation from deposition of air pollutants.

3.3.6 **Soil**: If not carefully co-ordinated, the need for new major bus transport infrastructure (e.g. bus depots, bus stations, bus interchanges and mobility hubs) to cope with increased demands could lead to the loss of important soil resources, soil erosion and land contamination.

3.3.7 **Water**: If not carefully co-ordinated, the need for new major bus transport infrastructure (e.g. bus depots, bus stations, bus interchanges and mobility hubs) to cope with increased demands could result in increased flood risks, changes to local hydrological and groundwater patterns, and potential for pollution of the water environment.

3.3.8 **Air Quality & Noise and Climatic Factors**: In the absence of a major modal shifts towards public transport and associated active travel, an increase in road traffic associated with projected population growth would increase fossil fuel combustion, carbon emissions and local atmospheric pollution, in particular greater release of particulate matter. This would lead to worsening air quality and noise, and act against wider policy efforts to decarbonise key economic sectors, including transport, to mitigate climate change. The failure to tackle existing areas of poor air quality and more generally to improve air quality could result in the need for local authorities within the SPT region to designate further Air Quality Management Areas (AQMAs) and implement associated Air Quality Action Plans (AQAP), which could adversely impact on the functioning of the transport network.

3.3.9 **Material Assets**: Bus transport infrastructure and provision would be mis-aligned with changing transport patterns and demands whilst opportunities to encourage modal shift to public transport would be lost. The absence of the SRBS could result in the failure of SPT and

constituent local authorities to attract the substantial public and private sector funding needed to adequately maintain existing public transport infrastructure, better integrate transport modes and to deliver the new or upgraded infrastructure required to meet the needs of a rising population. This might adversely affect the ability of SPT, as the statutory RTP for the west of Scotland area, to support the delivery of sustainable and inclusive economic growth.

3.3.10 **Cultural Heritage**: If not carefully co-ordinated, the need for new major bus transport infrastructure (e.g. bus depots, bus stations, bus interchanges and mobility hubs) to cope with increased demands could increase development pressures in areas of historical or archaeological interest and could undermine the integrity and setting of sensitive heritage assets.

3.3.11 **Landscape and townscape**: If not carefully co-ordinated, the need for new major transport infrastructure (e.g. bus depots, bus stations, bus interchanges and mobility hubs) to cope with increased demands could adversely impact on the landscape character of and key landscape features within the SPT region, as well as adversely affecting visual amenity in some key transport corridors.

4 The SEA Process

4.1 Introduction

4.1.1 This section provides an overview of the SEA process which has been undertaken to assess the likely environmental effects of the emerging Draft SRBS. The overall purpose of the assessment and the framework of SEA objectives is set out in **Section 4.2**, with further details of the SEA methodology including consultation explained in **Section 4.3**. The approach to consideration of alternatives to the SRBS is presented in **Section 4.4** and the final section (**4.5**) provides an overview of how the SEA process has informed the development of the SRBS.

4.2 SEA Purpose and Objectives

4.2.1 In accordance with the 2005 Act, the purpose of SEA is to identify, assess, and evaluate the likely significant environmental effects of a qualifying plan, programme or strategy. A key objective of SEA is to enhance the environmental and wider sustainability performance of a plan or programme. This is achieved through identifying any likely significant effects from implementation of the plan or programme as drafted, proposing mitigation measures to address any identified significant adverse environmental effects, and identifying enhancement measures to improve the overall performance of the plan or programme. As such, SEA is an integral part of good policy development and not a separate or retrospective activity.

4.2.2 The framework for the SEA has been established through early formulation of a set of ten objectives which reflect the key priorities for the environmental assessment. These objectives were drafted at the scoping stage of the process and subsequently consulted on with the SEA Consultation Authorities. They are set out in **Table 4.1**.

Table 4.1 SEA Objectives

SEA Objective	Objective Wording
Health	Improve the health of the resident and workplace population, including with respect to physical and mental health and social wellbeing.
Accessibility	Reduce the need to travel and ensure appropriate and affordable access for all to facilities, services, economic opportunities and social activities.
Material Assets	Manage, maintain and where possible improve the efficient and effective use of natural resources, land and infrastructure to meet identified needs.
Productivity, Competitiveness and Innovation	Deliver an integrated and efficient transport system to increase economic prosperity, support the growth of key economic sectors and deliver increased and more inclusive employment.
Air Quality and Amenity	Tackle poor air quality, reduce concentrations of harmful atmospheric pollutants and minimise exposure to noise and vibration.
Climate Change Mitigation	Decarbonise the transport sector and support wider efforts to mitigate climate change.
Biodiversity, Geodiversity and Soil	Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by protecting green infrastructure.
Water, Flood Risk and Resilience	Conserve, protect and enhance water environments, water quality and water resources, whilst adapting to climate change and reducing flood risks.
Cultural Heritage	Conserve, protect and enhance the historic environment and cultural assets.
Landscape	Protect and enhance the landscape character, townscape character and visual amenity.

4.3   Approach to SEA

4.3.1   This section describes the approach to SEA, identifies the key stages and the assessment methods used. Consultation on the SEA to date is discussed and the final sub-section sets out the assumptions and limitations in undertaking the environmental assessment.

Key Stages of the SEA

4.3.2   The SEA has been undertaken iteratively and in step with the development of the emerging SRBS. The key stages of SRBS development and parallel SEA activities are set out in **Section 2.3**. The approach to environmental assessment of the developing components of the Draft SRBS has focused on three key groups of Strategy elements as follows:

- compatibility appraisals of the preliminary elements of the Draft SRBS including the Goals and Objectives

- environmental appraisal of the transport options generated in the transport planning analysis of problems and opportunities (which were presented initially in the SRBS Case for Change report)

- environmental assessment of the subsequent draft SRBS policy themes and supporting detailed policies and measures and actions (as presented in the draft Strategy)

4.3.3   At the scoping stage, a SEA framework was prepared to provide the basis for comprehensive environmental assessment of the SRBS components and a consistency of approach. The framework includes the SEA objectives and a series of guiding questions and criteria for each objective / policy theme to prompt consideration of all potential environmental effects during its application.

4.3.4   The SEA framework is presented in **Table 4.2**. The framework includes a series of guide questions and supporting criteria which have been used to inform the consideration of the potential effects of each SRBS policy against the SEA objectives in a consistent and objective manner. Due to the high-level nature of the Strategy, the SEA team has applied professional judgement drawing from experience of assessing similar plans and programmes to determine the likelihood of significant environmental effects.

4.3.5   The approach to environmental assessment at each of the above key SRBS stages has required a flexible method adapted to each SRBS component. The methods used are explained in the following paragraphs.

Table 4.2 SEA Framework

SEA Objectives	Guide Questions – *Will the SRBS…*	Supporting Criteria to Assess Transport Policies
1. Health: Improve the health of the resident and workplace population, including with respect to physical and mental health and social wellbeing.	▪ Facilitate and encourage use of public transport and active travel? ▪ Improve accessibility to public open spaces, sports facilities, path networks? ▪ Reduce the negative impacts of transport on human health, especially in terms of pollution and air quality? ▪ Reduce the likelihood of transport-related road accidents and casualties? ▪ Improve access to healthcare facilities? ▪ Safeguard sensitive environmental receptors to maintain and enhance human health?	▪ Proximity to and impacts on access to healthcare facilities. ▪ Proximity to and impacts on active travel networks. ▪ Proximity to and impacts on open space provision and accessibility.
2. Accessibility: Reduce the need to travel and ensure appropriate and affordable access for all to facilities, services, economic opportunities and social activities.	▪ Reduce the need to travel? ▪ Increase the accessibility of public services, economic opportunities and markets? ▪ Improve the accessibility and integration of the transport network? ▪ Improve the accessibility of education infrastructure, in particular by active travel and public transport? ▪ Enhance access to active travel routes? ▪ Reduce congestion and allow for greater journey time reliability? ▪ Help reduce severance effects of the transport network? ▪ Address changing transport needs resulting from population growth and ageing?	▪ Proximity to and impacts on the public transport network. ▪ Proximity to the strategic road network (motorways and trunk roads). ▪ Proximity to and impacts on identified congestion pinch points. ▪ Proximity to and impacts on the accessibility of community facilities, public services and key amenities. ▪ Proximity to and impacts on the accessibility of education infrastructure. ▪ Proximity to and impacts on SPT's green network
3. Material Assets: Manage, maintain and where possible improve the efficient and effective use of natural resources, land and infrastructure to meet identified needs.	▪ Support the delivery of relevant spatial strategies within national policy and applicable Development Plans? ▪ Improve the integration of land use and transport? ▪ Unlock the delivery of housing to meet identified needs? ▪ Facilitate the re-development of previously developed land? ▪ Support the provision of adequate infrastructure, services and facilities to meet identified needs?	▪ Proximity to and impacts on the delivery of key housing sites. ▪ Proximity to and impacts on the re-development of previously developed land. ▪ Impacts on natural resources, including the extraction of mineral resources.

SEA Objectives	Guide Questions – *Will the SRBS…*	Supporting Criteria to Assess Transport Policies
	■ Enhance the resilience of infrastructure to adverse weather and the effects of climate change?	
4. Productivity, Competitiveness and Innovation: Deliver an integrated and efficient transport system to increase economic prosperity, support the growth of key economic sectors and deliver increased and more inclusive employment.	■ Support the sustainable management of infrastructure assets? ■ Promote the co-location of synergistic economic activities, industries and land uses? ■ Support the efficient movement of freight? ■ Improve physical access to employment for all? ■ Support increased and diversified employment opportunities?	■ Economic development and employment benefits unlocked by the policies/measures. ■ Impacts on transport efficiency. ■ Impacts on the movement of freight. ■ Proximity to and impacts on existing and planned key employment locations.
5. Air Quality and Amenity: Tackle poor air quality, reduce concentrations of harmful atmospheric pollutants and minimise exposure to noise and vibration.	■ Maintain or enhance air quality? ■ Reduce exposure to poor air quality? ■ Support the implementation of existing local authority Air Quality Action Plans (AQAPs) and Low Emissions Zones (LEZs)? ■ Decrease noise and vibration levels at sensitive locations? ■ Prevent and reduce emissions of harmful pollutants?	■ Proximity to and impacts on existing Air Quality Management Areas (AQMA). ■ Likely impacts on the implementation of existing AQAPs and/or Glasgow's Low Emission Zone. ■ Proximity to congestion pinch points. ■ Likely operational emissions.
6. Climate Change Mitigation: Decarbonise the transport sector and support wider efforts to mitigate climate change.	■ Support a sustainable pattern of development which minimises energy consumption and GHG emissions? ■ Reduce reliance on car travel? ■ Contribute to or challenge the decarbonisation of the transport sector? ■ Promote modal shift towards sustainable and active travel? ■ Promote the use of clean fuels and technologies?	■ Impacts on climate change mitigation: modal shifts and GHG emissions or saving (construction and operational phases). ■ Penetration of zero emissions vehicles in transport fleets.
7. Biodiversity, Geodiversity and Soil: Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by protecting green infrastructure.	■ Ensure appropriate safeguards for the integrity and conservation objectives of sites designated at international, national or local levels for reasons of biodiversity or geodiversity value or species protection? ■ Support the protection and enhancement of valued species and habitats? ■ Support safeguarding against habitat loss or fragmentation?	■ Proximity to and impacts on sites designated at international, national and local levels for reasons of biodiversity conservation, ecological importance or geological importance. ■ Proximity to and impacts on designated woodlands, important trees or hedgerows and other valued habitats.

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SEA Objectives	Guide Questions – *Will the SRBS…*	Supporting Criteria to Assess Transport Policies
	- Support the protection and enhancement of protected trees and important woodland areas? - Improve access to nature? - Protect and enhance important soil resources?	Potential impacts on protected species.
8. Water, Flood Risk and Resilience: Conserve, protect and enhance water environments, water quality and water resources, whilst adapting to climate change and reducing flood risks.	- Support improvement in the quality of waterbodies in accordance with the Water Framework Directive? - Maintain or enhance the ecological and chemical status of the water environment in accordance with the Water Framework Directive? - Affect the volume of surface water runoff into or abstraction from water bodies? - Minimise the risk of flooding to people, property, infrastructure and environmental assets? - Manage residual flood risks appropriately and avoid new flood risks? - Seek to minimise new development in areas prone to flood risk or mitigate the potential for such risk? - Promote the resilience of the transport system to the effects of climate change and adverse weather?	- Proximity to Flood Risk Zones. - Proximity to and impacts on the environmental and hydrological status of waterbodies and aquifers. - Measures to enhance resilience to adverse weather and adapt to the effects of climate change. - Adoption of sustainable drainage and blue/green infrastructure.
9. Cultural Heritage: Conserve, protect and enhance the historic environment and cultural assets.	- Conserve, protect and enhance (as appropriate) the integrity, character and setting of heritage places, spaces and assets (designated and undesignated)? - Preserve important archaeological sites and protect potential unknown archaeological resources from adverse effects of transport development? - Support improved access (by active and public transport) to, and understanding of, cultural heritage sites?	- Proximity to and potential effects on heritage assets, important archaeological places, spaces, sites and their settings. - Opportunities to enhance access and understanding of archaeology and built heritage.
10. Landscape: Protect and enhance the landscape character, townscape character and visual amenity.	- Protect and enhance landscape character? - Safeguard important landscape and townscape features? - Protect visual amenity and valued views? - Prevent urban sprawl? - Maintain and enhance the attractiveness of the public realm?	- Proximity to and impacts on designated landscapes. - Impacts on visual amenity and key views. - Impacts on settlement integration or coalescence.

Assessment Methods

4.3.6   The early stages of the SEA process included development of an assessment methodology which was set out in the SEA Scoping Report. This included the identification of the SEA framework (including SEA objectives – see **Section 4.2**) which was then used to inform consideration of the compatibility between the SEA and SRBS objectives.

4.3.7   The compatibility appraisals followed a qualitative assessment method where the potential for environmental effects from the key emerging SRBS elements at that stage (the Goal and Objectives) was considered by the SEA team with respect to each SEA objective, and with reference to the guide questions in the SEA Framework, to provide a consistent and objective approach. The findings of the initial compatibility appraisals were presented using simple tables with indicative environmental 'compatibility scores' and a supporting narrative. The appraisals have been reviewed and updated to reflect changes to the SRBS elements (e.g., through changes to the wording of the SRBS objectives). The updated appraisals based on the finalised wording of the Goal and Objectives are presented in **Section 5.2**.

4.3.8   The generation and appraisal of the transport options for the Strategy was undertaken in accordance with STAG methods at a strategic level. Environmental input was provided to this process providing an appraisal of the environmental and climate change criteria required by STAG based on a seven-point scale of impact criteria to assign an indication of significance of the predicted impact alongside the impact commentaries. These appraisal inputs then informed the development of recommendations in accordance with the options that offered the best performance against transport planning objectives and the STAG criteria. The findings of the environmental appraisal of the transport options are captured in the option appraisal tables set out in **Appendix E** and a summary of the key environmental effects is presented in **Section 5.4** of this report.

4.3.9   Following the options appraisal, the SRBS process involved the development of seven transport policy themes, and refinement of policies and measures within each theme. The next stage of the SEA environmental assessment involved the application of the SEA framework to assess the predicted environmental effects of the individual policies. These assessments were also drawn on the findings of the appraisals of the relevant options from the STAG-based work.

4.3.10   For each policy with measures, each SEA objective was considered in turn by the assessment team and environmental effects were predicted with reference to the guiding questions and criteria in the SEA Framework and drawing on the judgement and professional experience of the assessment team. The predicted environmental effects of the policies were then evaluated with reference to a set of impact criteria as shown in **Table 4.3** to determine their likely significance.

Table 4.3 Significance Criteria for Assessing Environmental Effects

Score	Description	Symbol
Significant (Major) Positive Effect	The proposed strategy component / action contributes significantly to the achievement of the SEA Objective	++
Minor Positive Effect	The proposed strategy component / action contributes to the achievement of the SEA Objective but not significantly	+
Neutral Effect	The proposed strategy component / action is related to but does not have any effect on the achievement of the SEA Objective	0
Minor Negative Effect	The proposed strategy component / action detracts from the achievement of the SEA Objective but not significantly	-
Significant (Major) Negative Effect	The proposed strategy component / action detracts significantly from the achievement of the SEA Objective. Mitigation is therefore required	--
Uncertain Effect	The proposed strategy component / action has an uncertain relationship to the SEA Objective, or the	?

Score	Description	Symbol
	relationship would be dependent on the way in which the aspect is managed	
No Clear Relationship	There is no clear relationship between the strategy component / action and the achievement of the SEA Objective, or the relationship is negligible	~

4.3.11 The predicted effects and their significance were recorded in a series of assessment frameworks (tables) to capture information on the nature of the predicted effects, their likely significance, and proposed mitigation (and enhancement) measures to be taken forward when action plans are further developed at later stages of the SRBS implementation. These frameworks are presented in **Appendix D** and the key findings of this environmental assessment are presented in **Section 5** of this report.

4.3.12 The SRBS process further involved the development of an action plan that supports the delivery of the SRBS. The Action Plan covers the initial actions for the Franchising Route Map, actions to support the management of the 'pre-franchising' period, actions for bus infrastructure and traffic management, and actions to support a 'bus friendly' environment integrated with other key programmes and policies. In total, 27 actions have been developed.

4.3.13 Each action was assessed against each of the SEA Objectives, drawing on consideration of the predicted environmental effects of the action (and where relevant linked measure) within each theme.

4.3.14 A high-level commentary on potential cumulative effects of the Draft SRBS has also been included in **Section 5.6** to recognise in particular the opportunity for synergies from enhanced active travel and public transport across the region to reduce emissions and other environmental effects.

Consultation

4.3.15 Statutory consultation with the SEA Consultation Authorities was undertaken at the Scoping Report stage of the SRBS and SEA processes.

4.3.16 At the Scoping Report stage, SEA Consultation Authorities were issued with a copy of the SEA Scoping Report and requested to provide comments regarding the proposed scope and approach to undertaking the SEA of the emerging RTS. It was requested that comments were provided within 5 weeks of receiving the report. The following consultees responded at this stage:

- Scottish Natural Heritage (now NatureScot)

- Scottish Environment Protection Agency (SEPA)

- Historic Environment Scotland (HES)

4.3.17 The Consultation Authorities were generally satisfied with the scope, level of detail and approach to the SEA presented in the Scoping Report including the SEA objectives and assessment framework. SEPA and HES provided some comments and suggestions on data sources and other relevant plans and strategies (including information available from their SEA reports) which could be usefully reviewed to contribute to the SEA baseline and key issues for the assessment. All the consultees were content with the proposals for public and stakeholder consultation on the draft SRBS and SEA ER.

4.3.18 SPT carried out a consultation exercise between Tuesday 2nd April and Monday 13th May 2024 to understand levels of support or opposition to these recommendations and reasons why. Feedback from the general public and stakeholders was gathered, with 3,072 responses received in total across the following channels:1) Questionnaire, (2) Document / Letter, (3) Workshops and (4) Interviews.

4.3.19 A schedule of the comments received from the SEA Consultation Authorities, and responses from the SEA team on how the issues raised have been addressed is included in **Appendix C**.

Assumptions and Limitations

4.3.20 The identification of any assumptions and uncertainties is an important element of the SEA process, as the emerging SRBS will need to be unambiguous to ensure the plan can be implemented as intended.

4.3.21 The SEA has been undertaken alongside a relatively high level and strategic document in the SRBS which is intended to cover a significant timespan of up to approximately 10 to 15 years. There is some inherent uncertainty therefore in the accuracy of predictions made for the environmental assessment of long-term policies where the detail of implementation is still to be worked up. Whilst the Strategy does not include any detail on specific spatial transport interventions, the process of identifying and appraising options and the subsequent linking of options with policies in the draft Strategy has allowed the environmental assessment team to better judge the types of intervention associated with each policy through consideration of indicative (if generic) measures.

4.3.22 This has reduced the uncertainties inherent in the assessment of a plan of this nature and it is considered that the environmental assessment has been founded on sufficient prescription in the policies to allow for a competent strategic level assessment of potential significant effects. To address potential uncertainty in the degree of effectiveness of the SRBS policies, the SEA team has also taken account of the typical measures which the options set provides, and the assessment assumes that policies and their subsequent delivery measures would be implemented broadly and comprehensively across the SPT region in order to identify and better understand their likely environmental and sustainability consequences. The reliability of these assessments has been improved through close working between the SEA and transport planning teams through the whole SRBS process so that the types of options and their potential impacts were better understood.

4.3.23 The SEA assessment and reporting matrices (see **Appendix D and F**) have been designed to allow uncertainties and assumptions affecting the implementation of the emerging SRBS to be identified early and effectively within the SRBS preparation process. Relevant assumptions have therefore been incorporated in relation to the assessment of each SRBS policy theme in this appendix.

4.3.24 The iterative nature of the SEA process has enabled mitigation and enhancement recommendations to be devised and incorporated into the emerging SRBS to address any identified issues, in particular to avoid likely significant adverse effects from occurring. Finally, the commitment to continued environmental assessment at an appropriate level through the future stages of SRBS delivery and incorporation of mitigation principles from this SEA (see **Section 6.2**) will help to ensure that any uncertainties at this stage in how policies may be taken forward can be proactively addressed through later delivery.

4.3.25 No significant difficulties or limitations have been encountered in preparing this SEA Report.

4.4 Consideration of Reasonable Alternatives

4.4.1   The SEA legislation requires that the likely significant environmental effects of implementing the Strategy and reasonable alternatives to it are identified, described and evaluated. The reasons for selecting the alternatives dealt with should also be outlined.

4.4.2   The principal and most strategic alternative considered at the outset of the SRBS process by SPT related to whether or not a new Strategy was required. The existing bus strategy for Strathclyde and the possibility of 'refreshing' the strategy was considered as an alternative course of action. However, there has been rapid development of legislation and policy in the transport sector in Scotland in recent years and an increasing prominence and urgency of addressing issues such as climate change and a range of socio-economic and equalities priorities in the region. These and other developments, coupled with the need for an update of the transport and economic trends and data underpinning the Strategy, meant that SPT considered that a complete review and plan replacement was necessary and appropriate. This decision also triggered the requirement for the SEA process to commence which was undertaken from early stages of the plan development and allowed for environmental and sustainability issues to be addressed comprehensively as part of a new Strategy.

4.4.3   Alternatives and options have been considered in the SRBS development process from the outset. The overall direction of the Strategy, as expressed through its Goal and Objectives, inherently considered alternatives through refinement of their wording to reflect and address priorities for transport in the SPT region. This process included consideration of a wide range of policy drivers, spatial characteristics and transport 'key issues' as set out in the Case for Change Consultation report. The SEA process contributed to this refinement and direction through consideration of the compatibility of developing themes and wording for the SRBS Goal and Objectives with environmental priorities expressed through the developing SEA objectives and framework.

4.4.4   The consideration of alternatives was an integral part of the identification and development of the 'delivery' elements of the SRBS, principally in the form of the transport options which were generated and appraised through integrated working between the client, transport planning and SEA and equalities assessment teams.

4.4.5   By considering a long list of potential options to address bus transport challenges in the region, a broad view of the alternatives available for the new bus transport strategy was adopted. The transport planning, STAG and SEA processes ensured that there was full consideration of the potential for adverse and beneficial effects of these options which helped to refine and sift the most suitable (and therefore, reasonable) alternatives for further consideration. These alternative courses of action were therefore subject to environmental assessment by integrating the SEA and SRBS workstreams. The findings of the STAG process are presented in a supporting transport appraisal report to the SRBS.

4.4.6   As the SRBS is a high level and strategic document, there remains considerable flexibility in the identification and consideration of alternatives for implementation of transport solutions during later stages of implementation. This process will facilitate ongoing appraisal of measures as specific details about proposals emerge and the SEA provides a framework to underpin and support required further environmental design and assessment input to the future implementation of the SRBS.

4.5 How the SEA informed the SRBS

4.5.1   Integration of the SEA process and team with the SRBS and transport planning workstreams has allowed for an iterative approach to SRBS development whereby feedback from the SEA team at key stages of Strategy development has informed subsequent SRBS updates. This is considered to have improved the environmental context and contribution to better environmental outcomes. The key stages of this integrated approach have included:

- A review of the coverage of environmental issues in the draft SRBS CfC report which identified that the CfC report generally provided a strong evidence-based platform on which to develop the SRBS and underpin action to tackle key environmental issues. The SRBS draft objectives were reviewed against the SEA objectives and considered to be compatible with the SEA objectives.

- This review, and a supporting 'compatibility appraisal' of the SRBS Goal and Objectives, also made recommendations on how SRBS goal should be further developed to set out clearer outcomes, more explicit coverage of some environmental issues (including enhancement of environmental quality as an overarching key issue) and hence improve the environmental performance of the proposed SRBS. The Draft SRBS for consultation now incorporates seven policy themes, developed from the original core policy areas identified at Case for Change stage, which more clearly reference policy priorities including stronger reference to sustainability, climate resilience and accessibility.

- The SEA also identified a series of emerging environmental issues from synthesis of baseline information including the key policies and plans reviewed at that stage which was fed back to be taken into account in the development of the SRBS. It was recommended that the SRBS should clearly explain the role of the SEA process in supporting development of the policy. The Draft SRBS for consultation incorporates text on the input of the SEA and impact assessments into development of the Strategy and many of the principal themes running through the document's various chapters are inherently of an environmental nature.

- The STAG assessment of the options and the subsequent SEA framework-based assessment of SRBS policies has provided a mechanism to identify predicted beneficial and adverse effects of the SRBS and to develop mitigation measures which, provided they are committed through the implementation phases of the Strategy, will secure minimal adverse environmental effects and provide enhancement opportunities. A key role of the SEA process is therefore to develop appropriate mitigation and enhancement which can help address uncertainties in future Strategy delivery and strengthen the sustainability performance of the SRBS. The suite of mitigation principles identified from the detailed environmental assessment of the SRBS policies is set out in **Section 6.2**.

4.5.2   Through this approach it is considered that the development of the draft SRBS at each key stage have taken better account of environmental issues than they would have done without the SEA and has contributed to formulation of a draft Strategy which optimises beneficial environmental effects, minimises adverse effects and identifies opportunities for environmental and social enhancement. The Draft SRBS has very strong themes around climate change and social justice for example and the proposed transport measures and interventions are well aligned with the objective to achieve emissions reduction, climate resilience and other environmental and health outcomes.

4.5.3   In taking the SRBS forward to implementation stages it will be important to maintain the focus on achieving these beneficial outcomes for people and the environment. Further details on proposed methods for monitoring the process and embedding mitigation are set out in **Section 6.3** of this report.

5   Findings of the Environmental Assessment

5.1   Introduction

5.1.1   This section sets out the findings of the environmental assessment of each key component of the Draft SRBS. **Section 5.2** presents the assessment of compatibility of the SRBS and SEA objectives. **Section 5.4** sets out a summary of the key findings of the environmental appraisal of the SRBS options and the assessment of the likely significant effects of the SRBS policies is set out in **Section 5.3**.

5.2   Assessment of Goal and Objectives

5.2.1   The Goal and Objectives were appraised against the draft SEA objectives to inform identification of any clear inconsistencies between the two sets of objectives and to identify any potentially significant environmental effects. The findings of the assessment have been updated to reflect subsequent amendments to both objective sets and are set out in **Table 5.1**.

5.2.2   The SRBS Goal states that:

- More people using buses, and people using buses more often

- More communities have access to bus for everyday travel

5.2.3   Three SRBS Objectives were developed at the Case for Change stage in response to the identified transport problems. Considering the commentary contained within the SEA Case for Change and other consultation, the Objectives were updated. As such, the SRBS Objectives are:

1.   Aim for a consistent and improved level of service across the region, ensuring communities are connected quickly and efficiently to key destinations and services

2.   Aim for bus travel to be affordable, safe and accessible for all

3.   Aim for an attractive, integrated and sustainable bus network.

5.2.4   The table below considers the compatibility of the SRBS Vision and Objectives with the SEA Framework. In the table reference is made to SRBS Objectives numbers which can be read from the full list above.

5.2.5   In overall terms, the Goal and suite of SRBS Objectives clearly identify the role of the transport system in 'facilitating' positive environmental and health outcomes, as well as referencing the need for the transport system to be developed and operated sustainably. This provides an appropriate high-level platform from which to develop specific policies and proposals to address a range of key environmental (as well as socioeconomic and wider) issues.

Table 5.1 Compatibility of SRBS Goal and Objectives with SEA Framework

KEY:	Compatible	+	Incompatible	-
	Neutral	0	No Clear Relationship	~
	Uncertain	?		

SEA Objectives	Goals / outcomes	Objective 1: consistent and improved level of service across the region	Objective 2: bus travel to be affordable, safe and accessible for all	Objective 3: attractive, integrated and sustainable bus network	Commentary
Health: Improve the health of the resident and workplace population, including with respect to physical and mental health and social wellbeing.	+	+	+	+	**Goals/outcomes:** The goal can improve health and health equity by reducing traffic accidents and air pollution through modal shift. The goal also increases in physical activity, and improves access to medical care, healthy food, vital services, employment, and social connection. Hence, it is compatible with the SEA objective. **Objectives:** Objectives 1, 2, and 3 align with this SEA Objective through setting an ambition to make the transport system safe, affordable, accessible and inclusive and by reducing emissions and encouraging people to choose sustainable bus network.
Accessibility: Reduce the need to travel and ensure appropriate and affordable access for all to facilities, services, economic	+	+	+	+	**Goals/outcomes:** The goal that more communities have access to bus for everyday travel would promotes accessibility between communities and key services/facilities. Hence, it is compatible with the SEA objective. **Objectives:**

SEA Objectives	Goals / outcomes	Objective 1: consistent and improved level of service across the region	Objective 2: bus travel to be affordable, safe and accessible for all	Objective 3: attractive, integrated and sustainable bus network	Commentary
opportunities and social activities.					Objective 1 requires a quick and efficient bus network, and this will reduce waiting times, improve coverage and increase reliability. Hence, this will enhance accessibility. Objective 2 clearly links to the Accessibility SEA Objective. Objective 3 promotes an integrated bus network. This will create a cohesive travel experience if integrating into other transport modes. This makes it easier for passengers to switch between different types of transport, reducing travel time and effort.
Material Assets: Manage, maintain and where possible improve the efficient and effective use of natural resources, land and infrastructure to meet identified needs.	+	+	+	+	**Goals/outcomes:** The goal to have more people to use buses, and the people using buses more often would enhance more resource efficient transportation. Hence it is compatible with the SEA objective. **Objectives:** Objectives 1, 2 and 3 are consistent with the principle of the SEA Objective through seeking to promote more resource efficient transportation and making better use of existing infrastructure and minimising the use of new land. Objective 3 also requires a sustainable bus network, which would lead to lower fuel consumption and reduce emissions.
Productivity, Competitiveness and Innovation: Deliver an integrated and efficient transport system to increase economic prosperity, support the growth of	+	+	+	+	**Goals/outcomes:** The goal that more communities have access to bus for everyday travel would reduce travel time and congestion, allowing people to reach their destinations more efficiently. This can lead to increased productivity. A reliable and efficient public transportation system can make a city or region more attractive to businesses and investors. It can enhance access to a broader labour market

SEA Objectives	Goals / outcomes	Objective 1: consistent and improved level of service across the region	Objective 2: bus travel to be affordable, safe and accessible for all	Objective 3: attractive, integrated and sustainable bus network	Commentary
key economic sectors and deliver increased and more inclusive					and reduce transportation costs, thereby improving the overall competitiveness of the area. **Objectives:** All the Objectives align with this SEA Objective through seeking to enhance the efficiency and performance of the transport system whilst increase accessibility enabling economic growth/prosperity
Air Quality and Amenity: Tackle poor air quality, reduce concentrations of harmful atmospheric pollutants and minimise exposure to noise and vibration.	+	+	+	+	**Goals/outcomes:** The goal is not explicitly engaging specifically with Air Quality and Amenity issues. With the promotion of more people to use buses, it would reduce the vehicles trips and congestion through modal shift. This would improve the air quality and hence compatible with the SA objective. **Objectives:** Objective 1 covers this SEA Objective as they could result in beneficial impacts on air quality and amenity as it provided improved efficient and access. Objective 2 would encourage more people to use bus travel though affordable fare, safe and accessible for all. These will reduce the vehicle trips and reduce local air pollutant and noise emissions. Objective 3 clearly aligns with the SEA objective by seeking to reduce emissions and other harmful pollutants from sustainable bus network, and buses powered by new technology and alternative fuels to petroleum hydrocarbons.

SEA Objectives	Goals / outcomes	Objective 1: consistent and improved level of service across the region	Objective 2: bus travel to be affordable, safe and accessible for all	Objective 3: attractive, integrated and sustainable bus network	Commentary
Climate Change Mitigation: Decarbonise the transport sector and support wider efforts to mitigate climate change	+	+	+	+	**Goals/outcomes:** The goal is not explicitly engaging specifically with Climate Change Mitigation issues. With the promotion of more people to use buses, it would reduce the vehicles trips and congestion. This would reduce the greenhouse emission and have improvement in climate change. It is compatible with the SA objective. **Objectives:** Objective 1 covers this SEA Objective as they could result in beneficial impacts on air quality and amenity as it provided improved efficient and access. Objective 2 would encourage more people to use bus travel though affordable fare, safe and accessible for all. These will reduce the vehicle trips and reduce greenhouse emission. Objective 3 clearly aligns with the SEA objective by seeking to reduce greenhouse gas emissions from sustainable bus network.
Biodiversity, Geodiversity and Soil: Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by	+	+	+	+	**Goals/outcomes:** The goal is not explicitly engaging specifically with Biodiversity, Geodiversity and Soil issues. By encouraging more people to use buses instead of private cars, a regional bus strategy can reduce air pollution and greenhouse gas emissions. This improvement in air quality can benefit local ecosystems and wildlife. Efficient public transportation can reduce the need for extensive road networks and parking spaces, which often fragment habitats. This can help preserve larger, contiguous areas of natural habitat. **Objectives:**

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SEA Objectives	Goals / outcomes	Objective 1: consistent and improved level of service across the region	Objective 2: bus travel to be affordable, safe and accessible for all	Objective 3: attractive, integrated and sustainable bus network	Commentary
protecting green infrastructure.					Objectives 1 and 2 would encourage more people to use buses instead of private cars, it can reduce air pollution and greenhouse gas emissions. This improvement in air quality can benefit local ecosystems and wildlife. Objective 3 would directly support the protection and enhancement of biodiversity and geodiversity through reduced atmospheric emissions.
Water, Flood Risk and Resilience: Conserve, protect and enhance water environments, water quality and water resources, whilst adapting to climate change and reducing flood risks.	+	+	0	+	**Goals/outcomes:** The goal is not explicitly engaging specifically with water, flood risk and resilience issues. By promoting bus public transportation, there is less need for extensive road networks and parking lots through reduction of the vehicle trips. This can help to reduce impervious surfaces, which further decreases stormwater runoff and lowers the risk of flooding. **Objectives:** Objectives 1 would indirectly support through building a resilient network. Objective 2 has a neutral effect with this SEA Objective. Objective 3 would indirectly support the protection of water quality through reduced atmospheric emissions.

SEA Objectives	Goals / outcomes	Objective 1: consistent and improved level of service across the region	Objective 2: bus travel to be affordable, safe and accessible for all	Objective 3: attractive, integrated and sustainable bus network	Commentary
Cultural Heritage: Conserve, protect and enhance the historic environment and cultural assets.	+	+	+	+	**Goals/outcomes:** The goal is not explicitly engaging specifically with cultural heritage issues. However, by encouraging more people to use buses instead of private cars, a regional bus strategy can reduce air pollution. The emission of air pollution would cause corrosion to the historic structure. Enhanced bus services can also make cultural heritage sites more accessible to both locals and tourists, increasing visitation and awareness. **Objectives:** Enhanced accessibility through Objectives 1 and 2 may promote opportunities to access/enjoy cultural heritage. Objective 3 is compatible with the SEA Objective as reducing transport emissions indirectly has the potential to enhance the historic environment.
Landscape: Protect and enhance the landscape character, townscape character and visual amenity.	+	+	+	+	**Goal:** The goal is not explicitly engaging specifically with landscape issues. However, by promoting the bus strategy, there is less need for extensive road networks and parking lots through reduction of the vehicle trips. This can help on the protection of landscape. **Objectives/outcomes:** Objectives 1 and 2 align with the SEA Objective indirectly as encouraging public transport, should reduce the volume of road vehicles and as such, have a positive effect on townscape. Objective 3 aligns with the SEA Objective indirectly as a reduction in transport emissions should result in beneficial effects on landscape and townscape.

5.3 Assessment of Policies

5.3.1 To implement the proposed SRBS Objectives, a suite of policies / measures has been developed, grouped into seven overarching policy themes and forming the basis of future implementation of the Strategy. This section summarises the findings of the environmental assessment of the policy themes. The detailed findings of the assessment, including the scoring of each individual policy are set out in the tables in **Appendix D**.

5.3.2 The assessment shown within this section is two-fold. An overall summary of the environmental assessment of each SRBS policy theme is presented in **Table 5.2** drawing on the consideration of the predicted environmental effects of the policies (and where relevant linked options) within each theme. Following this, a text-based summary of the assessment of the combined environmental effects of the SRBS policies is presented for each of the SEA objectives in turn. This approach has allowed for understanding and presentation of the predicted environmental effects of the Draft SRBS at both policy-specific and SEA thematic levels.

Table 5.2 Summary of Environmental Assessment by Policy Theme

Policy Theme	Overall Score	Commentary
Buses where they are needed, when they are needed	+	These policies are generally compatible with the SEA objectives and in several cases significant beneficial effects are predicted including for health (for Policy P1), accessibility and productivity. In general, the policies provide opportunities for people to access and enjoy facilities, services and the wider environment. The policies are also predicted to have some beneficial effects for SEA topics of health (for Policy P2 and P3), material asset, air quality, climate change, biodiversity and cultural heritage.
Reliable and quicker journeys	+	The policies are generally compatible with the SEA objectives and significant beneficial effects are predicted for accessibility. They may also give rise to some beneficial changes for people accessing and enjoying facilities, services and the wider environment. The policies are also predicted to have some beneficial effects for SEA topics of health, material asset, productivity, competitiveness and Innovation, air quality and amenity, climate change mitigation, and cultural heritage.
Affordable and attractive fares and ticketing	+	These policies are generally compatible with the SEA objectives. Significant beneficial effects are predicted for accessibility (for Policy P6). The policies on affordable and attractive fares and ticketing are also predicted to have some beneficial effects for SEA topics of health (for policy P6), accessibility and productivity. The polices would provide opportunities for people to access and enjoy facilities, services and the wider environment.
Accessible and safer bus journeys	+	The policy is generally compatible with the SEA objectives and in a number of cases significant beneficial effects are predicted including for health and accessibility. The policy is also predicted to have some beneficial effects for SEA topics of productivity. It may also give rise to some beneficial changes for people accessing and enjoying facilities, services and the wider environment.
A trusted and recognisable bus network	+	The policies are predicted to have some beneficial effects for SEA topics of health (for Policy P13), accessibility and productivity. Ensure high quality and consistent driver standards will ensure delivering a consistently safe and accessible network for all users.
A seamless and integrated network	+	The policies are generally compatible with the SEA objectives and significant beneficial effects are predicted for accessibility (for Policy P15). The policies are also predicted to have some beneficial effects for SEA topics of health, accessibility (for Policies P14 and P16), material asset (for Policy P15), productivity, competitiveness and Innovation, air quality and

Policy Theme	Overall Score	Commentary
		amenity (for Policy P15), climate change mitigation (for Policy P15), biodiversity (for Policy P15) and cultural heritage (for Policy P15).
A more environmentally sustainable, resilient and adaptable bus network and fleet	+	The policies are generally compatible with the SEA objectives and in a number of cases significant beneficial effects are predicted including for Health (for Policy P17) accessibility (for Policies P18 and P19), air quality (for Policies P17 and P19), and climate change (for Policies P17 and P19).

The policies are also predicted to have some beneficial effects for SEA topics of health (for Policies P18 and P19), material asset (for Policy P18), productivity, air quality (for Policy P18), climate change (for Policy P18), biodiversity (for Policies P17and P18), Water, Flood Risk and Resilience (for Policy P19) and cultural heritage.

The policies are also predicted to have uncertain effects for SEA topics of material asset (for Policy P17 and P19), biodiversity (for Policy P19) and landscape (for Policy P19) due to new infrastructure development and vehicles. |

5.3.3   Overall, the assessment has identified that no significant adverse environmental effects would be predicted from implementation of the draft SRBS policies. All the policy themes are predicted to have some beneficial environmental effects.

5.3.4   Several policies are predicted to have significant beneficial effects where implementation of supporting measures would deliver positive impacts. These include:

- Policy theme 1 (Buses where they are needed, when they are needed) incorporates multiple sets of transport policies which are predicted to have significant beneficial effects on the SEA objectives for health, accessibility, and productivity

- Policy theme 2 (Reliable and quicker journeys) incorporates multiple sets of transport policies which are predicted to have significant beneficial effects on the SEA objectives for accessibility

- Policy theme 3 (Affordable and attractive fares and ticketing) incorporates multiple sets of transport policies, which are predicted to have significant beneficial effects on the SEA objectives for accessibility

- Policy theme 4 (Accessible and safer bus journeys) incorporates a set of transport policy which are predicted to have significant beneficial effects on the SEA objectives for health, and accessibility

- Policy theme 6 (A seamless and integrated network) incorporates a set of transport policy which are predicted to have significant beneficial effects on the SEA objectives for accessibility

- Policy theme 7 (A more environmentally sustainable, resilient and adaptable bus network and fleet) incorporate multiple sets of transport policies which are predicted to have significant beneficial effects on the SEA objectives for health, accessibility, air quality, and climate change through its potential to deliver material emissions reductions and support a resilient and operationally efficient bus network

5.3.5   There are some uncertainties associated with the delivery of Policy Theme 7 (A more environmentally sustainable, resilient and adaptable bus network and fleet). The high-level

nature of the Draft SRBS does not allow for specific prediction of effects of measures to enhance connectivity on SEA topics of Material Assets, Biodiversity and Landscape where there are some potentials for adverse environmental effects from new or enhanced bus infrastructure. With a clear commitment to mitigation and enhancement where appropriate in the delivery of measures at future stages of SRBS implementation it is not predicted that significant adverse effects would result however this will need to be closely considered during development of the SRBS delivery plan and subsequent design, assessment and promotion of any key transport improvement schemes.

SEA Objective 1 – Health

5.3.6 Most policy themes assessed are predicted to have a beneficial effect on this objective. Several of the polices are designed to enhance opportunities for access to services, including healthcare facilities and open spaces which would be predicted to have beneficial effects on human health. Additionally, several of the polices aim to provide a safe and secure bus network.

5.3.7 In addition, the proposed policy on transition regional bus fleet to zero emission vehicles are predicted to improve air quality through reductions in traffic emissions which in turn is predicted to have potential for significant beneficial effects on health, particularly respiratory health and for groups such as children and older people who are typically most sensitive to the adverse effects of air pollution.

5.3.8 The policies predicted to have significant beneficial health effects are summarised below:

Policy Theme	Policy
Buses where they are needed, when they are needed	P1 Improve periods of operation and geographic coverage of the bus network, where required
Accessible and Safer Bus Journeys	P9. Improve the accessibility and safety of bus travel for all passengers.
A more environmentally sustainable, resilient and adaptable bus network and fleet	P17. Transition the regional bus fleet to zero emission vehicles.

5.3.9 When considered collectively, the policies of the Draft SRBS are predicted to have the potential for significant beneficial effects on human health.

SEA Objective 2 – Accessibility

5.3.10 Most policy themes assessed are predicted to have a beneficial effect on this objective. The policies seek to improve accessibility in terms of physical access to the network and infrastructure including access to public services, hospitals, education facilities and economic opportunities. They also seek to improve the integration of the transport network including improved information and ticketing and to ensure transport services and facilities are accessible and affordable for all people. Some policies would also improve the accessibility needs of all people including groups with protected characteristics such as disabled people.

5.3.11 The policies predicted to have significant beneficial effects on accessibility are summarised below:

Policy Theme	Policy
Buses where they are needed, when they are needed	P1. Improve periods of operation and geographic coverage of the bus network, where required P2. Improve the frequency of bus services, where required P3. Improve the efficiency of the regional bus network
Reliable and quicker journeys	P4. Improve the reliability and punctuality of bus services P5. Improve the attractiveness of bus journey times compared to car journey times
Affordable and attractive fares and ticketing	P6. Improve the affordability of bus fares, especially for people living in poverty, disadvantaged communities and rural or remote communities.
Accessible and Safer Bus Journeys	P9. Improve the accessibility and safety of bus travel for all passengers
A seamless and integrated network	P15. Ensure bus stops and interchanges are high quality and located conveniently and efficiently across the region
A more environmentally sustainable, resilient and adaptable bus network and fleet	P18. Ensure high-quality and well-maintained vehicles across the region P19. Ensure the regional bus fleet supports a resilient and operationally efficient bus network.

5.3.12   When considered collectively, the policies of the Draft SRBS are predicted to have the potential for significant beneficial effects on accessibility.

SEA Objective 3 – Material Assets

5.3.13   Most policy themes assessed are predicted to have some beneficial effects on the Material Assets SEA objective through support a more efficient bus network. Policies that aim to increase the adaptability and resilience of transport infrastructure to adverse weather effects and effects of climate change would also have beneficial effects.

5.3.14   Policies which deliver improvements to bus transport to make it more accessible are likely to result in greater uptake of public transport and contribute to reduced car use which would reduce congestion and allow transport infrastructure to operate more efficiently. Similarly, measures which achieve modal shift and reduce the demand for travel and those delivering vehicle efficiencies have the potential to lower overall use of energy, particularly fossil fuels in the region.

5.3.15   There are some predicted uncertainties around the effects of implementation of policies which could promote new or upgraded infrastructure from the resultant demand on new materials. Promotion of a circular economy in the SPT region would be key to efficient materials management and reducing the indirect environmental effects associated with resource extraction, processing and end of life / waste management. Development of bus transport system improvements should always be developed wherever possible through re-use and reallocation of existing assets to avoid and reduce the need for new materials and non-renewable resources.

5.3.16   When considered collectively, the policies of the Draft SRBS are not predicted to have significant effects on material assets. Overall, the Strategy is predicted to have mainly beneficial

non-significant effects provided implementing measures take account of the potential for environmental effects from non-renewable resource use.

SEA Objective 4 – Productivity, Competitiveness and Innovation

5.3.17 Overall, the Productivity, Competitiveness and Innovation SEA Objective is covered well by the Strategy's policy themes and their associated policies. Several of the policies support improved access to services, including employment opportunities, and enhanced regional connectivity. Where it is delivered, a step change in accessibility and regional transport quality would also be beneficial to the regional economy and businesses efficiencies. For example, improved opportunity for businesses to access the best talent, who may previously have been restricted by their transport options to employment locations. Improved transport options can also increase productivity for businesses through improving the health of employees, for example, reducing fatigue on employees who may previously have experienced long and tiring commutes.

5.3.18 There are some predicted minor beneficial effects to the economy from improving the resilience of the bus network. This is particularly relevant to Policy theme 7: *A more environmentally sustainable, resilient and adaptable bus network and fleet.* Besides, Policy theme 7 also promotes the decarbonisation of the transport system may also promote investment and demand in low carbon industries and energy generation which may have minor beneficial effects on productivity.

5.3.19 The policies predicted to have significant beneficial on productivity are summarised below:

Policy Theme	Policy
Buses where they are needed, when they are needed	P1. Improve periods of operation and geographic coverage of the bus network, where required
	P2. Improve the frequency of bus services, where required
	P3. Improve the efficiency of the regional bus network

5.3.20 When considered collectively, the policies of the Draft SRBS are predicted to have the potential for significant beneficial effects on productivity, competitiveness and innovation.

SEA Objective 5 – Air Quality and Amenity

5.3.21 The Draft SRBS policies are predicted to have an overall beneficial effect on the Air Quality and Amenity SEA Objective. Facilitating and encouraging the uptake of bus transport is predicted to support the delivery of modal shift for a broad range of journeys away from road-based transport, which would be predicted to reduce transport emissions and other harmful pollutants in key corridors where a full suite of complementary measures was implemented.

5.3.22 Measures to support transition the regional bus fleet to zero emission vehicles, under *Policy theme 7 - A more environmentally sustainable, resilient and adaptable bus network and fleet* would also clearly support efforts to reduce the impacts of emissions from fossil-fuel powered transport, particularly in urban centres and more heavily trafficked routes.

5.3.23 The policies predicted to have significant beneficial effects on air quality are summarised below:

Policy Theme	Policy
A more environmentally sustainable, resilient and adaptable bus network and fleet	P17. Transition the regional bus fleet to zero emission vehicles.

5.3.24 When considered collectively, the policies of the Draft SRBS are predicted to have the potential for significant beneficial effects on air quality and amenity.

SEA Objective 6 – Climate Change Mitigation

5.3.25 The policies assessed are predicted to have a range of beneficial effects on the Climate Change Mitigation SEA Objective. Policies which support enhanced bus transport would be predicted to contribute to modal shift where they were delivered and sustained at scale across the key transport corridors in the region. This would contribute to reducing regional carbon emissions from transport through reductions in road-based travel.

5.3.26 Measures to support transition the regional bus fleet to zero emission vehicles, under Policy theme 7 *A more environmentally sustainable, resilient and adaptable bus network and fleet* would also clearly support efforts to reduce the impacts of greenhouse emissions from fossil-fuel powered transport, particularly in urban centres and more heavily trafficked routes.

5.3.27 Policy theme 7 *A more environmentally sustainable, resilient and adaptable bus network and fleet* also supports a road and bus infrastructure network that is resilient and adaptable to the effects of climate change

5.3.28 The policies predicted to have significant beneficial effects on climate change mitigation are summarised below:

Policy Theme	Policy
A more environmentally sustainable, resilient and adaptable bus network and fleet	P17. Transition the regional bus fleet to zero emission vehicles. P19. Ensure the regional bus fleet supports a resilient and operationally efficient bus network.

5.3.29 When considered collectively, the policies of the Draft SRBS are predicted to have the potential for significant beneficial effects on climate change mitigation.

SEA Objective 7 – Biodiversity, Geodiversity and Soil

5.3.30 The predicted effects of the SRBS on the Biodiversity, Geodiversity and Soil SEA Objective are mixed with some predicted beneficial effects and some uncertainties due to the absence of location-specific detail at this stage of the plan.

5.3.31 The predicted beneficial effects have been identified for a number of the policies which would work to deliver a bus transport network that is less reliant on private car journeys and, instead, support an uptake of bus transport resulting in a reduction in air pollutant emissions which can be harmful to biodiversity, geodiversity and soils. These effects are not predicted to be significant at the regional scale.

5.3.32   Measures to transit the regional bus fleet to zero emission vehicles under Policy theme 7 *A more environmentally sustainable, resilient and adaptable bus network and fleet* would also clearly support efforts to reduce the impacts of emissions from fossil-fuel powered transport, particularly in urban centres and more heavily trafficked routes. The reduction in emission would have benefit to the ecosystem.

5.3.33   There is some predicted uncertainty around the implementation of new or upgraded transport infrastructure (e.g. bus depots, bus stations, bus interchanges and mobility hubs) which has the potential for adverse effects on natural heritage dependent on the location of the schemes and the baseline sensitivity of the areas affected. At this stage specific improvement proposals have not been identified and a commitment has been made in this SEA to key mitigation principles to ensure that new works were delivered sensitively and avoided significant adverse effects.

5.3.34   When considered collectively, the policies of the Draft SRBS are not predicted to have significant beneficial effects on biodiversity, geodiversity and soil. The Strategy is predicted to have some beneficial dependent on the detail of future implementing measures. The uncertainty in predicting environmental effects on natural heritage receptors has been reduced through identification of important mitigation principles which the assessment has assumed would be committed to in the later stages of Strategy delivery.

SEA Objective 8 – Water, Flood Risk and Resilience

5.3.35   Generally, the policies in the draft SRBS are predicted to have minor (and non-significant) effects on the SEA Objective for Water, Flood Risk and Resilience.

5.3.36   Policy theme 7 *A more environmentally sustainable, resilient and adaptable bus network and fleet* would support a resilient and operationally efficient bus network that is adaptable to the effects of climate change.

5.3.37   Policies that may involve some new transport infrastructure, such as bus depots, bus stations, bus interchanges and mobility hubs, have some potential for adverse effects on the water environment particularly during their construction. However, assuming the appropriate level of environmental assessment is undertaken, and key mitigation measures implemented, these effects are not predicted to be significant adverse at this stage.

5.3.38   When considered collectively, the policies of the Draft SRBS are not predicted to have significant beneficial effects on water resources and flooding. Overall, the Strategy is predicted to have potential for some beneficial effects.

SEA Objective 9 – Cultural Heritage

5.3.39   Overall, it is predicted that there would be potential for some minor beneficial effects on the Cultural Heritage SEA Objective. It is considered that the policies to reduce emissions generated by road transport would help to conserve historic buildings which are vulnerable to the corrosive effects of some air pollutants.

5.3.40   The delivery of improved bus transport would increase opportunities for all people to access areas of historic and cultural sites. There would be potential for a resultant increase in visitor numbers and increased awareness and appreciation of the region's historic and cultural assets.

5.3.41   Nevertheless, where new infrastructure (e.g. bus depots, bus stations, bus interchanges and mobility hubs) was developed on greenfield or previously undeveloped land, the potential for impacts on archaeological resources would need to be considered further as proposals were designed and assessed. It has been assumed in this SEA that mitigation principles to avoid, reduce and mitigate such adverse effects would be committed to in the later stages of strategy delivery.

5.3.42   None of the policies in the SRBS has been predicted to have significant beneficial effects on cultural heritage and when taken together, the Strategy is not predicted to have significant beneficial effects. Overall, the Strategy is predicted to have potential for some minor beneficial on cultural heritage and archaeology. There are opportunities for transport improvements to contribute to enhanced understanding and interpretation of the region's history and cultural heritage for all people through better access to sites and areas of interest and importance.

SEA Objective 10 – Landscape

5.3.43   Overall, the policies in the Draft SRBS are not predicted to have significant beneficial effects on the Landscape SEA Objective. Policies encouraging bus transport are predicted to have some beneficial effects in terms of improving townscape and amenity in urban and built-up areas through helping to reduce traffic congestion. This would contribute to improved air quality, reduced noise and lower visual intrusion which would make spending time in these landscape environments more pleasant for all people.

5.3.44   The delivery of improved bus transport would increase opportunities for all people to access areas of high-quality landscape which are located throughout the region, but which may remain inaccessible for many at present.

5.3.45   Any new infrastructure (e.g. bus depots, bus stations, bus interchanges and mobility hubs) to enhance transport connections and improve connectivity has the potential for adverse effects if not designed sympathetically with the local landscape or townscape character.

5.3.46   None of the policies in the SRBS has been predicted to have beneficial significant effects on landscape and when considered collectively, the policies of the Draft SRBS are not predicted to have significant effects on landscape and townscape. The Strategy is predicted to have potential for both very minor beneficial effect. There are opportunities for transport development in the region to contribute to enhanced enjoyment of landscape and townscape through enhanced accessibility of open spaces and civic areas by bus transport.

5.4   Assessment of Bus Services Delivery Options

5.4.1   This section summarises the findings of the appraisals of the bus options considered during the SRBS development in response to the analysis of transport problems and opportunities across the SPT region. The findings of the environmental and climate appraisals of each individual option are set out in the delivery options assessment table in **Appendix E**.

5.4.2   The options represent varying delivery models for bus services in the Strathclyde region. These include partnership options on a voluntary and statutory basis, as well as options for local transport authorities (including SPT) to take greater control of bus service operations through franchising or establishing a municipally owned bus company. The options under consideration include:

- Business as usual

- Voluntary Partnerships

- Bus Service Improvement Partnership (BSIP)

- Local Services Franchising

- Municipal Bus Operation

5.4.3   All options considered are in the context of the Transport (Scotland) Act 2019, which provided new options to local transport authorities to improve bus services in their areas including Bus Service Improvement Partnership, local services franchising and municipal bus operations.

5.4.4   A summary of the findings of the environmental appraisal of the options within each group of options is presented in **Table 5.3**. Further information on the process of transport option development and appraisal is set out in a stand-alone options appraisal report (Stantec and Systra, 2024) which is available on SPT's website: https://www.spt.co.uk/about-us/what-we-are-doing/regional-transport-strategy/bus-strategy/.

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Table 5.3 Summary of Environmental Appraisal of SRBS Delivery Options

Key (adopted from STAG assessment in the Option Appraisal Report)

Major beneficial effect	✓✓✓	Major adverse effect	✗✗✗
Moderate beneficial effect	✓✓	Moderate adverse effect	✗✗
Minor beneficial effect	✓	Minor adverse effect	✗
Neutral / negligible effect	0		

Option Group & Summary of Options	Key Environmental Impacts	Mitigation & Recommendations
1. Business As Usual *The current bus operations in the SPT region reflect the provisions of the 1985 Transport Act. The majority of bus services are provided on a commercial basis by privately owned bus companies who recover the cost of operating their services through a mixture of farebox revenues and government payments.*	▪ The LEZ in place for Glasgow is expected to help ensure that bus fleets entering the LEZ improve their environmental credentials. Although there will be improving air quality inside LEZ which may have some positive impacts on health outcomes, accidents may get worse due to declining bus use and increasing car use across the SPT region. ▪ Environmental impact improvements related to modal shift away from car to bus are expected to be limited under business as usual, as the recent trend of bus network provision and bus use in the SPT region is that of decline overall. ▪ The Scottish Zero Emission Bus Challenge Fund (ScotZEB) is currently closed for future bids since the deadline for applications to Phase 2 closed in September 2023, constraining the ability to deliver zero emission vehicles and potentially disproportionately impacting the less commercially attractive routes and services. ▪ Some minor improvements to security might be expected as bus fleets are renewed and upgraded.	▪ Regarding to the LEZ, there is a risk, however, that without a coordinated plan this can result in the more polluting vehicles in operators' fleets being redeployed to areas outwith the LEZ. Therefore, a regional approach would be of benefit. ▪ Any new buses should be in line with best practice with regards to emissions and user accessibility. ▪ Success of any governance measures and their contribution to improved environmental outcomes would depend on their scale and ambition of implementation including delivery of improvements throughout key public transport corridors.

Option Group & Summary of Options	Key Environmental Impacts	Mitigation & Recommendations
	- Access to health and wellbeing infrastructure may get worse due to the ongoing trend of declining bus service provision. - The trend of changes to bus services suggests that reductions would continue under a business-as-usual situation. In this case, public transport network coverage would worsen, as would comparatively access by people group. - In terms of affordability, the relative cost of travel by bus has risen more than other modes, with a lack of fares integration, and ticketing complexity; with a particularly adverse impact on some groups of people.	
	Overall, minor adverse to minor beneficial impacts are predicted:	
	Scoring: ✗	✓
2. Voluntary Partnership *A voluntary partnership (VP) provides a formal written framework within which bus operators, local transport authorities, local highway authorities and other relevant actors will work together to achieve stated objectives and deliver agreed measures and facilities.*	- The option has the potential to enhance the delivery of low- and zero- emission vehicles and co-ordination of their deployment. Similarly, improvements to the bus network to encourage modal shift from car to bus are also possible. - However, based on the current voluntary partnership arrangements in the area, initiatives delivered under this arrangement are unlikely to generate significant or sustained growth in passenger demand. - Similar to the business as usual, the trend of changes to bus services suggest that reductions would continue under a voluntary partnership. While, a voluntary partnership could be used to improve the situation, existing examples do not suggest this will be the case to any notable extent. Indeed, based on current trends, public transport network coverage would worsen even in partnership areas, as would comparatively access by people group. - In terms of affordability, given long-term trends for real terms fares increases, it is likely that fares will continue to become less affordable under a voluntary partnership option; with a particularly adverse impact on some groups of people	- Should VP arrangements be enhanced, however, then there may be more scope for the generation of significant or sustained growth in passenger demand but likely at a lesser scale than BSIP or franchising options which would be more likely to set and deliver more ambitious targets. - Success of any governance measures and their contribution to improved environmental outcomes would depend on their scale and ambition of implementation including delivery of improvements throughout key public transport corridors. - Any new buses should be in line with best practice with regards to emissions and user accessibility. - Additionally, where implementation of measures generates revenue, this may be used to reinvest in decarbonisation which could also help to reduce emissions and improve local air quality further.
	Overall, minor adverse to minor beneficial impacts are predicted:	

Option Group & Summary of Options	Key Environmental Impacts	Mitigation & Recommendations
	Scoring: ✖	✓
3. Bus Service Improvement Partnership (BSIP) *A Bus Service Improvement Partnership is a new form of statutory quality partnership enabled by the Transport (Scotland) Act 2019. A BSIP enables partners to come together and agree binding commitments that will be delivered during the term of the partnership. If measures and facilities agreed in the BSIP are not delivered, then the relevant partner can be at risk of sanctions*	▪ BSIP may be more likely to deliver improvements which could deliver modal shift from car to bus as it can underpin more ambitious investment. This will help to reduce emission and improve the health. The modal shift would have benefit to the accidents and health outcomes. ▪ As growing patronage is of benefit to operators, and BSIP arrangements can be a good avenue to deliver measures such as bus priority. ▪ BSIP arrangements may also be more likely to deliver expedited low- and zero-emission fleet improvements as part of quid pro quo arrangements. Besides, Quid pro quo arrangements can enhance bus stop security and provide wider safety initiatives area. ▪ Health and well-being can further be enhanced through deliver on-bus measures to enhance security and improve access to health and wellbeing infrastructure. ▪ The option could support targeted expansion to the network and enhancements to levels of service, to benefit the public transport network coverage, comparative access by people group, and comparative access by geographic location sub-criteria. ▪ Safety and Security improvements could also benefit the comparative access by people group sub-criterion in particular. Improved accessibility standards for vehicles, stops and information, could also benefit this sub-criterion. ▪ In terms of affordability – a BSIP could provide targeted zero or reduced fares for those that need it the most, and general affordability improvements by introducing value for money multi-operator tickets. ▪ This option is deemed to have an overall minor beneficial impact on the public sector equality duty (PSED) as a whole.	▪ Success of any governance measures and their contribution to improved environmental outcomes would depend on their scale and ambition of implementation including delivery of improvements throughout key public transport corridors. ▪ Any new buses should be in line with best practice with regards to emissions and user accessibility. ▪ Additionally, where implementation of measures generates revenue, this may be used to reinvest in decarbonisation which could also help to reduce emissions and improve local air quality further. ▪ The options have potential for significant beneficial impacts where fares are set very low and sufficient public transport services/capacity is provided to meet increased demand. ▪ The potential scope for improvements of the equality under this option would depend on the development of partnerships based on agreed commitments. Beneficial impacts are most likely to be delivered as a result of improved services and network coverage, accessibility enhancements and increased affordability measures.
	Overall, moderate beneficial impacts are predicted:	
	Scoring: ✓✓	✓✓

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Option Group & Summary of Options	Key Environmental Impacts	Mitigation & Recommendations
4. Bus Franchising *A bus franchising scheme replaces on-road competition between commercial operators with a competition for operating contracts. The contracts are specified and tendered by the local transport authority, placing a higher degree of control over service specifications and fares in the hands of the local transport authority.*	▪ A franchising scheme could set out level of service, affordability and quality measures which deliver modal shift from car to bus. This could help to improve air quality and to reduce CO_2 emission overall although growing bus operations will create more emissions from buses, which need to be offset by reductions in car use. ▪ When in place, a franchising scheme could help to ensure improvements to bus fleets and aid delivery of a more consistent approach to rolling out cleaner buses effectively across the region. ▪ The option could set out level of service, affordability and quality measures which deliver modal shift from car to bus (to benefit the accidents and health outcomes sub-criteria), enhanced on-bus security, and improve access to health and wellbeing infrastructure. ▪ Franchising allows the authority to specify service standards, which it is assumed will result in aspirational levels of service (subject to sufficient funding) – levels of service will not only be dependent on passenger demand (as now) but can also support wider public sector policies such as offering sustainable travel alternatives, tackling social deprivation, or supporting local economies. Such enhancements to levels of service could benefit the public transport network coverage, comparative access by people group, and comparative access by geographic location sub-criteria ▪ Safety and Security improvements could also benefit the comparative access by people group sub-criterion in particular. Improved accessibility standards, for vehicles, stops and information, could also provide benefit. ▪ This option could provide targeted zero or reduced fares for those that need it the most, and general affordability benefits by introducing a full suite of ticketing improvements: network-wide tickets, smart cards, auto fare capping; lower fares for all with targeted zero fares; and best-value capping. The options have potential for significant beneficial impacts where fares are set very low	▪ Driver training for fuel efficient driving and on-vehicle feedback systems could also be specified in the scheme. ▪ Success of any governance measures and their contribution to improved environmental outcomes would depend on their scale and ambition of implementation including delivery of improvements throughout key public transport corridors. ▪ Any new buses should be in line with best practice with regards to emissions and user accessibility. ▪ Additionally, where implementation of measures generates revenue, this may be used to reinvest in decarbonisation which could also help to reduce emissions and improve local air quality further. ▪ Due to the length of time that it could take to implement a franchising scheme, it is not a valid short-term fleet improvement mechanism. ▪ The major PSED benefit is attributed to the scale of control over service specification and region-wide geographic coverage that could be applied under this option.

Option Group & Summary of Options	Key Environmental Impacts	Mitigation & Recommendations
	▪ and sufficient public transport services/capacity is provided to meet increased demand. ▪ This option could result in an overall major beneficial impact in relation to the Public Section Equality Duty (PSED).	
	Overall, moderate to major beneficial impacts are predicted:	
	Scoring: ✓✓	✓✓✓

5. Municipal ownership
The Transport (Scotland) Act 2019 permits local transport authorities to establish a municipally owned public bus operator(s) that can compete for contracts and operate registered bus services. The municipal operator would likely be an arms-length company wholly owned by the local transport authority, providing suitable separation when competing for tendered bus service contracts
	▪ Municipal bus operations could be used to encourage modal shift from car to bus, potentially benefitting air quality and reduction of CO_2 emission.
	▪ Fleets for operations could also be aligned with environmental improvement ambitions of the government, subject to funding being available.
	▪ Municipal operations could be specifically targeted at areas that are most likely to deliver modal shift from car to bus and improve air quality and reduce CO_2 emission and noise and vibration impacts from transport.
	▪ The option could set out level of service, affordability and quality measures which deliver modal shift from car to bus (to benefit the accidents and health outcomes sub-criteria), enhanced on-bus security, and improve access to health and wellbeing infrastructure.
	▪ If profits permit, the company could offer a better level of service than a private sector operator (covering more geographical areas or operating at quieter times of day) – but subject to always maintaining overall financial viability. If viable, enhancements to levels of service could be targeted to benefit the network coverage, comparative access by people group, and comparative access by geographic location sub-criteria.
	▪ Safety and Security improvements could also benefit the comparative access by people group sub-criterion in particular. Improved accessibility standards for vehicles, stops and information, could also benefit this sub-criterion.
	▪ In terms of affordability – this option gives complete freedom regarding fares, but only for those services
		▪ Success of any governance measures and their contribution to improved environmental outcomes would depend on their scale and ambition of implementation including delivery of improvements throughout key public transport corridors.
		▪ The scale of benefit achieved would relate to the scale and share of operations of the municipal bus company in relation to the overall network and the existence of any other relevant delivery model within which the municipal bus company was operating.
		▪ Municipal ownership has the potential to deliver a range of positive impacts, however this is highly dependent on the operating context in which this option would be situated.
		  - If applied to existing conditions, it is unlikely to yield many enhancements due to competition with other operators and limitations to partnerships or agreements that could be made.
		  - If delivered alongside a BSIP or franchising model, it is judged that this option could deliver greater improvements linked to the core policy areas.
		▪ However, there are also uncertainties about the scale of geographical impact that could be delivered under this model.
		▪ Any new buses should be in line with best practice with regards to emissions and user accessibility.
		▪ Additionally, where implementation of measures generates revenue, this may be used to reinvest in decarbonisation which could also help to reduce emissions and improve local air quality further.

Option Group & Summary of Options	Key Environmental Impacts	Mitigation & Recommendations
	delivered by the municipal bus company. Therefore, these could be limited or dependent on any wider enhancements alongside one of the other options above. The options have potential for significant beneficial impacts where fares are set very low and sufficient public transport services/capacity is provided to meet increased demand.	
	Overall, minor to major beneficial impacts are predicted:	
	Scoring: ✓	✓✓✓

5.4.5 SPT carried out a consultation exercise between Tuesday 2nd April 2024 and Monday 13th May 2024 to understand levels of support or opposition to a set of recommendations on the appraised options to guide the development and implementation of the bus strategy. The consultation outcomes were presented to the SPT Partnership Board in September 2024, which approved the following recommendations:

- Business As Usual and Voluntary Partnerships should be ruled out as means to deliver a better bus network as more radical intervention is required

- SPT should commence work on franchising, in line with the requirements of the Transport (Scotland) Act 2019

- SPT will consider developing business case(s) for small-scale municipal bus company(ies) aimed at socially necessary services in parts of the region where private operators are currently very limited

- SPT, and our partners, should progress with the necessary transition arrangements appropriate (e.g. time-limited, voluntary partnerships or other agreements aimed at improving the bus network) to provide a structured basis for private and public sector collaboration in attempting to arrest further passenger decline and stabilise the bus network in the pre-franchising period.

5.4.6 The recommendations were taken forward into the development of the draft strategy and delivery plan.

5.5 Assessment of Actions

5.5.1 An action plan that supports the delivery of the SRBS as well as wider transport strategies including the RTS and Local Transport Strategy has been proposed in the draft SRBS. The Action Plan covers the initial actions for the Franchising Route Map, actions to support the management of the 'pre-franchising' period, actions for bus infrastructure and traffic management, and actions to support a 'bus friendly' environment integrated with other key programmes and policies. In total, 27 actions have been developed:

- Eight actions covering the Franchising Route Map

- Seven actions covering the Pre-franchising period

- Nine actions covering Bus infrastructure and traffic management

- Three actions covering Bus friendly environment

5.5.2 The detailed findings of the assessment, including the scoring of each individual action are set out in the tables in **Appendix F**.

5.5.3 Overall, the assessment has identified that no significant adverse environmental effects would be predicted from implementation of the draft actions. Some of the actions are predicted to have minor to major beneficial environmental effects.

5.6 Cumulative Effects

5.6.1 The preceding discussion of predicted effects of the Strategy on the individual SEA objectives has identified that the Draft SRBS, when implemented, is likely to have a range of predominantly beneficial environmental effects, in some cases significant. The analysis in Section 5.4 also identifies the key policies which are considered to particularly contribute to significant effects for each environmental theme captured by the relevant SEA objective. This approach has allowed for consideration of the total contribution of the policies in the SRBS to the environmental

themes in the SEA which supports further consideration of potential cumulative effects of the Strategy.

5.6.2 Whilst the high-level nature of the Draft SRBS precludes a detailed appraisal of cumulative effects, some strategic-level commentary on cumulative effects of the plan is set out here. These are addressed first for the potential for different predicted effects of the Strategy to combine and result in effects on sensitive receptors that are different from those when single theme environmental effects are considered (termed here as in-combination effects). The potential for implementation of the Strategy to cumulatively affect receptors when considered with the effects of other key policies and plans in the SPT region is also briefly addressed (and referred to as cumulative effects).

In-Combination Effects of the SRBS

5.6.3 At the scale of the SPT region, receptors sensitive to in-combination effects can be considered in terms of all the main communities and areas of population and the supporting civic, community and transport infrastructure that serves them. Key natural heritage sites include those designated for their high quality and sensitivity (such as part of the Loch Lomond and the Trossachs National Park and other designated landscapes), important habitats including those supporting internationally important assemblages of birds and other species, lochs, rivers and their catchments, the coastal and inter-tidal zone, country parks and green spaces important to people and nature and the region's rich and varied cultural heritage. It is also recognised that people and local communities value a wide range of other places and sites for a range of attributes that they provide which can contribute to quality of life, health, education and supporting local businesses and the economy.

5.6.4 At the strategic level of the SRBS only broad consideration of in-combination effects and receptors is possible. The SEA has not predicted any significant adverse environmental effects in relation to the ten topic-based themes and objectives which lowers the potential for impacts to combine and have additive or synergistic effects on key receptors which may be significant. With the mitigation principles outlined in this report and a commitment to their ongoing development and application through SRBS delivery stages, no significant adverse effects on sensitive receptors at the regional level from in-combination effects are predicted.

5.6.5 It is recommended that as the Strategy is implemented, a framework for continued consideration of environmental impacts is taken forward commensurate with the detail and location-specific nature of the delivery stages. To ensure that environmental and sustainability effects are considered holistically (and in relation to cumulative effects) it may be appropriate to develop a framework based on a natural-capital type approach. This would characterise the range and scale of natural (and man-made) assets and services associated with a region from which a more informed understanding of the impacts of sub-programmes and key transport interventions could be identified.

5.6.6 The main potential for the SRBS to have in-combination effects is on human receptors, primarily people in communities across the region who would benefit from the potential for multiple effects on health, accessibility and socio-economic outcomes. The region includes many areas where people live in deprived communities and where life prospects and lived experiences may be materially influenced for the better by the availability, accessibility and affordability of bus transport. Transport is increasingly being defined by policy makers as a human right and the potential benefits of the SRBS, where it can be implemented and sustained at scale, would support significant beneficial environmental and health effects to these (and other) communities.

5.6.7 Similar to the RTS, the potential for significant beneficial in-combination effects of the Draft SRBS is therefore predicted in areas where a step-change in accessibility and mobility is delivered from its implementation contributing to improved health, air and amenity, accessibility to key services and improved socio-economic prospects (productivity).

Cumulative Effects of the SRBS

5.6.8   There are many policies, plans and programmes relating to land use and transport development in the SPT region, including some of those identified in **Appendix B**. A proportionate approach to consider potential cumulative effects with other strategies has been followed reflecting the strategic nature of the SRBS, its predominantly beneficial predicted effects, and the inherent complexity and uncertainty in forecasting cumulative effects.

5.6.9   The key plans which are considered to have potential for significant cumulative effects with the SRBS are those likely to have a 'reinforcing' impact on its predicted beneficial effects. These include the Scottish Government's National Transport Strategy 2 (and associated delivery plans), the Infrastructure Investment Plan (IIP), the Scottish Climate Change Plan Update, and the 'road-map' proposals to achieve a 20% reduction in road vehicle kilometres by 2030. These policies, and their relevant subordinate and related action plans in areas such as electric vehicles and sustainable, safe and accessible transport system, set out high level proposals and commitments in complementary themes to the SRBS including:

- Improvement in bus transport services, affordability and integration (relevant to SEA objectives for health, accessibility, material assets and productivity).

- Emissions reductions (relevant to SEA objectives for climate change mitigation and air quality and amenity).

5.6.10   Taken together with these strategies, and with other complementary regional level programmes and interventions such as Glasgow's Low Emission Zone (LEZ), it is predicted that the SRBS would have significant beneficial cumulative environmental effects on climate, air quality, human health, accessibility and productivity, similar to that of the RTS. The extent of the beneficial outcomes and when they might be achieved would depend on the effectiveness and timescales of the delivery measures taken forward by SPT and its partner organisations.

5.6.11   The potential for significant adverse cumulative effects has also been considered. The predicted adverse environmental effects of the draft SRBS are limited in number and scope (and none of which is likely to be significant, see **Section 5.3**). The principal policies of the SRBS where potentially minor environmental impacts are predicted (or are uncertain) relate to those whose implementation may involve development of bus depots, bus stations, bus interchanges and mobility hubs.

5.6.12   There are no specific locations or designs for any of these policy interventions at this stage of the SRBS. To ensure that significant adverse cumulative effects with other similar or linked transport plans and programmes was avoided in future, the implementation of future projects should be taken forward in collaboration with other key delivery agencies including the relevant SPT local authorities, transport operators, and Transport Scotland. Delivery of new transport facilities (e.g. e.g. bus depots, bus stations, bus interchanges and mobility hubs) would therefore be complementary with, and supportive of, national level interventions which may come forward in the region from programmes such as the Strategic Transport Projects Review 2 (STPR2), the Infrastructure Investment Plan (IIP) and the National Planning Framework (NPF4). Engagement with the key environmental authorities including SEPA, NatureScot and Historic Environment Scotland (HES) will also ensure that relevant connected initiatives and programmes are integrated with transport development, including for example SEPA's strategic infrastructure sector plans, NatureScot's programmes on biodiversity, climate change, nature recovery, access and placemaking and HES's programme of work on climate adaptation and resilience.

5.6.13   It is necessary to ensure that new and upgraded transport infrastructure and facilities were planned and delivered to maximise beneficial outcomes and take account of all relevant environmental and sustainability constrains and opportunities. It is considered that an integrated approach together with implementation of the other environmental mitigation principles set out

in this SEA (see **Section 6.2**) would avoid the potential for significant adverse cumulative environmental effects with other key plans and programmes in the region.

6 Mitigation and Monitoring

6.1 Introduction

6.1.1 The 2005 Act requires SEA Reports to provide a *"description of the measures envisaged concerning monitoring"* after the adoption of a plan or programme which is subject to SEA. To comply with these, a SEA Monitoring Framework has been developed. This will be used as the main tool to monitor and review the implementation of the SRBS and associated environmental effects.

6.1.2 Similar to the RTS, in addition to monitoring SRBS delivery, to comply with statutory SEA requirements the SPT SRBS Monitoring Framework will also need to specifically include mechanisms to monitor the likely significant effects on the environment of the SRBS as predicted through this SEA process. In addition, the Monitoring Framework should include mechanisms to assess whether all SRBS policies are being implemented as intended and with no unforeseen adverse consequences. To inform future SRBS reviews, it would also be prudent to monitor whether the policies remain in conformity with any updates to national transport policy and regional land use planning policies.

6.2 SEA Mitigation

6.2.1 A series of environmental mitigation measures in the form of high-level principles have been defined through the SEA process, particularly following initial options appraisal and in the assessment of the SRBS policies. Mitigation in this SEA is presented in the form of principles and general commitments as it reflects the level of detail of the draft Strategy as evidenced in the policies and their supporting narratives. The key mitigation identified at this stage is set out in **Table 6.1**.

Table 6.1 SEA Mitigation Measures

Group	Mitigation Commitment	
General Mitigation Principles		
The mitigation principles outlined in this report will be developed and applied through the SRBS delivery stages including through continued application of an appropriate level of environmental assessment as the details of policy implementation are progressed. These environmental assessments will be supported, where appropriate, through the development of environmental baseline information specific to the key transport corridor(s) where transport measures are being considered. The implementation of future SRBS projects will be taken forward in collaboration with other key delivery agencies including the relevant SPT local authorities, bus operators, and Transport Scotland. Engagement with the key environmental authorities including SEPA, NatureScot and Historic Environment Scotland will be maintained to ensure that relevant connected initiatives and programmes are integrated with SRBS delivery.		
Policy Specific Mitigation Measures		
Vehicles and Decarbonisation	▪ Increased provision of bus capacity and services should deploy zero or ultra-low emission vehicles. ▪ Bus operators should be supported to achieve rapid decarbonisation on existing vehicle fleets	
Relevant policies: *1. Buses where they are needed, when they are needed.*		

Group	Mitigation Commitment
7. A more environmentally sustainable, resilient and adaptable bus network and fleet	
Access and Fairness	▪ Measures using pricing to reduce demand for car travel should be designed equitably to ensure that they do not have unintended consequences for people with socio-economic disadvantage, in line with national and regional commitments to a Just Transition to Net Zero. ▪ Enhancement to bus services and facilities should be designed and operated to ensure that the needs of all users and disabilities groups are accommodated. ▪ Setting up an internal KPI to monitor the journey time and punctuality ▪ By utilising Urban - Rural classifications, approximate levels of connectivity from different settlements to key services can take into account the size and wider accessibility of the settlement. ▪ Cost modelling will provide insight into fare options potential, and it may be possible to rationalise / better determine the scale of options that are deliverable. For targeted products, modelling can apply fare reductions to a subset of the population, for example based on local demographic data.
Relevant policies: *1. Buses where they are needed, when they are needed.* *2. Affordable and attractive fares and ticketing* *4. Reliable and quicker journey* *7. A more environmentally sustainable, resilient and adaptable bus network and fleet*	
Transport Infrastructure	• New bus infrastructure should be developed wherever possible through re-use and reallocation of existing bus assets (in accordance with the Scottish Government's Investment Hierarchy as set out in the 2021 Infrastructure Investment Plan) and where new facilities or infrastructure are required these should be designed and constructed following circular economy principles to minimise use of primary resources. • Any new or upgraded bus infrastructure would be subject to appropriate levels of environmental assessment and consenting, this would involve development of designs, mitigation measures and sensitive construction environmental management to ensure that wherever possible significant adverse environmental effects were avoided. • Where materials are required to develop bus infrastructure priority should be given to the use of secondary, recycled and remanufactured materials and products before use of non-renewable resources.
Relevant policies: *3. Accessible and Safer Bus Journeys* *6. Seamless and integrated network* *7. A more environmentally sustainable, resilient and adaptable bus network and fleet*	
Bus Networks and Enhancement	• Measures to adapt the bus transport system to climate change should take account of the embodied carbon in designs and materials • Collaborative working with relevant flood risk agencies and local authorities should be pursued in integrating transport resilience works with flood prevention activities, wherever possible working at a watercourse catchment scale.
Relevant policies: *7. A more environmentally sustainable, resilient and adaptable bus network and fleet*	

Group	Mitigation Commitment

6.2.2   These mitigation commitments provide a framework for the development of specific measures in more detail alongside the articulation of the SRBS Delivery Plan. Future elaboration of this framework will include identification of specific lead responsibilities for SPT and other partners and associated timeframes. At this stage it is important to note that the principles are committed to by SPT which has allowed them to be used in considering the potential residual (i.e., post mitigation) environmental effects of the draft Strategy as reported in **Section 5**.

6.3   Monitoring Framework

6.3.1   A Delivery Plan, including an action plan, has been developed in the draft SRBS. The Delivery Plan sets out the key actions, initiatives and projects for SPT and partners over the first 5 years of the new SRBS. Progress of the SRBS will be tracked through a monitoring and evaluation framework as set out in the draft SRBS document. This includes an initial schedule of proposed indicators. Many of these indicators are considered to be suitable to help track progress in the delivery of the Strategy with respect to environmental outcomes. They will also be used to check that the beneficial effects of the SRBS predicted in this SEA are being realised and to monitor any adverse effects so that corrective actions may be introduced.

6.3.2   Monitoring of environmental effects will be better integrated and practical to undertake where the indicators used are shared with those proposed for the main SRBS monitoring process. After reviewing the indicators proposed in the SRBS, the relevant indicators considered to be useful in tracking progress against both SRBS objectives and SEA objectives have been captured in the assessment tables in **Appendix D** in relation to each policy theme. A collated summary of the indicators proposed for monitoring progress against the SRBS objectives is presented in **Table 6.2** which identifies those considered to be relevant for monitoring against SEA objectives.

Table 6.2 Indicators proposed in draft SRBS for Monitoring SRBS Environmental Effects

SEA Objective	Monitoring Indicators	Relevant SRBS Objectives
1. Health	Monitoring Indicator: • Proportions of adults who feel personally safe and secure on the bus (day and evening)	**Objectives**: 1, 2 and 3
2. Accessibility	Monitoring Indicator: • Number of bus passenger journeys • Modal share of all journeys • Modal share of all journeys to work • Modal share of journeys to school • Proportion of adults who use local bus services at least 2 times per week • Proportion of households by public transport journey time (categories/ranges) to hospital, town centre, etc • Proportion of households within 400m of a bus stop, by service frequency • Proportion of adults who feel that local bus services are stable and are not regularly changing • Bus vehicle kilometres	**Objectives**: 1,2 and 3

SEA Objective	Monitoring Indicators	Relevant SRBS Objectives
	• Proportion of bus stops with a high access kerb • Proportion of adults who are satisfied with local public transport • Proportion of adults who feel that local bus services are on time • Proportion of adults who feel that it is easy to change from local bus services to other forms of transport	
3. Material Assets	Monitoring Indicator: • Number of bus passenger journeys • Number of Bus vehicle kilometres	**Objectives**: 1, 2 and 3
4. Productivity, Competitiveness and Innovation	Monitoring Indicator: • Modal share of all journeys to work • Proportion of adults who feel that local bus fares are good value • Transport components of retail prices index • Concessionary Card Take up	**Objectives**: 1, 2 and 3
5. Air Quality and Amenity	Monitoring Indicator: • No related monitoring indicator proposed under the draft SRBS. Monitoring of CO_2e from road transport has been proposed in the draft SRBS. The trend of CO_2e could reflect changes in air quality to a certain extent. However, for a better representation of air quality, toxic gas indicators have been proposed in **Table 6.3**.	**Objectives**: 1, 2 and 3
6. Climate Change Mitigation	Monitoring Indicator: • COe emissions estimates from road transport	**Objectives**: 1, 2 and 3
7. Biodiversity, Geodiversity and Soil	Monitoring Indicator: • No related monitoring indicator proposed under the draft SRBS. Further environmental monitoring and tracking indicators have been proposed in **Table 6.3**.	**Objectives**: 1, 2 and 3
8. Water, Flood Risk and Resilience	Monitoring Indicator: • No related monitoring indicator proposed under the draft SRBS. Further environmental monitoring and tracking indicators have been proposed in **Table 6.3**	**Objectives**: 1 and 3
9. Cultural Heritage	Monitoring Indicator: • No related monitoring indicator proposed under the draft SRBS. Further environmental monitoring and tracking indicators have been proposed in **Table 6.3**.	**Objectives**: 1, 2 and 3
10. Landscape	Monitoring Indicator: No related monitoring indicator proposed under the draft SRBS. Further environmental monitoring and tracking indicators have been proposed in **Table 6.3**.	**Objectives**: 1, 2 and 3

6.3.3   Analysis of the distribution of SRBS indicators in the table suggests that there is a good level of consistency with monitoring for the SEA objectives. For some environmental themes, there are fewer or no indicators relevant from the SRBS suite of indicators and the SEA process has identified a suggested set of additional environment-focused indictors for consideration by SPT in completing the monitoring and tracking proposals after reviewing those proposed in the SEA process of RTS. The indicators are presented in **Table 6.3** and draw from existing indicator and data sets wherever possible.

Table 6.3 Proposed Environment Focused Monitoring and Tracking Indicators

SEA Objective	Indicators proposed in RTS, which can be shared with SRBS	Proposed Indicators for future consideration in SRBS and Potential Data Sources
1. Health	<u>Tracking Indicators proposed in RTS</u> • Healthy Life Expectancy • Mental Wellbeing (Mean WEMWBS score) <u>Supplementary SEA specific indicators for future consideration in RTS (subject to adoption)</u> • A health-based indicator such as reported incidences of respiratory disease or asthma	
2. Accessibility	<u>Monitoring Indicators proposed in RTS</u> ▪ MyBus Usage ▪ Bus network coverage and service frequency	<u>Proposed Tracking Indicators</u> • Number of total passenger journeys (*source: Transport Scotland*) • Number of total vehicles kilometres (*source: Transport Scotland*)
3. Material Assets		<u>Proposed Tracking Indicators</u> • Number of EV enabled bus depot facilities and supporting infrastructure (*data source: bus operators*) • Number of new bus stops, interchange and mobility hub (*data source: bus operators*) • Number of total vehicles kilometres (source: *Transport Scotland*) • Number of total passenger journeys (source: Transport Scotland) • Circular economy indicator(s) for materials used in bus transport infrastructure and for vehicle/battery recovery and re-use (*data source: bus operators*)
4. Productivity, Competitiveness and Innovation	<u>Monitoring Indicators proposed in RTS</u> • Affordability of public transport fares • Employment rate • Percentage of young adults participating in education, training or employment	

SEA Objective	Indicators proposed in RTS, which can be shared with SRBS	Proposed Indicators for future consideration in SRBS and Potential Data Sources
5. Air Quality and Amenity	Monitoring Indicators proposed in RTS • Number of AQMS Supplementary SEA specific indicators for future consideration in RTS (subject to adoption) • Concentrations of roadside local air pollutants at key monitoring locations	Proposed Tracking Indicators • Toxic air pollutants (e.g NO_x, PM_{10} and $PM_{2.5}$) emissions estimates from bus transport (*data source: bus operators*) • Toxic air pollutants emissions estimates (e.g NO_x, PM_{10} and $PM_{2.5}$) from road transport (*data source: Transport Scotland*) • Proportion of buses that are ULEZ / zero emission vehicles (*data source: bus operators*)
6. Climate Change Mitigation	Monitoring Indicators proposed in RTS • Grammes CO2e per passenger km by mode/vehicle type	Proposed Tracking Indicators • CO2e emissions estimates from bus transport (*data source: bus operators*) • Proportion of buses that are ULEZ / zero emission vehicles (*data source: bus operators*)
7. Biodiversity, Geodiversity and Soil	Monitoring Indicators proposed in RTS • Natural Capital Asset Index Supplementary SEA specific indicators for future consideration in RTS (subject to adoption) • Condition of protected nature sites • Area of habitat delivered which provides biodiversity net gain	
8. Water, Flood Risk and Resilience		Proposed Tracking Indicators • Number of bus facilities at risk of flooding (*data source: bus operators* • Number of bus route affected by flooding (*data source: bus operators*) • Number and type of annual flood incidences affecting bus services (*data source: bus operators*)
9. Cultural Heritage	Monitoring Indicators proposed in RTS • Percentage of adults who have attended or visited a cultural event or place in the last 12 months	

SEA Objective	Indicators proposed in RTS, which can be shared with SRBS	Proposed Indicators for future consideration in SRBS and Potential Data Sources
	Supplementary SEA specific indicators for future consideration in RTS (subject to adoption) • Visitor numbers recorded at the region's key cultural heritage sites • State of historic sites	
10. Landscape	Monitoring Indicators proposed in RTS • Natural Capital Asset Index Supplementary SEA specific indicators for future consideration in RTS (subject to adoption) • Indicator on quality of public realm / built heritage	

6.3.4   The indicators set out in **Tables 6.2** and **6.3** will be developed and refined following feedback from consultation on the Draft SRBS. This will include completing a sub-set of environmental focused indicators to support monitoring against the objectives set out in this SEA. A suitable baseline will be derived for each indicator, wherever possible drawing from existing monitoring programmes at the national, regional and sub-regional levels to draw from recognised data sources and to ensure a resource efficient approach. Similar to RTS, a detailed consistency review will also be made with other key strategy SEA reports produced in the last three years (e.g., for the STPR2, NTS2, NPF4 and other key regional development plans) to align monitoring and reporting for consistency of presentation and economy of data gathering and analysis.

6.3.5   The Draft SRBS states that SPT will report annually on progress towards achieving the SRBS objectives through a set of monitoring indicators, report on progress of transport projects, initiative and workstreams and track a set of socio-economic, environmental and health indicators from wider policy environment. There is also a commitment to undertaking a 5 yearly evaluation process against SRBS Goals.

7 Next Steps

7.1 Consultation on this Environmental Report

7.1.1 This SEA Report and its Non-Technical Summary have been published for consultation alongside the Draft SRBS which has been prepared by SPT (with support from Stantec UK) together with supporting reports including the Equality Impact Assessment (EQIA) Report, Fairer Scotland Duty Impact Assessment (FSD) Report, Island Communities Impact Assessment (ICIA) Report, and Children's Rights and Wellbeing Impact Assessment (CRW) Report.

7.1.2 The Draft SRBS and supporting assessment reports, including this environmental assessment, will be published for consultation (of at least 12 weeks) in the first half of 2025. The consultation process will reach a broad range of stakeholders and the general public who will be able to provide their feedback through a dedicated website facility (see below). The Draft SRBS and SEA Report, together with other supporting reports, will be made available for public access on SPT's website (www.spt.co.uk). The documents will also be made available in hard copy for inspection, should this be requested, at the principal offices of SPT.

7.1.3 Details of how to participate in the consultation will be published by SPT and, in accordance with statutory requirements, an advert will be placed in a local newspaper inviting expressions of interest and stating where a copy of the relevant plan can be inspected. A web-based consultation facility will be established with access to the on-line feedback forms available at https://www.spt.co.uk/about-us/what-we-are-doing/regional-transport-strategy/bus-strategy/

7.1.4 The SEA Report and a copy of the Draft SRBS (the 'relevant documents') will also be provided to the SEA Consultation Authorities via the Scottish Government's SEA Gateway for formal consultation on the Strategy and the SEA under the requirements of the Environmental Assessment (Scotland) Act 2005.

7.2 Next Stages of SRBS Preparation and SEA

7.2.1 This Report will be consulted on in tandem with the Draft SRBS, EQIA, ICIA, CRWA, and FSDA. All feedback received regarding these documents will be analysed by Systra and Stantec, on behalf of SPT. SPT will consider the recommendations from the analysis of the consultation feedback and determine if and what changes may be required to the SRBS and if any further development work or consultation is required. Following this, an updated final version of the SRBS will be presented to the SPT Partnership Board for approval. Following approval of the finalised SRBS, SPT will formally adopt and publicise the Strategy. At this time, a SEA Post Adoption Statement (PAS) will be prepared to explain how the SEA process has closely informed the development of the finalised SRBS and how the feedback from consultation has been taken into account in finalising the Strategy. The PAS will also set out proposals for future monitoring of the environmental effects of the SRBS.

Appendix A   Environmental Baseline Review

A.1   Introduction

A.1.1   This appendix supports Chapter 3 of the SEA Environment Report by providing a review of the current environmental and socio-economic conditions within the area likely to be affected by the emerging draft SRBS, in particular (but not exclusively) the SPT regional administrative area. In doing so, this review identifies relevant aspects and characteristics of the environment, including those likely to be significantly affected by the SRBS. This includes:

- Identifying sites designated at international or national levels for reasons of biodiversity conservation, geological importance, heritage or landscape value which have the potential to be affected by the emerging SRBS;

- Identifying relevant socio-economic trends and baseline conditions, again focusing on matters likely to be significantly affected by the outcome of the emerging SRBS; and

- Identifying key environmental and socio-economic characteristics, baseline conditions and issues to be addressed within the SRBS and considered within this SEA.

A.1.2   This evidence is then used to:

- Outline the expected evolution of baseline environmental conditions in the absence of the emerging SRBS; and,

- Define a suite of key environmental issues which will need to be addressed within the emerging SRBS and which should be considered throughout the SEA process.

A.1.3   The purpose of this baseline review is therefore to inform both proposals for the emerging SRBS and the content of an SEA Framework which will be used to assess all substantive components of the emerging SRBS.

A.1.4   **Table A.1** identifies sites designated at international, national or local level for reasons of biodiversity conservation, geological importance, heritage or landscape value which may have the potential to be affected by implementation of proposals from the emerging SRBS. **Table A.2** presents a characterisation of the environmental baseline position and identifies the relevance of existing issues and problems to the emerging SRBS and the forthcoming SEA.

A.1.5   Both tables present information relevant to the SPT region and provide a context for the environmental baseline and issues underpinning the environmental assessment.

Table A.1: Designated Sites of Relevance to the Emerging SRBS

Relevant Sites in the SPT Region	Designation Type	Qualifying Features / Interests	Key Issues for SEA
Biodiversity			
International/ European			
The SPT region hosts 10 SPAs: ▪ Glen Etive and Glen Fyne ▪ Loch Lomond ▪ Ailsa Craig ▪ Inner Clyde ▪ Black Cart ▪ Renfrewshire Heights ▪ Arran Moors ▪ Glen App and Galloway Moors ▪ Muirkirk and North Lowther Uplands ▪ Slamannan Plateau	Special Protection Area (SPA)	The identified SPAs have been designated as they support rare and vulnerable birds (as listed on Annex I of Directive 2009/147/EC on the conservation of wild birds – 'the Birds Directive') and for regularly occurring migratory species.	The SPAs identified are typically located in upland and remote rural locations distant from most of the major transport corridors in the SPT region. The Muirkirk and North Lowther Uplands, situated on the border between East Ayrshire and South Lanarkshire, is the largest SPA in the area. The other large sites include the Arran Moors on the island of Arran and Renfrewshire Heights in the Clyde Muirshiel Regional Park. The Inner Clyde designation is located in the north west of the region. The nearby Black Cart Water site is north of Glasgow Airport and may also represent a constraint. The other sites, including Loch Lomond, Slamannan Plateau, Glen App and Galloway Moors, Ailsa Craig and Glen Etive and Glen Fyne are all situated on the border of the SPT area and therefore are unlikely to be a major constraint.
The SPT region area hosts 19 SACs: ▪ Craigengar ▪ Cranley Moss ▪ Dykeneuk Moss ▪ Loch Lomond Woods ▪ Clyde Valley Woods ▪ Lendalfoot Hills Complex ▪ Merrick Kells ▪ West Fannyside Moss ▪ Airds Moss ▪ Coalburn Moss ▪ Cockinhead Moss ▪ Bankhead Moss, Beith ▪ Black Loch Moss ▪ Braehead Moss ▪ North Shotts Moss ▪ Red Moss	Special Area of Conservation (SAC)	The identified SACs have been designated owing to their significant contribution in conserving the 189 habitat types and 788 species identified in Annexes I and II of Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ('the Habitats Directive').	In South Lanarkshire and along the M74, there are a cluster of SACs that includes the Clyde Valley Woods, Coalburn Moss, and Red Moss. None of the sites are of significant scale. The Airds Moss SAC, near Cumnock, is the largest single SAC in the region but is unlikely to be a key constraint for the SRBS due to its remote location. The Loch Lomond Woods site is on the border of the region and is unlikely to represent a significant constraint for the SRBS.

Relevant Sites in the SPT Region	Designation Type	Qualifying Features / Interests	Key Issues for SEA
▪ Endrick Water ▪ Waukenwae Moss ▪ River Tweed			
Two of the SPAs within the SPT region are also designated as Ramsar Sites: ▪ Inner Clyde ▪ Loch Lomond	Ramsar Site	Ramsar Sites are wetlands that are considered to be of international importance under the Ramsar Convention.	The Inner Clyde designation stretches from Clydebank to Colgrain on the north bank, and from Erskine to Port Glasgow in the south. Loch Lomond is situated on the edge of the SPT region but is still considered a constraint relevant to Argyll / West Dunbartonshire.
National			
The SPT region area includes over 133 SSSIs designated for reasons of biodiversity conservation or important ecological features: ▪ Whinnerston ▪ Southannan Sands ▪ Portencross Woods ▪ Auchenreoch Glen ▪ Longriggend Moss ▪ Avondale ▪ Millburn ▪ Miller's Wood ▪ Milton-Lockhart Wood ▪ Merrick Kells ▪ Endrick Mouth and Islands ▪ Nethan Gorge ▪ North Bellstane Plantation ▪ Ness Glen ▪ Balglass Corries ▪ Ballantrae Shingle Beach ▪ Possil Marsh ▪ Ballochmartin Bay	Site of Special Scientific Interest (SSSI)	The identified SSSIs have been designated owing to the presence of nationally important or rare habitat types and the species they support.	There are several SSSIs along the west coast, especially in South Ayrshire; however, these are unlikely to be a key constraint for most interventions likely from the SRBS. A significant proportion of the island of Arran is designated as SSSI. This must be taken into consideration with regards to any island-specific transport proposals. There are several sites situated on the SPT region border between East Ayrshire and South Lanarkshire. While they are significant in scale, they are unlikely to be key constraints for the SRBS. The Inner Clyde designation stretches from Clydebank to Colgrain on the north bank, and from Erskine to Port Glasgow in the south. There are also several sites along the SPT region border at Loch Lomond, but these are unlikely to be key constraints. There are some smaller designations in South Lanarkshire that may be an issue for the SEA given their proximity to the transport network.

Relevant Sites in the SPT Region	Designation Type	Qualifying Features / Interests	Key Issues for SEA
- Pinbain Burn to Cairn Hill - Pollochro Woods - River Ayr Gorge - Ross Park - Ross Park - Lochshore Woodland - South Coast of Arran - Sculliongour Limestone Quarry - Shiel Dod - Shovelboard - Shielhill Glen - Skelmorlie Glen - South Braes - Barlosh Moss - Barmufflock Dam - Troon Golf Links and Foreshore - Tinto Hills - Red Moss - Hassockrigg and North Shotts Mosses - Townhead Burn - Slamannan Plateau - Turnberry Dunes - West Loch Lomondside Woodlands - Western Gailes - Beinn an Lochain - Woodend Loch - Dykeneuk Moss - Waukenwae Moss - Ailsa Craig - Loch Libo - Ben Vorlich - Benlister Glen - Glen App and Galloway Moors - North Lowther Uplands - Bennane Head Grasslands - Black Cart - Blantyre Muir - Bankhead Moss, Beith - Black Loch Moss - Auchalton - Bishop Loch			There are also several sites along the west coast in North Ayrshire, Inverclyde and Renfrewshire that may represent a constraint, including the large-scale Renfrewshire Heights.

Relevant Sites in the SPT Region	Designation Type	Qualifying Features / Interests	Key Issues for SEA
▪ Loch Doon ▪ Lang Craigs ▪ Littleton and Balhamie Hills ▪ Haw Craig - Glenarbuck ▪ Glen Moss ▪ Glen Loin ▪ Lady Bell's Moss ▪ Knocknairs Hill ▪ Ashgrove Loch ▪ Arran Northern Mountains ▪ Knockdolian Hill ▪ Knockdaw Hill ▪ Inchtavannach and Inchconnachan ▪ Inchmurrin ▪ Inchmoan ▪ Inchlonaig ▪ Renfrewshire Heights ▪ West Fannyside Moss ▪ Kames Bay ▪ Jock's Gill Wood ▪ Feoch Meadows ▪ Ard Bheinn ▪ Falls of Clyde ▪ Gleann Dubh ▪ Hamilton Low Parks ▪ Hamilton High Parks ▪ Dalmellington Moss ▪ Dumbarton Muir ▪ Dullatur Marsh ▪ Gills Burn and Mare Gill ▪ Geal and Dubh Lochs ▪ Garrion Gill ▪ Dargavel Burn ▪ Fiddler Gill ▪ Caldarvan Loch ▪ Cleghorn Glen ▪ Clauchlands Point - Corrygills ▪ Mugdock Wood ▪ Blairbeich Bog ▪ Dundonald Wood			

Relevant Sites in the SPT Region	Designation Type	Qualifying Features / Interests	Key Issues for SEA
▪ Dolphinton - West Linton Fens and Grassland ▪ Inner Clyde ▪ Craigengar ▪ Craigallian Marshes ▪ Craig Wood ▪ Cranley Moss ▪ Cartland Craigs ▪ Cart and Kittoch Valleys ▪ Castle Semple and Barr Lochs ▪ Cockinhead Moss ▪ Cobbinshaw Reservoir ▪ Cobbinshaw Moss ▪ Coalburn Moss ▪ Cadder Wilderness ▪ Carnwath Moss ▪ Aldons Hill ▪ Upper Nethan Valley Woods ▪ Martnaham Loch and Wood ▪ Maidens to Doonfoot ▪ Bogton Loch ▪ Bogside Flats ▪ Brother and Little Lochs ▪ Arran Moors ▪ Braehead Moss ▪ Boturich Woodlands ▪ Bothwell Castle Grounds ▪ Blood Moss and Slot Burn ▪ Cander Moss ▪ Muirkirk Uplands ▪ Endrick Water ▪ Formakin ▪ Bargeny Hill ▪ Inchcruin ▪ Craig Royston Woods ▪ Cleghorn Glen			

Relevant Sites in the SPT Region	Designation Type	Qualifying Features / Interests	Key Issues for SEA
The SPT region hosts 2 NNRs: ▪ Clyde Valley Woodlands ▪ Loch Lomond	National Nature Reserve (NNR)	NNRs are designated to further the conservation and study of wildlife, habitats or geological features of special interest.	Loch Lomond is on the boundary of the SPT region and is unlikely to be a key constraint for the SRBS and SEA. The Clyde Valley Woods are not significant in scale, but this site may be relevant to consideration of transport movements in South Lanarkshire.
Geological			
National			
The SPT region hosts approximately 78 SSSIs designated for reasons of geological importance: ▪ Auchensail Quarry ▪ Lugar Sill ▪ Lynn Spout ▪ Millenderdale ▪ Merrick Kells ▪ Mollinsburn Road Cutting ▪ Endrick Mouth and Islands ▪ Nith Bridge ▪ Balglass Corries ▪ North Newton Shore ▪ Rhu Point ▪ Pinbain Burn to Cairn Hill ▪ Raven Gill ▪ Penwhapple Burn ▪ Portnellan - Ross Priory - Claddochside ▪ River Clyde Meanders ▪ Ree Burn and Glenbuck Loch ▪ Roughneuk Quarry ▪ Rouken Glen ▪ South Coast of Arran ▪ Sgavoch ▪ Shiel Burn ▪ South Threave ▪ Stairhill ▪ Tinto Hills ▪ Turnberry Lighthouse to Port Murray ▪ Trearne Quarry ▪ Waulkmill Glen ▪ Ailsa Craig	Site of Special Scientific Interest (SSSI)	Geological SSSIs are designated owing to the presence of nationally important or rare geological features.	There are several SSSIs along the west coast, especially in South Ayrshire; however, these are unlikely to be key constraint for the SRBS. The north-end and coasts of the island of Arran have SSSIs which will have to be taken into consideration for any island-specific transport proposals. There are several large-scale SSSIs situated on the border between East Ayrshire and South Lanarkshire. While they are significant in scale, they are unlikely to form a key constraint for the SRBS and SEA. While there are several other designations across the region, they are not key constraints given their scale and location.

Relevant Sites in the SPT Region	Designation Type	Qualifying Features / Interests	Key Issues for SEA
▪ Benbeoch ▪ North Lowther Uplands ▪ Blair Farm ▪ Ardrossan to Saltcoats Coast ▪ Afton Lodge ▪ Birk Knowes ▪ Birkenhead Burn ▪ Loch Humphrey Burn ▪ Laggan Burn ▪ Kennox Water ▪ Laggan ▪ Knockormal ▪ Leadhills - Wanlockhead ▪ Arran Northern Mountains ▪ Largs Coast Section ▪ Knockgardner ▪ Howford Bridge ▪ Ard Bheinn ▪ Falls of Clyde ▪ Glenarbuck ▪ Girvan to Ballantrae Coast Section ▪ Garpel Water ▪ Garabal Hill ▪ Dumbarton Rock ▪ Drumadoon - Tormore ▪ Geilston Burn ▪ Fountainhead ▪ Fossil Grove ▪ Calder Glen ▪ Clauchlands Point - Corrygills ▪ Dippin Head ▪ Dundonald Burn ▪ Dunaskin Glen ▪ Dunside ▪ Dunrod Hill ▪ Craighead Quarry ▪ Craighead Hill Quarry ▪ Corrie Foreshore and Limestone Mines ▪ Clochodrick Stone ▪ Byne Hill			

Relevant Sites in the SPT Region	Designation Type	Qualifying Features / Interests	Key Issues for SEA
▪ Corrie Burn ▪ Manse Burn ▪ Maidens to Doonfoot ▪ Boylestone Quarry ▪ Blood Moss and Slot Burn ▪ Muirkirk Uplands ▪ Carstairs Kames ▪ Endrick Water ▪ Greenock Mains			
Cultural Heritage			
International			
The SPT region hosts two UNESCO World Heritage Sites: the Antonine Wall, and New Lanark.	World Heritage Sites	The Antonine Wall is the most substantial and important Roman monument in Scotland. In July 2008, the international cultural and archaeological importance of the Antonine Wall was recognised when the World Heritage Committee of UNESCO inscribed the site as Scotland's fifth World Heritage Site (WHS). The Antonine Wall became an extension of the trans-national Frontiers of the Roman Empire World Heritage Site which includes Hadrian's Wall in England. UNESCO considers the creation of New Lanark to be *"a milestone in social and industrial history. The moral and social beliefs that underlay*	The Antonine Wall stretches from Bo'ness in the east to Old Kirkpatrick in the west and passes through the northern part of the SPT region. It may represent a constraint for implementation of transport measures in East Dunbartonshire and North Lanarkshire. The New Lanark site is situated in South Lanarkshire but is unlikely to be a key constraint for the SRBS and SEA.

Relevant Sites in the SPT Region	Designation Type	Qualifying Features / Interests	Key Issues for SEA
		Robert Owen's work there provided the basis for seminal material and intangible developments that have had lasting influences on human society over the past two hundred years".	
National			
The SPT region hosts approximately 600 Scheduled Monuments and approximately 12,400 Listed Buildings. There are also 46 Inventory Gardens and Designed Landscapes (GDLs) and 5 Inventory Battlefields in the study area.	Scheduled Monuments (SM) and Listed Buildings	A wide range of historic structures within the SPT region area have been designated as either Scheduled Monuments or Listed Buildings, including hill forts, chapels, standing stones, bridges, castles and cairns. Scheduled Monuments are designated owing to their historical significance whilst buildings are listed owing to their features of architectural importance.	The large number and distribution of Scheduled Monuments and Listed Buildings indicates the importance of cultural heritage in the SPT region. In taking forward the SRBS, the SEA should consider the potential for transport interventions in each key strategy corridor to affect proximate designations. Whilst there are fewer Inventory standard GDLs and Battlefields, the proximity of these important sites would have to be considered where relevant in the implementation of the SRBS.
The SPT region area hosts 171 Conservation Areas, split as follows by local authority: ▪ East Ayrshire: 26 ▪ North Ayrshire: 13 ▪ South Ayrshire: 23 ▪ Inverclyde: 8 ▪ Glasgow City: 25 ▪ East Dunbartonshire: 14 ▪ Renfrewshire: 8 ▪ East Renfrewshire: 5 ▪ West Dunbartonshire: 5 ▪ Argyll and Bute: 7 ▪ North Lanarkshire: 7 ▪ South Lanarkshire: 30	Conservation Areas	The designated Conservation Areas are often centered upon clusters of Listed Buildings or other structures of historical and architectural importance and are typically designated within villages, towns and cities.	There is a concentration of large-scale Conservation Areas within Glasgow City that are key issues for the SEA. North of Glasgow, into East Dunbartonshire, also contains a number of designated sites of scale. The proximity of designated areas to potential future interventions associated with the SRBS will need to be taken into account where relevant in the implementation of the SRBS.

Relevant Sites in the SPT Region	Designation Type	Qualifying Features / Interests	Key Issues for SEA
Regional / Local			
Locally designated assets and non-designated historic environment assets	Non-designated	A range of sites which are important at a local level and/or which are not designated such as those identified on local historic environment records.	There are many thousands of such sites. At the level of the SRBS and the necessarily strategic consideration of potential effects from its policies, it has not been appropriate to collate this data. Future delivery of the SRBS should take account of potential effects of interventions on the range of sites and (as appropriate) their settings.
Landscape			
National			
Loch Lomond and the Trossachs	National Park	Loch Lomond and The Trossachs National Park was the first of the two national parks established by the Scottish Parliament in 2002 and is the fourth largest in the British Isles, with a total area of 1,865 km^2 (720 sq mi) and a boundary of some 350 km (220 mi) in length. Section 1 of the National Parks (Scotland) Act 2000 as amended identifies the four aims of Scotland's National Parks including Loch Lomond and the Trossachs National Park (LLTNP), namely: *"(a) to conserve and enhance the natural and cultural heritage of the area; (b) to promote sustainable use of the natural resources of the area;*	The Loch Lomond and the Trossachs National Park overlaps with the north-west part of the SPT region in parts of Argyll & Bute and West Dunbartonshire. The designation adds to the sensitivity of the natural and cultural environment of this area.

Relevant Sites in the SPT Region	Designation Type	Qualifying Features / Interests	Key Issues for SEA
		(c) to promote understanding and enjoyment (including enjoyment in the form of recreation) of the special qualities of the area by the public; and, *(d) to promote sustainable economic and social development of the area's communities".*	
North Arran NSA Loch Lomond NSA	National Scenic Areas (NSAs)	NSAs are nationally important due to their scenic quality. There are 40 NSAs, mainly in the more remote and mountainous areas of Scotland, all of which were originally identified in 1978 by the Countryside Commission for Scotland (CCS) in its publication 'Scotland's Scenic Heritage'. They represent the best areas of the type of scenic beauty popularly associated with Scotland and for which it is renowned. In 2010, the Scottish Ministers issued directions to local authorities under provisions in section 263A of the Town and Country Planning (Scotland) Act 1997	The North Arran National Scenic Area is unlikely to be a key constraint for the SEA. Loch Lomond NSA is located in the north-west of the region. The special landscape qualities of these areas should be considered as part of the implementation of interventions through delivery of the Strategy.

Relevant Sites in the SPT Region	Designation Type	Qualifying Features / Interests	Key Issues for SEA
		(inserted by section 50 of the Planning etc. (Scotland) Act 2006) to designate the current suite of 40 NSAs, thereby affording statutory protection to their special qualities when making planning decisions.	

Table A.2: Review of Relevant Environmental Baseline Information, Issues and Problems

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
Biodiversity, Fauna and Flora Relevant SEA Objective: 7. Biodiversity, Geodiversity and Soils *Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by protecting green infrastructure*	**Table A.1** above identifies the qualifying features (habitats and species) of relevant European sites (SPAs, SACs and Ramsar sites) and sites designated at the national level and benefiting from statutory protection within the SPT region for specific reasons of ecological importance or biodiversity conservation. Other key habitats (including areas of ancient woodland), locations known to support important populations of protected species, and locally designated sites have been incorporated where relevant.	There is a need to safeguard these qualifying features from adverse effects, protect the integrity of designated sites, and work towards the achievement of defined conservation objectives.	The key environmental constraints regarding biodiversity, fauna and flora from the network of designated sites have been incorporated within the environmental baseline. New transport infrastructure proposals could adversely impact ecology and biodiversity through direct and indirect effects due to permanent loss of habitat, disturbance and changes in transport emissions and pollution discharges to the water environment. Changes in transport operations and particularly road traffic may affect emissions in key corridors with indirect effects in adjacent sensitive habitats and may change disturbance levels for noise sensitive species.
Population (including relevant socio-economic conditions)	**Governance and Statistical Geographical Units**: The SPT Region includes 12 local authorities within its strategic regional boundary, each	It is important to note the geographical (and therefore governance and statistical) similarities between the SPT	The SEA should take into account the different local authority areas across the SPT region, in particular through the consideration of prevailing demographic issues.

Stantec

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
Relevant SEA Objective: 4. Productivity, Competitiveness and Innovation *Deliver an integrated and efficient transport system to increase economic prosperity, support the growth of key economic sectors and deliver increased and more inclusive employment* 2. Accessibility *Reduce the need to travel and ensure appropriate and affordable access for all to facilities, services, economic opportunities and social activities*	with local planning and transport control: Argyll and Bute (Helensburgh and Lomond), Inverclyde, Renfrewshire, East Renfrewshire, North Ayrshire, South Ayrshire, East Ayrshire, South Lanarkshire, North Lanarkshire, West Dunbartonshire, East Dunbartonshire and Glasgow City. Additionally, part of the SPT Region lies within the Loch Lomond and the Trossachs National Park, which is subject to separate planning control. Urban areas are located throughout the SPT region, with the principal settlements being: Glasgow City, Paisley, Greenock, Helensburgh, Irvine, Hamilton, Motherwell, Troon and Ayr. The key strategic economic development and investment priorities, taken from indicative Regional Spatial Strategies, are widespread across the region, categorised by sites in the Greater Glasgow Region, Ayrshire and Arran, Argyll and Bute, and Loch Lomond and Trossachs National Park. In addition to this, there is the Clyde Mission-Clyde Corridor and Helensburgh & Lomond Growth Area. The Clydeplan SDP (2017) also identifies a network of strategic centres for the Clydeplan area.	region and Clydeplan area – although Clydeplan does not include Ayrshire or Argyll and Bute. There is a need to consider Indicative Regional Spatial Strategies and LDPs and their role in terms of economic development and investment priorities.	The baseline data sets highlight a range of issues in the SPT region for population, including changes in demographics, educational and social factors and their clear linkages with socio-economic conditions and employment opportunity. The role of transport in supporting the population and, in particular, reducing socio-economic disadvantage is critical and development of future transport interventions will be assessed with respect to key data presented in this table during the implementation of the Strategy.

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	Demographics: The mid-year annual population estimates from National Records of Scotland (2022)[1] indicate that the 12 local authorities that comprise the SPT region have a resident population of 2,301,630 people, representing approximately 42% of Scotland's total population. Within the region there are multiple densely populated urban areas, most significantly Glasgow with an estimated population of 622,820 within the City Council area and 1,848,270[2] within the wider metropolitan area. The Clydeplan Strategic Development Plan (SDP), which covers a large part of the SPT region excluding Ayrshire and Argyll and Bute, identifies a network of strategic centres containing high population densities and associated economic activity. Other settlements outwith the Clydeplan SDP area but within the SPT region, including Ayr and Kilmarnock, also have relatively high population densities and resident populations exceeding 50,000. In terms of overall population trends and projections, data from the National Records of Scotland indicates that the population of the SPT region increased by 2.5% between 2011 and 2020, although at a slightly slower rate of growth than for Scotland as a whole (3.1%). This disparity is predicted to accelerate by 2033 the population of the SPT region is	Whilst the overall population of the SPT region is projected to increase, the rate of growth is expected to be slower than across Scotland overall and several constituent local authorities are expected to experience significant population declines. Depopulation may result in the reduction or removal of services, economic opportunities and amenities in affected areas, with consequential implications for public transport demand, cost effectiveness and provision. To deliver sustainable and inclusive economic growth within the SPT region there is a need to arrest projected depopulation in certain areas and to support more geographically widespread population growth. The SPT region is expected to experience significant population ageing, and at a faster rate than for Scotland overall. The changing age structure cannot easily be altered (without substantial in-migration of young working age	

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[1] National Records of Scotland, Mid-Year Population Estimates: Time Series Data: https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/mid-year-population-estimates/population-estimates-time-series-data

[2] The Glasgow metropolitan area is designated as the Glasgow City Region, comprising the local authorities East Dunbartonshire, East Renfrewshire, Glasgow City, Inverclyde, North Lanarkshire, Renfrewshire, South Lanarkshire, and West Dunbartonshire.

Stantec

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	projected to grow 0.7%, compared to 3.4% growth nationwide and a 5.2% growth in areas of Scotland outside of the SPT region[3.] This is due to several of Scotland's fastest growing cities, including Inverness, Perth, and Edinburgh, all being located outwith the region. At the local authority level, several local authorities within the SPT region are projected to experience a decrease in population over the next fifteen years. The largest projected declines are in Inverclyde (-7.7%); North Ayrshire (-4.9%); and West Dunbartonshire (-4.1%), whereas in contrast the population of East Renfrewshire is projected to increase by 7.7% by 2033[4]. As with Scotland overall, the population of the SPT region is expected to experience significant ageing. The resident population above the age of 65 within the region is projected to grow by 32.6% over the next 15 years, consistent with the nationwide increase of 32.3% over the same period[5]. In tandem, both the SPT region and Scotland as a whole are expected to experience a decline in the working age (16-64) population, although based on current projections the working age population of the SPT region will decline at a rate twice as fast as the Scottish average (7% and 3.5% respectively).	people) and will have wide-ranging implications for public policy, demand and provision of public services, labour market characteristics and tax revenues. Population ageing will also have substantial transport impacts due to changes in connectivity and accessibility needs.	

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[3] Experian Population Projections, 2018.

[4] Regional Planning Service, Experian, 2018.

[5] Regional Planning Service, Experian, 2018.

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	Housing: Both the approved Clydeplan SDP (2017) and adopted Local Development Plans (LDPs) for each constituent local authority set housing land requirements (HLRs) (all tenure, private and affordable) in accordance with the Scottish Planning Policy (2014). New HLRs are also in development for emerging LDPs across the SPT region. Each HLR is evidence based and informed by a Housing Need and Demand Assessment (HNDAs) to ensure that a sufficient level of housing on effective sites is allocated within LDPs to meet identified needs.	Housing need will continue to increase in the SPT region owing to overall population growth and changes in household formation. Additional housing need and provision within the SPT area may put increased pressure upon local and regional transport infrastructure. Improvements should be made to transport infrastructure where necessary to ensure that new housing and/or population increases does not result in additional congestion or other disruption.	
	Educational Infrastructure and Attainment: Headline figures indicate that secondary education in the SPT region performs at a rate consistent with the national average. The percentage of school leavers with a positive destination (i.e. into employment, training, or further education) in the SPT region in 2021-23 was slightly higher than the national average (96.6% compared to 95.9% respectively)[6]. Qualification attainment by school leavers in the SPT region is equally reflective of national trends. In the areas covered by the SPT, an average of 89.2% of school leavers left with one pass or more at SCQF Level 5 or better, compared to the national average of 88.9%.	Transport provision for students who reside outwith specified distances from primary and secondary schools is the responsibility of the relevant local authority. To be successful at attracting and retaining staff, students and research funding, further and higher education institutions need to be easily accessible and located close to highly skilled labour supplies. Ease of access to healthcare, higher education institutions and	

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[6] Attainment and Leavers Destinations Data 2024: https://www.gov.scot/publications/summary-statistics-attainment-initial-leaver-destinations-no-6-2024-edition/pages/5/

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	Primary and secondary schools are located throughout the SPT region to meet identified population needs where they occur. This means that the SPT region has schools within both urban and rural locations and of varying sizes and characteristics. Within the SPT region there are five higher education institutions; University of Glasgow, University of Strathclyde, Glasgow Caledonian University, University of the West of Scotland and the Royal Conservatoire of Scotland. The SPT region also hosts multiple further education institutions and campuses, including Ayrshire College, City of Glasgow College, Glasgow Clyde College, Glasgow Kelvin College, Glasgow School of Art, New College Lanarkshire, Scotland's Rural College (SRUC), South Lanarkshire College and West College Scotland.	community infrastructure varies throughout the SPT region due to its urban and rural settings.	
	Community Infrastructure: Within the SPT region, public services and community facilities are available throughout each of the local authorities. The SPT region, as previously noted, encompasses urban and rural areas which require suitable transport networks to accommodate the local population. Healthcare provision is widespread throughout the SPT region with several hospitals and doctor's surgeries within both urban and rural areas of the region.	Whilst the SPT region has a qualified labour force and a relatively balanced economic base, there are some areas with particularly high unemployment and other areas with a spatial mismatch between the available local labour force and available employment.	
	Employment and Economic Activity:		

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	Across the SPT region, 71.9% of the working age (16-64) population are in employment.[7] This is 1.2% below the figure for Scotland as a whole. The rate of those over 16 who are self-employed in the SPT region (6.6%) is also less than the national rate (7.5%). This suggests a higher level of unemployment in the region, which is reinforced by the higher benefit claimant count rate[8] (4.4%) than the national average (3.9%)[9]. Over three-quarters (75.5%) of the working age population of the SPT region are economically active[10]. Consistent with employment trends, this rate is below the national average (76.9%). The Clydeplan SDP (2017) identifies 22 strategic economic investment locations (SEILS). The SEILS have been selected as priority locations to promote the Scottish Government's key economic sectors and Scottish Enterprise's locational priorities. Given its scale and importance to the city region, Glasgow City Centre is the primary SEIL in the network in relation to its dominant roles and functions. Indicative Regional Spatial Strategies (2020) were developed to inform the National Planning Framework 4. These identify growth areas in each of the following regions within the SPT area: Argyll & Bute, Ayrshire & Arran, Clydeplan/Glasgow City Region and Loch		

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[7] Annual Population Survey, 2021.

[8] Benefit claimant counts are often used as a proxy for unemployment rates. They have a tendency to underestimate the true rate due to non-claimants.

[9] Office of National Statistics, Claimant Count, December 2021

[10] Annual Population Survey, 2021.

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	Lomond & Trossachs NPA. The IRSS's set strategic outcomes, with targeted focus on carbon/climate change, people, work and place.		
	Inequality, Social Exclusion and Deprivation: The Scottish Index of Multiple Deprivation (SIMD) provides an overview of deprivation in Scotland. All the local authority areas have deciles ranked within the most deprived 5%. Glasgow City has the largest number of deciles ranked as the most deprived 5%. The SIMD is a relative measure of deprivation across small areas in Scotland. It looks at multiple deprivation based on employment, education, health, access to services, crime, and housing in addition to income. As a whole, the SPT region is disproportionately deprived, with 31%[11] of the region's population living within Scotland's 20% most deprived areas. However, there are considerable differences between the level of multiple deprivation found within local authorities in the SPT region. Data is not published on poverty at a subnational level on a regular basis. However, the End Child Poverty Campaign publishes annual estimates of the proportion of children living in poverty in individual local authorities. Based on this data, it is estimated that 25% of children within the SPT region live in	The SPT region is disproportionately deprived and, whilst there are geographical variations within the region, a large component of the resident population lives within Scotland's most deprived areas. Furthermore, the rate of child poverty within the SPT region is higher than for Scotland as whole, with total income poverty also likely to be higher. To deliver sustainable and inclusive economic growth within the SPT region there is a need to reduce child and total poverty levels, enhance economic prosperity for all and to tackle all aspects of multiple deprivation.	

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[11] Scottish Index of Multiple Deprivation 2020

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	poverty[12]. In comparison to surrounding local authorities, Glasgow has a higher proportion of children living in poverty, 33% compared to 16% of children in East Dunbartonshire and 14% in East Renfrewshire. As the child poverty rate for the SPT region is higher than the national rate of 23%, it can be assumed that the total poverty rate across the total resident population is also higher within the SPT region than across Scotland as a whole.		
Human Health Relevant SEA Objective: 1. Health *Improve the health of the resident and workplace population, including with respect to physical and mental health and wellbeing*	**Life expectancy:** Life expectancy at birth for the SPT region is 78 years old.[13] This is equivalent to the national life expectancy. Within the SPT region, life expectancy for both males and females was lowest in Glasgow City (73 years and 78 years respectively). Males in East Dunbartonshire can expect to live for 80 years, 7 years longer than in Glasgow City. Females in East Dunbartonshire can expect to live for 83 years, 5 years longer than in West Dunbartonshire.[14]	There are significant gaps in life expectancy between the most and least deprived deciles within the SPT region and between the region and Scotland as a whole. Measures should be put in place to ensure those living in more deprived areas have access to affordable public transport options.	The baseline data on human health indicates significant variations in health outcomes across the SPT region. Transport improvements can contribute to objectives to improve health through enhancing access to employment, services and specifically to health care facilities.
	Census Health Indicators: Of the local authorities in the SPT area, the highest proportion of residents reported themselves to be in very good health resided in East Renfrewshire (58.8%) and East Dunbartonshire (56.6%) (2011 Census)[15].	Overall, there is a need to improve all aspects of the health and wellbeing of the resident population of the SPT area including physical heath, mental health and social wellbeing.	

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[12] End Child Poverty, 2023

[13] National Records of Scotland, Life Expectancy in Scotland, 2020-22: https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/life-expectancy/life-expectancy-in-scotland/life-expectancy-in-scotland-2020-2022

[14] National Records of Scotland, Life Expectancy in Scotland, 2020-22: https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/life-expectancy/life-expectancy-in-scotland/life-expectancy-in-scotland-2020-2022

[15] 2011 Census: http://www.scotlandscensus.gov.uk/ods-web/standard-outputs.html

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	Conversely, the highest proportion of residents who reported themselves to be in bad health were in Glasgow City (6.4%) and West Dunbartonshire (6.1%).		
	Health Indicators: Self-assessed general health is also slightly below the national level, with approximately 71% of SPT residents reporting "good" or "very good" health, compared to 72% across Scotland[16]. The SPT region performs poorly relative to the rest of the country in the SIMD Health Domain. Over a third (33.5%)[17] of the SPT region is placed within the nationwide most deprived quintile. Of this quintile, the SPT region includes 68.9% of the affected data zones. Despite accounting for 41.2% 2867/69 of all data zones measured by the SIMD, the SPT region accounts for only 25.4% of the least health deprived quintile of data zones. Within the SPT region, approximately 67.7% of adults aged 16 and over were overweight in 2024, including approximately 31.3% who were obese[18]. In 2018, 19% of adults in Scotland reported being smokers; down from 28% in 2003[19].		
	Health Infrastructure:	Adequate health infrastructure must be located in accessible	

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[16] Scottish Health Survey Dashboard, 2018-2022: https://scotland.shinyapps.io/sg-scottish-health-survey/

[17] 962 of the 2867 Data Zones within the SPT region were in the most deprived 20% using SIMD 2020, which is the most up-to-date data at the time of writing.

[18] Obesity Action Scotland: https://www.obesityactionscotland.org/healthy-weight-data-info/healthy-weight-in-scotland/obesity-prevalence-in-scotlands-14-regional-health-boards/

[19] The Scottish Health Survey 2018: https://www.gov.scot/publications/scottish-health-survey-2018-volume-1-main-report/pages/31/

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	The NHS Scotland Health Boards which serve the SPT region are Ayrshire & Arran, Greater Glasgow & Clyde, Lanarkshire and Highland[20].The Helensburgh and Lomond area covered by the NHS Highland Health board shall be part of a future assessment. Hospital provision within each NHS Health Board area is as follows; ▪ Ayrshire & Arran – 13 ▪ Greater Glasgow & Clyde – 9 main hospital sites; 35 hospitals ▪ Lanarkshire – 12 At the national level, the latest available data indicates that there are approximately 8 GPs per 10,000 patients with a WTE (whole time equivalent) of 6 GPs per 10,000. For health boards within the SPT area this varies as follows[21]; ▪ Ayrshire & Arran – WTE per 10,000 of 6.3 GPs ▪ Greater Glasgow & Clyde – WTE per 10,000 of 5.9 GPs ▪ Lanarkshire – WTE per 10,000 of 4.9 GPs	locations to meet the needs of existing and future populations. A range of high quality physical and mental health facilities are required to address the changing health needs of the population with associated improvements to infrastructure.	
Soil Relevant SEA Objective:	**Geological and Ground Conditions:** The SPT region is made up of a mix of urban, peri-urban and rural landscapes therefore incorporating a variety of geological types resulting in varying ground conditions[22]. Soil	New transport infrastructure must be appropriately sited and designed to reflect the geological and soil characteristics and agricultural	Soils are a non-renewable resource of fundamental importance in supporting a range of habitats, economic activity and ecosystems services. Undeveloped soils and particularly

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[20] NHS Health Boards Map: https://hub.arcgis.com/datasets/govscot::nhs-health-boards-scotland/explore?location=56.030815%2C-2.774864%2C6.84

[21] ISD Scotland Primary Care Out of Hours Workforce Survey 2019: publichealthscotland.scot

[22] British Geological Survey Interactive Map: http://mapapps.bgs.ac.uk/geologyofbritain/home.html

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
7. Biodiversity, Geodiversity and Soils *Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by protecting green infrastructure*	types within the SPT region are mainly mineral gley, peat, mineral podzol or brown soil and vary between local geographies. The Glasgow City area, alongside suburbs and other regional urban settlements, is predominantly impermeable urban surfaces with sparse green space.	land classifications of the SPT region. The protection of peat soils and habitats which are an important carbon store is a high priority.	areas with peat content should be protected from development. NatureScot's Carbon and Peatland map 2016 would be used to identify the presence of peatland and other carbon-rich soils. The SEA should consider the potential for proposed transport to affect soils through permanent changes in land take for new infrastructure and by considering (where relevant) indirect impacts from emissions and the potential for pollution and run-off of water from new development areas.
	Agricultural Land Quality: Within the SPT region, agricultural land quality is predominantly classified within categories 4 to 5 (land capable of producing a narrow range of crops to land capable of use as improved grassland). Some land, particularly in lowland river corridor areas, is however designated between categories 2 to 3 (land capable of producing a wide range of crops to land capable of producing consistently high yields of crops)[23].		
Water Relevant SEA Objective: 8. Water, Flood Risk and Resilience *Conserve, protect and enhance water environments, water quality and water resources, whilst adapting to climate change and reducing flood risks*	**Waterbodies**: Main waterbodies within the SPT region include: Loch Lomond, River Clyde, Forth & Clyde Canal, multiple minor lochs, reservoirs, rivers and burns. The principal watercourse in the region is the River Clyde which runs through much of the area and forms a large estuarial water in its lower reaches before out falling to the Firth of Clyde.	Waterbodies across the SPT area vary in quality, ecological value and present condition. Maintenance and improvements to water-based transport networks within the SPT area such as ferry routes and Forth & Clyde Canal shall increase their efficiency.	The water environment of the region provides an important resource underpinning much of the environmental quality of the area and associated ecosystems services. Flood risk is an increasingly important issue for development management and climate change is projected to significantly change future conditions. The SEA should consider the potential for transport policies to impact on water resources and quality as a result of new development and indirect issues such as pollution. The influence of flood risk should also be strategically considered in assessing the effects of future
	Flood risks: SEPA Flood Risk Mapping indicates that the extent of the western coastline and mouth of the River Clyde of the SPT region is at high to medium risk of coastal flooding. Rivers, canals and other minor lochs within the SPT	Flood risk levels are varied within the SPT boundary due to the combined area of the 12 local authorities. New development and in particular infrastructure improvements	

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[23] Scotland's Soils: http://map.environment.gov.scot/Soil_maps/?layer=1

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	region have varied flood risk from low to high. In particular, the River Clyde and Loch Lomond are at a high risk of river flooding.	should ensure flood risk levels are not increased across the SPT area.	climate change on new proposals for transport infrastructure.
Air Quality and Noise Relevant SEA Objective: 5. Air Quality and Amenity *Tackle poor air quality, reduce concentrations of harmful atmospheric pollutants and minimise exposure to noise and vibration.*	**Air Quality Management Areas (AQMAs) and Poor Air Quality:** There are 14 AQMAs designated in the SPT region for transport-related air pollutants: Byres Road/Dumbarton Road, Chapelhall, Coatbridge, Glasgow City Centre, Johnstone High Street, Lanark, Motherwell, Croy, Paisley, Parkhead Cross, Renfrew Town Centre, Rutherglen, Whirlies Roundabout (East Kilbride), Kirkintilloch Road (Bishopbriggs)[24].	Continued monitoring of air quality within the SPT region will be required, in particular the main arterial roads in the centre of Glasgow. Additional traffic on these roads caused by new development should be monitored.	The presence of AQMAs in some of the region's town centres / road links indicates ongoing problems for air pollutant concentrations in some areas as a result of transport conditions. Similarly, high noise levels and problem areas identified as CNMAs indicate ongoing environmental quality issues primarily from road (and air) transport operations. The SEA should assess the potential for new transport policies to give rise to changes in environmental quality (local air quality and noise).
	Noise Levels: The Scottish Government has published Strategic Noise Action Plans (SNAP), as directed by the Environmental Noise (Scotland) Regulations 2006. The Glasgow SNAP identified a variety of Candidate Noise Management Areas (CNMAs) throughout Glasgow City, South Lanarkshire, North Lanarkshire and Renfrewshire. Generally, noise has decreased across the Glasgow Agglomerate with localized increases with the completion of the M74 extension in 2011[25]. Within the SPT area, the M77, M74 and M8 have been recorded as exceeding 80dB along multiple points (at roadside). While there is no noise data recorded for Glasgow Prestwick Airport, noise generated by Glasgow Airport	Continued monitoring of noise levels will be required. It must be ensured that infrastructure improvements achieve compliance with relevant environmental noise regulations.	

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[24] Air Quality in Scotland, Air Quality Management Areas: https://www.scottishairquality.scot/laqm/aqma#!/la/467

[25] Scottish Government, Glasgow Agglomeration: Noise Action Plan: https://www.gov.scot/publications/glasgow-agglomeration-noise-action-plan/pages/5/ (see Appendix 1)

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	ranges from <55dB to >80dB and has been recorded from East Dunbartonshire to Renfrewshire Council areas[26]. Throughout Ayrshire, noise levels are mainly <55dB except road corridors which range from >55dB to >80dB. Generally, Inverclyde and Helensburgh/Lomond rarely exceed 60dB.		
Climatic Change Relevant SEA Objective: 6. Climate Change Mitigation *Decarbonise the transport sector and support wider efforts to mitigate climate change* 8. Water, Flood Risk and Resilience *Conserve, protect and enhance water environments, water quality and water resources, whilst adapting to climate change and reducing flood risks*	**Greenhouse Gas Emissions:** Greenhouse Gas (GHG) emissions vary between local authorities across the SPT region, with Glasgow City having amongst the highest emissions in the SPT region[27]. Low carbon energy generation varies between local authorities within the SPT region[28]. South Lanarkshire has the highest number of low carbon energy installations in the SPT region with 8,206 installations as of 2022. However, this can be improved through further generation of future renewable capacity throughout the SPT region.	Measures must be put in place to continually monitor and mitigate greenhouse gas emissions in the SPT region in relation to increased traffic arising from projected population increases and works to transport infrastructure.	Transport in the SPT region is a significant contributor to greenhouse gas emissions and a sector where significant reductions have been difficult to achieve. National targets for climate mitigation (including Net Zero by 2045) require concerted action to reduce emissions, and in parallel increasing efforts and investment is needed for climate adaptation of key infrastructure. The SEA should include an assessment of the likely greenhouse gas emissions of transport policies. Climate resilience and adaptation have also been taken into account in the appraisals of policies with respect to SEA Objective 8.
	Climate Change Impacts: The UK Climate Change Risk Assessment (2022) projects that climate change will lead to an increase in the severity and frequency of severe weather, sea level rise, flooding and climate events including higher precipitation events. This could adversely impact on the	Predicted impacts from climate change up to 2050 will place significant strain on infrastructure and available resources across the UK, including within the SPT region.	

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[26] Scotland's Noise: https://noise.environment.gov.scot/noise-map.html

[27] Department for Business, Energy and Industrial Strategy (2018). Emissions of Carbon Dioxide for Local Authority Areas: https://data.gov.uk/dataset/723c243d-2f1a-4d27-8b61-cdb93e5b10ff/emissions-of-carbon-dioxide-for-local-authority-areas

[28] Department for Business, Energy & Industrial Strategy (2017). Regional Renewable Statistics. Available online at: https://www.gov.uk/government/statistics/regional-renewable-statistics

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	functioning and performance of transport infrastructure and the overall transport network. Each of the constituent local authorities have their own Climate targets and supplementary action plans. Annual reports, including emissions reports can be found on constituent authority websites. In addition to this, the Clydeplan SDP (2017) recognises the need to address risks associated with the impacts of climate change, in particular by; • increasing the resilience of infrastructure networks to sustain and enhance the benefits and services provided; • sustaining and enhancing the benefits, goods and services that the natural environment provides; and, • increasing the resilience of the existing built environment and ensure that new development is climate resilient. Further key sources of information on climate resilience and adaptation are included in the work of Climate Ready Clyde and the Scottish Government's Climate Change Adaptation Programme (2019-2024).		
	Atmospheric Conditions: As with the rest of the UK, transport provision within the SPT region can be subject to weather related travel issues such as extreme heat and cold making services subject to delay and/or cancellations.	Poor weather conditions causing delays/or cancellations to public transport in addition to service provision issues can contribute to loss of productivity and economic output for the SPT	

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SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
		region. Ferry services are particularly vulnerable to weather-related disruption.	
Material Assets Relevant SEA Objective: 3. Material Assets *Manage, maintain and where possible improve the efficient and effective use of natural resources, land and infrastructure to meet identified needs*	**Land Use:** The city of Glasgow is positioned at the top of the commercial and retail hierarchy within the SPT region and is the major regional centre. Greater Glasgow is the largest settlement in Scotland with an estimated population of 1,847,200, representing 34% of Scotland's total population. The settlement of Greater Glasgow is distributed across seven local authority areas[29]. The Clydeplan SDP (2017), the IRSSs and LDPs identify a network of strategic centres across the SPT area, whilst other smaller town centres also play an important role as focus points for public services, economic activities, transport and community activity.	There is an ongoing need to regenerate communities within the SPT area which have high levels of multiple deprivation. There is also a need to provide suitable land uses to meet identified needs, including increased housing and employment provision, whilst capitalising on the SPTs strengths and protecting sensitive land uses such as agriculture.	The material assets and infrastructure of the SPT are diverse and complex and of substantial importance to the Scottish economy and to underpinning the efficient operation of transport services. Within the scope of an SEA it is not appropriate to consider all of these issues in depth. SEA Objective 3 focuses on issues of land and resource efficiency, including consideration of increasingly important aspects such as adoption of circular economy approaches to materials management and the value chain and to minimising the adverse impacts of resource extraction and processing on the natural environment. It has also considered effects of land take for new transport measures which should, wherever possible, seek to re-use brownfield land.
	Transport infrastructure: *Road Network* Motorways within the SPT region include; M8, M77 and M74. The main arterial roads are the; A77, A71, A78, A737, A76, A725 and A82. These main core roads connect local areas of population and major settlements, adjoining B-road networks and all other minor roads within the SPT region. Of the five local authorities with the highest traffic volumes in Scotland, two were found to be within the SPT area: Glasgow and North	At present, parts of the motorway network in the SPT area experience congestion especially at peak times (M8, M77 and M74). Both Glasgow and North Lanarkshire are among the 5 local authorities which have the highest traffic volumes in Scotland. Improvements to transport infrastructure / public transport provision within these areas has the potential to reduce journey	

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[29] Population Estimates for Settlements and Localities (Mid 2020): https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/settlements-and-localities/mid-2020. The Glasgow metropolitan area is designated as the Glasgow City Region, comprising the local authorities East Dunbartonshire, East Renfrewshire, Glasgow City, Inverclyde, North Lanarkshire, Renfrewshire, South Lanarkshire, and West Dunbartonshire.

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	Lanarkshire. Journeys delayed by congestion in Scotland were 11% in 2022, down from 14.3% in 2007[30]. Many of the motorways and arterial roads in the SPT area are subject to congestion at peak times. *Rail Network* There are approximately 189 railway stations serving the SPT area. The five stations with the highest entries/exits for 2019/20 within the SPT area are[31]; - Glasgow Central (32,465,202) - Glasgow Queen Street (16,685,760) - Paisley Gilmour Street (3,903,776) - Partick (2,935,104) - Charing Cross (Glasgow) (2,149,716) Of the top 5 stations in Scotland[32], the SPT area includes 3: Glasgow Central, Glasgow Queen Street and Paisley Gilmour Street. In 2020-21, 3.8 million tonnes of freight was lifted in Scotland by rail, 12% less than the previous year. The main railheads in the SPT region are Air BP, Coatbridge, Crowbandsgate, Dalzell, Elderslie, Greenburn, Hillington, Irvine, Mossend Eurocentral, Port of Ayr, Port of Hunterston, Riccarton, Shieldmuir, Uddingston (Traffic Scotland)[33].	times and increase efficiency of the transport network where possible in the SPT area. Improvements to infrastructure in rural areas can bring a step-change in public transport connectivity which should catalyse economic growth and improve access to employment and public services within the SPT area. Promotion of active travel initiatives within the SPT area can help to reduce congestion while providing improvements to physical and mental health.	

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[30] Scottish Transport Statistics: https://www.transport.gov.scot/publication/scottish-transport-statistics-2023/chapter-5-road-traffic/

[31] ORR: http://orr.gov.uk/statistics/published-stats/station-usage-estimates

[32] Top 5 stations in Scotland: http://orr.gov.uk/__data/assets/pdf_file/0019/26137/station-usage-2016-17-top-5-stations-scotland.pdf

[33] Traffic Scotland: https://trafficscotland.org/freight/railheads/index.aspx

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	There are several railway stations throughout the SPT region, with the two main regional stations in Glasgow city being Glasgow Central Station and Glasgow Queen Street Station, which provide rail networks north and south of the region. Originating from these stations are the several regional railway lines connecting urban and rural settlements across the region, including the Ayrshire Coastal Line and North Clyde Line. *Public Transport* The SPT region is served by multiple bus services connecting urban and rural settlements. Services are predominantly run and timetabled by private operators, although SPT also supports some of bus routes where there is an assessed need for provision, but patronage levels make it unviable for private sector operators to operate without subsidy. Within Glasgow city, the subway offers connectivity between multiple city centre routes for commuting or general travel. The subway is presently undergoing a substantial modernisation programme involving the delivery of upgraded stations, track improvements and new rolling stock[34]. *Aviation* Glasgow Airport (Renfrewshire) and Glasgow Prestwick Airport (Ayrshire) are located within the SPT region, allowing access to both National and International destinations for passengers and freight. Glasgow Airport		

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[34] SPT: https://www.spt.co.uk/about-us/what-we-are-doing/modernisation

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	served c. 6.5 million passengers in 2022[35]. Currently, Drumchapel, Clydebank, Bearsden, Foxbar, Faifley and Linwood sit directly underneath the approach paths of Glasgow Airport. Glasgow Prestwick Airport served c. 639,000 passengers in 2019, down from 1.7 million in 2010. In comparison, Glasgow Airport served c. 6.5 million in 2010, which is roughly the same as the 2022 figure[36]. In terms of freight, in 2019 Glasgow Airport carried 12,822 tonnes (21.7% of Scottish total) and Glasgow Prestwick carried 13,003 tonnes (22.1% of Scottish total)[36]. *Maritime* The main passenger ports within the SPT region are located at Greenock, Ardrossan Brodick and Troon, providing a variety of services operated by CalMac and other ferry services. The CalMac routes which operate within the SPT area are between: • Ardrossan to Brodick and Campbelltown; • Lochranza to Claonaig; • Largs to Cumbrae; • Wemyss Bay to Rothesay. Ferry services from Ardrossan and Wemyss Bay have a direct rail to ferry link. The main freight ports in the region are Ayr Harbour and the Clydeport network, which includes the King George V Dock. In 2019,		

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[35] Transport Scotland, Scottish Transport Statistics 2023: https https://www.transport.gov.scot/publication/scottish-transport-statistics-2023/chapter-8-air-transport/

[36] Transport, Scottish Transport Statistics 2021: https://www.transport.gov.scot/publication/scottish-transport-statistics-2021/chapter-08-air-transport/

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	the total foreign and domestic traffic at Ayr Port was 339,000 tonnes, which equated to under 1% of Scotland's overall water freight traffic. In comparison, the Clyde Ports transported 8.8 million tonnes in 2019, which was 13% of the Scottish total.[37] *Active Travel* There are a variety of walking and cycling active travel routes across the SPT region, including Core Paths designated by each constituent local authority, public rights of way and nationally designate long-distance paths (e.g. John Muir Way Great Trail and West Highland Way). The National Cycle Network also traverses through urban and rural parts of the SPT region to provide cycle connectivity. In 2020, 13% of those travelling to work in Scotland walked and 2% cycled[38]. Since 2000, the figure for adults walking or cycling to work has fluctuated between 13 to 16%, with the latest figure (2018) being 15%[39]. Since 2000, the percentage of school aged children travelling to school by walking or cycling has fluctuated between 50% and 56, with the latest figure (2017) being 52%[40].		
Cultural Heritage	**Table A.1** above identifies the internationally and nationally designated heritage assets located within the SPT region. The area is	The SPT region hosts a range of designated heritage assets, each of which need to be	The SPT region's cultural heritage is significant and is an irreplaceable asset. The SEA should include an assessment of proposed transport

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[37] Scottish Transport Statistics 2021: https://www.transport.gov.scot/publication/scottish-transport-statistics-2021/chapter-09-water-transport/

[38] Scottish Household Survey: https://www.transport.gov.scot/media/50980/transport-and-travel-in-scotland-2020-results-from-the-scottish-household-survey-pdf-version.pdf

[39] Scottish Government, Adult Active Travel to Work: https://www.gov.scot/publications/obesity-indicators/pages/16/

[40] Scottish Government, Child Active Travel to School: https://www.gov.scot/publications/obesity-indicators/pages/17/

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
Relevant SEA Objective: 9. Cultural Heritage *Conserve, protect and enhance the historic environment and cultural assets*	also characterised by a range of non-designated heritage assets of local and regional importance.	appropriately protected from effects on their integrity and setting from development of new or improved transport infrastructure.	policies and the potential impacts on heritage assets. This should acknowledge that impacts from new measures (particularly those involving infrastructure development) have potential for other cultural heritage impacts which would need to be considered in more detail in future implementation plans.
Landscape Relevant SEA Objective: 10. Landscape *Protect and enhance the landscape character, townscape character and visual amenity*	**Designated areas: Table A.1** above identifies the internationally and nationally designated heritage assets located within the SPT region. **Landscape fabric, character and capacity:** Outside of the main urban and peri-urban settlements, the SPT area comprises a mixture of remote rural land encompassing the Scottish Lowlands with associated lochs, reservoirs, rivers, valleys and glens. A key part of the regional geography is the Loch Lomond and the Trossachs National Park and Isle of Arran, two recognized natural environment tourist attractions and areas with significant scenic (upland) importance. In addition, the SPT region has a vast coastline extending along the west of Scotland. **Visual amenity:** The natural landscape and historic heritage of the SPT region is maintained both throughout urban and rural areas (e.g. Loch Lomond and the Trossachs National Park, country parks and regional parks). However, visual amenity is adversely impacted in some parts of the SPT region by unsympathetic developments and land uses which are inappropriately managed. This can include the visual impact of transport infrastructure particularly elevated	There is a need to provide appropriate protection for designated landscapes, important landscape features, and sensitive landscape character areas within the SPT region. There is also a need to protect key views and safeguard visual amenity. The range of sensitivities and capacities of landscapes across the SPT region to accommodate new transport infrastructure should be taken account of within the emerging SRBS.	The diverse topography, climate, soils and habitats of west Scotland have given rise to a varied and attractive range of landscape character types. Extensive urban development, particularly in large towns and cities along the River Clyde provide a contrasting townscape of varied quality. The SEA should assess the high level potential for changes to landscape and to visual receptors from the proposed policies. This should take account of particular landscape sensitivities conferred by key designations such as National Parks and NSAs.

SEA Topic	Baseline Key Characteristics	Existing Objectives, Issues and Problems	Key Issues for SEA
	sections of major roads close to residential areas.		
	Green Belt Corridors: The predominant green belt corridor is the Glasgow and the Clyde Valley Green Network which traverses through the urban environment of Glasgow and the surrounding local authorities. In addition to this corridor, across local authorities such as Ayrshire there are large rural areas of undeveloped and agricultural land. The Loch Lomond and the Trossachs National Park is a key site in the north of the SPT region, providing access to the natural environment.		
	Dark Skies: Galloway Forest Park is situated on the border of the SPT area. On 16th November 2009 in the International Year of Astronomy, the Forestry Commission Scotland announced the establishment of part of Galloway Forest Park as the first Dark Sky Park in the UK. Galloway is special due to its remoteness. On a clear night, over 7000 stars and planets are visible with the naked eye, and the bright band of the Milky Way is usually easy to see arching across the sky.		

Appendix B   Review of Plans and Programmes

B.1   Introduction

B.1.1   This Appendix supports Chapter 3 of the SEA Scoping Report by setting out a review of relevant qualifying plans and programmes (including legislation and strategies) of relevance to the SRBS. The main purpose of this review is to identify relevant environmental protection objectives and policy requirements within the identified policy documents which have informed the emerging SRBS and this associated SEA.

B.1.2   The findings of the review are presented in **Table B.1.**

Table B.1: Review of Policy Documents of Relevance

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
International			
Population (including relevant socio-economic issues)	United Nations (2016) Habitat III (Quinto), United Nations Economic Commission for Europe (1998) Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (The Aarhus Convention)	These documents provide an international framework for promoting sustainable development within all decision making. In particular: ▪ UN Habitat III Directive focuses on sustainable urban development across all communities around the world at a localised level in the aim of achieving collective sustainability; and, ▪ The Aarhus Convention establishes the right of individuals with regard to the environment including the right to receive environmental data held by public authorities, the right to participate in environmental decision making, and the right to review procedures to challenge public decisions that have been made without	In line with the identified documents, the SRBS should set out policies and proposals which further the delivery of sustainable development across the region (within the context of the SRBS's influence and objectives). Additionally, the development of the SRBS should be objective, transparent, evidenced-based and conducted fairly.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		respecting the aforementioned rights or environmental law in general.	
Human Health	World Health Organization (2004) Children's Environment and Health Action Plan for Europe	This document provides an international framework which recognises the importance of the protection and improvement of human health.	In line with the identified document, the SRBS should seek to reduce the negative impacts of transport on human health, including the impact of pollution and poor air quality (within the context of the SRBS's influence and objectives).
Biodiversity, Flora & Fauna	The Ramsar Conventions on Wetlands (1971), EU Convention on the Agreement on the Conservation of African – Eurasian Migratory Waterbirds (2006) (The Bonn Convention), United Nations (1992) The Rio Convention on Biodiversity, Strategic Plan for Biodiversity 2011 – 2020 + Aichi Biodiversity targets	These documents provide an international framework to protect sites designated at the international level for reasons of biodiversity conservation and to protect important species from harm. In particular: ▪ The Ramsar Convention on Wetlands provides the framework for national action and international co-operation for the conservation and wise use of wetlands and their resources. ▪ The Convention on Biological Diversity requires the development of national biodiversity strategies and action plans, and to integrate these into broader	In line with the identified documents, the SRBS should take account of policies and proposals which protect and, where appropriate, enhance sites designated at the international level for reasons of biodiversity conservation or ecological importance (within the context of the SRBS's influence and objectives). The key sites of concern are highlighted in **Table A:1**.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		national plans for environment and development including forestry, agriculture, fisheries, energy, transportation and urban planning. ▪ The Strategic Plan for Biodiversity is a 10-year plan to reverse biodiversity loss and provides an international framework for biodiversity comprised of a vision, mission statement, strategic goals and the 20 global targets known as the Aichi targets. The Plan supports the establishment of national strategies and targets to implement the Convention.	
Soil & Land	N/A	N/A	N/A
Water	N/A	N/A	N/A
Air & Noise	World Health Organization (2018) Environmental Noise Guidelines, WHO (2021) Global Air Quality Guidelines, United Nations (1979) Geneva Convention on Long Range Transboundary Air Pollution	The WHO Environmental Noise Guidelines and Air Quality Guidelines identify the main sources ofcommunity/environmental noise and atmospheric pollution (including from transport systems), population exposure levels, health impacts of exposure, recommended	In line with the identified documents, the SRBS should set out polices and proposals to tackle poor air quality for all communities and seek to reduce noise levels and amenity impacts from transport (within the context of the SRBS's influence and objectives). Noise and air quality impacts form key issues for assessment of transport interventions in the SEA.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		noise and air quality limits, management strategies and priorities for noise reduction and air quality improvement.	
Climatic Factors	The United Nations Framework Convention on Climate Change (UNFCCC) (1992), Kyoto Protocol to the UN Convention on Climate Change (2005), United Nations (2009) The Copenhagen Accord, United Nations (2010) Cancun Adaptation Framework, United Nations (2016) Paris Agreement.	These documents provide an international framework which identifies the need for climate change mitigation and adaptation action. In particular: ▪ The UNFCCC is the forum for international action on climate change with the aim of stabilising GHG concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. The Convention focuses on mitigating (reducing) GHG emissions, adapting to climate change, reporting of national emissions, and financing of climate action in developing countries. ▪ The Kyoto Protocol established legal frameworks for the GHG emission reduction targets, with	The transport sector is a significant source of GHG emissions. In line with the identified documents, the SRBS must, directly or indirectly, contribute towards limiting global warming to well below 2 degrees Celsius compared to pre-industrial levels, through polices and projects that reduce the use of diesel and petrol vehicles, promote more sustainable lower carbon modes, promote walking and cycling, reduce the need to travel and promote more sustainable development. The SEA has taken account of these issues and Scotland's own legislated Net Zero targets in assessing the likely impacts on climate of transport packages. Additionally, the SRBS must, directly or indirectly, take account of, and, wherever possible, integrate with adaptation programmes and seek to reduce adverse impacts of climate change, including flooding and temperature stresses on transport systems and to promote resilience of transport systems and networks.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		the 2nd commitment period established for 2013 - 2020. The Paris Agreement aims to hold global average temperature increases to well below 2 degrees above pre-industrial levels and to pursue efforts to limit warming to 1.5 degrees Celsius. ▪ The Cancun Adaptation Framework recognises that adaptation must be given the same priority as mitigation, including measures to reduce vulnerability and increase resilience.	
Material Assets	N/A	N/A	N/A
Cultural Heritage	UNESCO (1972) Convention Concerning the Protection of the World Cultural and Natural Heritage	The Convention establishes state duties in relation to identifying, protecting and preserving natural or cultural sites comprising the World Heritage List.	In line with the identified document, the SRBS should avoid adverse impacts on cultural heritage and the historic environment (within the context of the SRBS's influence and objectives). Of note, within the study area are the Antonine Wall World Heritage Site and New Lanark World Heritage site.
Landscape	N/A	N/A	N/A
Interrelated Effects	Johannesburg Declaration on Sustainable Development, Communication COM (2005) 666: Taking Sustainable use of resources forward	Commits the sustainable use of resources and promotes sustainable development.	In line with the identified document, the SRBS should take account of policies and proposals which support the use of sustainable resources and delivery of sustainable development (within the context of the SRBS's influence and objectives).
European – all legislative and policy frameworks are informed by relevant higher level international frameworks			

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
Population (including relevant socioeconomic issues)	European Commission (2003) Public Sector Information Directive (PSI) 2003/98/EC, European Commission (2013) Towards Social Investment for Growth and Cohesion 2014-2020, European Commission (2010) Europe 2020: A strategy for smart, sustainable and inclusive growth.	These documents provide a European framework to further social cohesion, freedom of information, economic growth and inclusion.	In line with the identified documents, the SRBS should set out policies and proposals to meet population needs, facilitate economic growth, enhance community cohesion, address inequalities in society and tackle social exclusion (within the context of the SRBS's influence and objectives). It must also be developed in a transparent manner.
Human Health	European Commission (2007) Together for Health - A Strategic Approach for the EU 2008-2013, European Mental Health Strategy, European Framework for Action on Mental Health and Wellbeing (2013), WHO (2020) Health 2020 (European health policy framework)	These documents provide a European framework to promote a strategic vision for improving health standards. In particular: ▪ The European Mental Health Strategy (WHO Europe) sets out 7 key objectives for improving mental health including the crosscutting objective that physical and mental health are interdependent.	In line with the identified documents, the SRBS should take account of policies and proposals for the improvement of health and wellbeing, including mental health (within the context of the SRBS's influence and objectives). The SEA includes a specific SEA Objective to consider the health impacts of key elements of the SRBS.
Biodiversity, Flora & Fauna	Council of Europe (1981) Convention on the Conservation of European Wildlife and Natural Habitats - The Bern Convention, EU Biodiversity Strategy - Our Life Insurance, Our Nature Capital: An EU Biodiversity Strategy (2011), European Commission (2008) Environmental Quality Standards Directive 2008/105/EC, EU Birds Directive (Directive 009/147/EC/ on the conservation of wild birds), EU Habitats Directive (EU Directive 92/43/EEC on the conservation of	These documents provide a European framework to protect sites designated at the European level for reasons of biodiversity conservation and important habitats and species from harm. In particular: ▪ The Birds and Habitats Directives, amongst other measures, afford protection to certain habitats and animal	In line with the identified documents, the SRBS must, directly or indirectly, support the conservation of protected species and habitats, promote biodiversity and seek to reduce harmful impacts of transport systems and development on species, habitats and biodiversity including habitat loss or fragmentation, severance, pollution, and climate change. The SEA includes a specific appraisal objective on Biodiversity, Geodiversity and Soil.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
	natural habitats and of wild fauna and flora (As amended by 97/62/EC), EU Species Action Plans, EU 2030 Biodiversity Strategy, EU Green Infrastructure Strategy	and plant species targeted for conservation. The Birds Directive establishes Special Protection Areas (SPAs) to protect wild bird species and habitats. The Habitats Directive aims to maintain biodiversity and establishes the European network of protected areas known as Natura 2000. The Habitats Directive is transposed into law in Scotland by the 'Conservation (Natural Habitats, &c.) Regulations 1994', as amended. ▪ The 2030 EU Biodiversity Strategy aims sets out a series of key commitments to be met by 2030 to support nature recovery and reverse the degradation of ecosystems. It forms a core part of the European Green Deal.	
Soil & Land	European Thematic Strategy on Soil Protection European Commission (2006), Environmental Liability Directive 2004/35/EC	These documents provide a European framework to promote the sustainable use of soil resources, soil restoration and the	In line with the identified document, the SRBS should take note of the sustainable and efficient use of soil and land resources (within the context of the SRBS's influence and objectives). A key issue may be the threat to soil quality arising from transport routes and systems.

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SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		prevention of land degradation. The Thematic Strategy for Soil Protection sets a framework for Member States to take preventative measures to ensure sustainable soil use, identify soil problems and develop and maintain an inventory of contaminated sites, and develop and implement actions to improve and protect soils and remediate contaminated sites.	The SEA includes a specific appraisal objective on Biodiversity, Geodiversity and Soil.
Water	**Flood Risks** EU Floods Directive (Directive 2007/60/EC) EU Water Framework Directive (Directive 2000/60/EC), European Commission Groundwater Directive 2006/118/EC, European Commission (1991) The Urban Waste Water Directive 91/271/EEC **Waterbodies** European Commission: The Drinking Water Directive 98/83/EC, European Commission: The Bathing Waters Directive 2006/7/EC, European Commission Marine Strategy Framework Directive 2008/56/EC	These documents provide a European framework which seeks to protect the quality of the water environment, including through ensuring safe levels for bathing and drinking water and by promoting sustainable urban drainage. In particular: ▪ The Water Framework Directive aims to protect, sustain and improve the water environment through achievement of standards and objectives for inland surface waters, transitional waters, coastal waters and	In line with the identified documents, it will be important to minimise flood risks and promote sustainable flood risk management. Across the region there are several water bodies that may need to be considered, most notably the River Clyde. The SEA takes account of water resources (quality and quantity) and future changes in climate affecting flood risk (within the context of the SRBS's influence and objectives).

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		groundwater, remediating and reversing any increasing trends in groundwater pollutants and continuous and progressive reduction of groundwater pollution; and, ▪ The Floods Directive sets requirements for preliminary Flood Risk Assessments to be drawn up by Member States and for Flood Risk Management Plans to be produced in order to assess, communicate and manage flood risks.	
Air & Noise	European Parliament 2008/50/EC Ambient Air Quality Directive and Air Quality Framework Fourth Daughter Directive 2004/107/EC, European Parliament 2002/49/EC Environmental Noise Directive, European Commission (2005) EU Thematic Strategy on Air Quality	The EU Noise directive underpins overarching environmental policies such as monitoring noise pollution by drawing up strategic noise maps, holding consultations over noise exposure and addressing local issues through action plans. These EU Directives and associated documents provide European frameworks to protect and enhance air quality and to reduce noise pollution. Overall, these	In line with the identified documents, the SRBS must, directly or indirectly, recognise transport as a significant source of air pollution and environmental noise and support the policy framework to reduce the adverse impacts of both in accordance with European legislation. Of particular concern will be Air Quality Management Areas (AQMAs) which have already been identified as areas with poor air quality. The assessment and reporting of air pollution and environmental noise levels is also important. The SEA incorporates an objective addressing air quality and noise and has included a strategic level assessment of these issues.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		EU Directives set out mandatory monitoring, compliance and reporting requirements for air quality, as well as priority areas to reduce noise pollution. In particular: ■ The Ambient Air Quality Directive sets legally binding limits for concentrations in ambient (outdoor) air of major air pollutants that are known to have a significant impact on human health including particulate matter (PM10 and PM2.5) and nitrogen dioxide (NO2). The Ambient Air Quality Directive, along with the Directive 2004/107/EC, provides the current framework for the control of ambient concentrations of air pollution in the EU including aims to control emissions from mobile sources, improve fuel quality and promote and integrate environmental protection	

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		requirements into the transport and energy sector. Member states should assess and report on air pollution levels, prepare and implement action plans where pollution levels exceed limits or targets, and inform the population about air quality issues. ▪ The Environmental Noise Directive is the main EU instrument to identify noise pollution levels and to trigger the necessary actions both at EU level and member state. The Directive sets out three areas for action including the determination and quantification of exposure to environmental noise through Noise Mapping exercises, dissemination of information on environmental noise exposure to the population and preventing and reducing environmental noise	

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		where necessary and preserving noise quality where it is good through preparation and implementation of Action Plans. Additional EU regulations apply to specific sources of noise including road traffic, aircraft and railway.	
Climatic Factors	**Greenhouse Gas Emissions** EU (2009) Renewable Energy Directive (2009/28/EC), EU (2009) European Commission (2001), European Commission (2010) Energy 2020 - A Strategy for Competitive, Sustainable and Secure Energy, European Commission (2011) A Roadmap for Moving to a Competitive Low Carbon Economy in 2050, European Commission (2012) Energy Efficiency Directive (2012/27/EU), European Commission (2014) 2030 Climate and Energy Framework, EC 2030 Climate Target Plan **Climate Change Impacts** European Council (2013) Seventh EU Environmental Action Plan (EAP) (2013-2020), European Commission (2013) Strategy on Adaptation to Climate Change	These documents provide a European framework to respond to the global challenge of climate change through both mitigation and adaptation measures. The Roadmap suggests that EU emissions should be cut by 80% by 2050 (below 1990) including 40% reduction milestone by 2030, all sectors need to contribute, and that transition is affordable and feasible. The 2030 Climate Target Plan increases the target to reduce GHGs by 55% by 2030. The transport sector could reduce emissions by 60% by 2050 through more efficient vehicles, transition	In line with the identified documents, the SRBS should set out policies and proposals to decarbonise the transport sector and more generally, help to mitigate climate change, as well as policies and proposals which increase resilience to adverse weather and the effects of climate change (within the context of the SRBS's influence and objectives). This should include transitioning to more efficient vehicles to cut greenhouse gas emissions and improve air quality across the region. Of particular relevance, given the expected period of the emerging SRBS, is the 2030 Climate and Energy Framework. The SRBS should aim to achieve reductions in GHGs (within the context of the SRBS's influence and objectives) which support national legislated targets for emissions reductions in Scotland.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		to electric vehicles and use of biofuels.	
Material Assets	**Infrastructure** European Commission (2011) Roadmap to a Single European Transport Area	This document promotes measures to create a competitive and resource efficient transport system across Europe.	In line with the identified document, the SRBS should align with the Roadmap, creating a competitive and resource efficient transport system (within the context of the SRBS's influence and objectives).
Cultural Heritage	**Historic Assets** European Convention on the Protection of Archaeological Heritage (1992) Convention for the Protection of the Architectural Heritage of Europe (Granada Convention)	The key purposes of this Conventions are to protect and enhance architectural and archaeological heritage, including through improving pan-European co-operation in knowledge exchange, policy development and guidance.	In line with the identified document, the SRBS (and SEA) should seek to preserve, protect and, where appropriate, enhance cultural heritage assets and their setting (within the context of the SRBS's influence and objectives).
Landscape	European Landscape Convention (The Florence Convention, 2000)	This Convention provides a European framework to define and protect important landscapes which contribute to cultural and social heritage and quality of life. It promotes the protection, management and planning of all landscapes, including natural, managed, urban and peri-urban areas.	In line with the identified document, the SRBS should set out policies and proposals to protect and enhance landscape character and visual amenity within the region (within the context of the SRBS's influence and objectives).
Interrelated Effects	European Spatial Development Perspective, EU Strategic Environmental Assessment (SEA) Directive (Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment), EU Environmental Action Programme: Living Well,	These documents provide an overarching European framework to support the delivery of sustainable development, including through spatial and transport planning. In particular:	All emerging policy and proposals should be assessed to understand the likely environmental impacts (within the context of the SRBS's influence and objectives). Additionally, the EIA Directive should be taken account of within the emerging SRBS and its SEA.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
	Within the Limits of Our Planet, European Sustainable Development Strategy 2001 (Renewed 2006, Reviewed 2009), European Commission (1999) European Spatial Development Perspective (ESDP) (97/150/EC), European Commission (2009) Review of the EU Sustainable Development Strategy, European Union (2014) Environmental Impact Assessment Directive 2014/52/EU amending Directive 2011/92/EU	▪ The SEA Directive requires all Member States to assess the likely significant environmental effects of relevant and qualifying emerging plans and programmes prior to their adoption. ▪ The revised EIA Directive requires all Member States to carry out EIAs of certain projects likely to have a significant impact on the environment.	
UK – legislative and policy frameworks are informed by relevant higher level of European and international frameworks			
Population (including relevant socioeconomic issues)	The Enterprise and Regulatory Reform Act (2013), Equality Act (2010)	These documents provide a framework at the UK level to support economic growth and to tackle inequalities in society. The Equality Act 2010 protects people from discrimination in the work environment and wider society. The Act covers most land based public transport operations in relation to rules on services to the public and specific provisions on making taxis,	In line with the identified documents, the SRBS should set out policies and proposals to facilitate economic growth (within the context of the SRBS's influence and objectives), in particular the growth of key economic sectors, and to tackle inequality.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		public service vehicles and train carriages physically accessible.	
Human Health	Health Effects of Climate Change in the UK 2008 - An update of the Department of Health Report 2001/2002, Health Protection Agency (2009) Health Strategy for the United Kingdom 2, Health and Safety Executive (2009) The Health and Safety of Great Britain: Be Part of the Solution, Sustainable Development Commission (2010) Sustainable Development: The Key to Tackling Health Inequalities.	These documents provide a framework at the UK level to identify the key determinants of health, reduce health inequalities and improve health outcomes.	In line with the identified documents, the SRBS should recognise the role of the transport sector on human health and set out policies and proposals to minimise negative impacts (within the context of the SRBS's influence and objectives).

This includes promoting sustainable development and recognising the role of transport in improving human health through facilitating access to healthcare facilities and services and seeking to improve accessibility, especially for more vulnerable and at-risk populations. The SEA includes a specific objective to provide a framework for assessment of health impacts of the SRBS. |
| Biodiversity, Flora & Fauna | Wildlife and Countryside Act 1981, Environmental Protection Act 1990, The Protection of Badgers Act 1992, Conservation of Habitats & Species Regulations 2010 (as amended), UK National Ecosystem Assessment (2011) UK National Ecosystem Assessment: Understanding Nature's Value to Society, The Conservation of Habitats and Species Regulations 2010 as amended, JNCC (2012) The UK Post 2010 Biodiversity Framework, Natural Environment and Rural Communities Act 2006, HM Government (2018) 25 Year Environment Plan, Environment Act 2021 | These documents provide a framework at the UK level to provide protection for protected species and habitats. In particular:

▪ The Wildlife and Countryside Act is the UK's primary legislation for the protection and conservation of animals, plants and habitats. The Act establishes the SSSI classification for sites deemed to be of special interest due to biological, geological or physiological features and the measures to be taken to protect them. | In line with the identified documents, the emerging SRBS should set out policies and proposals to take account of the need to protect and enhance biodiversity interests, including sites designated at the national level (within the context of the SRBS's influence and objectives).

The SEA incorporates an objective to provide a framework for consideration of the impacts of the SRBS's interventions on biodiversity and to identify suitable mitigation and, where relevant, enhancement proposals. |

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		▪ The Protection of Badgers Act requires protection of badgers and their habitats in the UK. ▪ The Habitats Regulations require assessment of plans and projects that affect Natura sites to be carried out by the competent authority in certain circumstances. ▪ The UK Post-2010 Biodiversity Framework is the response to the EU Biodiversity Strategy to 2020 and sets out the UK response required to meet the Aichi targets. The framework sets out the activities required of Scotland (and the other 3 UK countries) to contribute towards the international obligations on biodiversity. ▪ The UK National Ecosystem Assessment provides an analysis of the state of the UK's natural environment and the benefits it provides for society	

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		and continued economic prosperity.	
Soil & Land	Environmental Protection Act 1990	This legislation provides a framework at the UK level for the identification, management and remediation of contaminated land that is causing or has the potential to cause significant harm or significant pollution to the water environment.	In line with the identified document, the SRBS must, directly or indirectly, recognise the threats to soil and land quality arising from transport routes and systems. It should also take account of policies and proposals which prioritise the remediation and redevelopment of contaminated land.
Water	Defra (2012) Marine Strategy Part 1: UK Initial Assessment and Good Environmental Status, DECC (2010) Department for Transport (2011) National Policy Statement for Ports, The Marine and Coastal Access Act (2009), Department for Environment, Food & Rural Affairs (2011) UK Marine Policy Statement, UK environmental permitting regime	These documents provide a framework at the UK level regarding the protection of water and coastal environments.	In line with the identified documents, the SRBS and SEA should take account of policies and proposals to minimise flood risks and promote sustainable flood risk management (within the context of the SRBS's influence and objectives). It should also protect, and where appropriate, enhance waterbodies, the water environment and utilities infrastructure.
Air & Noise	Environmental Protection Act 1990, The Environment Act 1995, The Air Quality Standards Regulations (2010) as amended, UK's Air Quality Action Plan (Defra, revised January 2016), Defra (2011) Air Quality Plans for the Achievement of EU Air Quality Limit Values for Nitrogen Dioxide (NO2) in the UK: List of UK and National Measures, UK Clean Air Strategy (2019)	These documents provide a framework at the UK level to implement objectives for the reduction of air and noise pollution. The framework sets out the transport-related causes of air pollution, air quality standards and the legal responsibilities for these, and identifies the cross-government, multi-stakeholder actions necessary to improve air quality.	In line with the identified documents, the SRBS should set out policies and proposals to tackle poor air quality and noise pollution (within the context of the SRBS's influence and objectives). It is important to take into account transport-related causes of air pollution, and implement the identified actions, including actions for transport policy to increase walking, cycling and public transport use, use of less polluting fuels and electric vehicles and improvements for the freight industry. It is also important to mitigate adverse impacts of noise pollution from the transport sector.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		The framework also presents the evidence of linking noise pollution and poor health and wellbeing outcomes and establishes standards and actions to reduce adverse impacts of noise on human health.	
Climatic Factors	Climate Change Act 2008, DECC (2011) UK Renewable Energy Roadmap, DECC (2014) UK National Energy Efficiency Action Plan, HM Government (2017) UK Climate Change Risk Assessment 2022	These documents provide a framework at the UK level regarding the need to mitigate and adapt to climate change. The Climate Change Act 2008 commits the UK government by law to reducing greenhouse gas emissions by at least 100% of 1990 levels (net zero) by 2050 and requires a programme of rolling carbon budgets to be set to achieve this.	In line with the identified documents, the SRBS should set out policies and proposals supporting efforts to decarbonise the transport sector and more generally help to mitigate climate change (within the context of the SRBS's influence and objectives). In particular, the SRBS must, directly or indirectly, take into account the Climate Change Act 2008 which sets a legally binding target of reducing the UK's GHG emissions by 80% by 2050 compared with 1990.
Material Assets	HM Treasury (2016) National Infrastructure Plan, HM Government (2009) The UK Renewable Energy Strategy, HM Government (2020) National Infrastructure Strategy	These documents provide a framework at the UK level regarding infrastructure development and energy generation.	In line with the identified documents, the SRBS should facilitate the efficient use of material assets including infrastructure to meet identified needs and to support the deployment of renewable and low carbon technologies (within the context of the SRBS's influence and objectives). The following should be considered: infrastructure capacity, resource efficiency, land use, energy efficiency, connectivity, and accessibility.
Cultural Heritage	The Ancient Monuments and Archaeological Areas Act (1979)	This legislation provides statutory protection for Scheduled Monuments and designated archaeological sites.	In line with the identified document, the SRBS should take account of policies and proposals to preserve and protect sites highlighted in **Table A:1** (within the context of the SRBS's influence and objectives).

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
Landscape	National Parks and Access to the Countryside Act (1949), Forestry Act (1967), National Planning Policy Framework (NPPF)	These documents provide a framework at the UK level regarding the protection of national parks, countryside and rural communities including rights of way and the protection of forests.	In line with the identified documents, the SRBS should protect and enhance public access to open space (within the context of the SRBS's influence and objectives). Of particular note is the Loch Lomond & The Trossachs National Park, in the northwest of the region.
Interrelated Effects	HM Government (2005) The UK Sustainable Development Strategy, Defra (2011) Mainstreaming Sustainable Development, Department for Transport (2008) Delivering a Sustainable Transport System, HM Government (2005) One Future – Different Paths. Shared Framework for Sustainable Development.	These documents provide a framework at the UK level to promote sustainable development and sustainable transport initiatives.	In line with the identified documents, the SRBS should set out policies and proposals which support the delivery of sustainable development (within the context of the SRBS's influence and objectives).
Scotland – all legislative and policy frameworks are informed by relevant higher-level UK, European and international frameworks			
Population (including relevant socioeconomic issues)	General Registers of Scotland: National Population Projections Equality Act 2010 (as amended specific to Scotland), Scottish Government: Fairer Scotland Action Plan, Going Further: Scotland's Accessible Travel Framework, National Bus Travel Concession Scheme for Older and Disabled Persons (2006 and amended), Scotland's National Strategy for Economic Transformation (2022), Town Centre Action Plan, The National Bus Travel Concession Scheme for Young Persons (Scotland) Order, 2021	These documents provide a national framework to support economic growth, improve accessibility, enhance social inclusion and to tackle inequalities in society. The Scottish population projections project a 27% increase in the population aged 75 years and over up to 2027. The Scottish Government's Accessible Travel Framework sets a national	In line with the identified policy context, the SRBS must, directly or indirectly, improve accessibility and reduce barriers to travel for individuals and communities, including rural communities and areas of socio-economic deprivation, and it must consider and plan for impacts of demographic change. It should also take account of policies and proposals to tackle poverty and inequality.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		vision and outcomes for accessible travel and a high-level action plan. The purpose of the framework is to support disabled people's rights by removing barriers and improving access to travel; and ensure disabled people are fully involved in work to improve all aspects of travel. Scotland's Economic Strategy (2022) is the national framework to create a fairer society and achieve long term sustainable economic growth, based on the principle that reducing inequalities and achieving sustainable growth are mutually reinforcing objectives. The Scottish Government's Town Centre Action Plan sets out a range of actions for the economic development and regeneration of town centres to create healthy centres at the heart of communities providing a range of services, spaces to interact and support the needs of residents,	

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		business and visitors. The action plan includes a range of transport-related actions including increasing the role of town centres as public transport hubs and improving access to town centres.	
Human Health	**Physical Activity** Scottish Government: Let's Get Scotland Walking - A National Walking Strategy 2014, Cycling Action Plan for Scotland, A Healthier Scotland - Actions and Ambitions on Diet, Activity and Healthy Weight 2017, Mental Health Strategy 2017 – 2027, Good Mental Health for All, Long Term Vision for Active Travel in Scotland 2014 **Road Safety** Scottish Government: Scotland's Road Safety Framework to 2030 **Access to Healthcare** Audit Scotland (2011) Transport for Health and Social Care Scottish Government: Short Life Working Group (2013) Healthcare Transport Recommendations, A connected Scotland – Tackling social isolation and loneliness and building stronger social connections, Going Further: Scotland's Accessible Travel Framework **Placemaking and Built Environment**	**Physical Activity** This national policy framework provides evidence of the relationship between increasing physical activity and improving physical and mental health outcomes and identifies increasing walking and cycling as key actions to achieve the outcomes. **Road Accidents** The Road Safety Framework sets the Scottish Government's road safety targets to 2030, identifies the benefits of reducing social and economic costs of road accidents, identifies the range of road safety stakeholders and identifies priorities, issues and commitments to achieve the targets. The priorities include improved partnership working,	In line with the identified documents, the SRBS should support objectives and outcomes to improve human health (within the context of the SRBS's influence and objectives). The following should be considered: ▪ Recognising the role of transport and active travel as integral to the delivery of national and local objectives to improve physical and mental health through increasing physical activity. ▪ Increase walking and cycling and improving access to opportunities to be active. ▪ Recognise the adverse effects of road accidents on human health, align with the Scottish Road Safety Framework, and seek to improve road safety for all users including pedestrians and cyclists through a range of actions. ▪ Recognise the role of transport in improving human health through facilitating access to healthcare facilities and services, and seek to improve accessibility especially for more vulnerable and at-risk populations. ▪ Recognise the relationships between transport systems and high-quality places that support improved health and wellbeing. ▪ Support the implementation of relevant Scottish planning and architectural policies and place making objectives through a range of actions, including reducing speeds, improving the quality of infrastructure including more attractive and safe walking and cycling routes, avoiding severance and improving local air quality.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
	Scottish Government: Good Places, Better Health. A New Approach to the Environment and Health in Scotland: Implementation Plan (2008), Creating Places (2013), Place Standard Tool (2016), Scottish Planning Policy (2014), Draft National Planning Framework 4 (2021) **Health Inequalities and Life Expectancy** Scottish Government: Equally Well (2008), First Equally Well Review (2010), Second Equally Well Review (2014), Equally Well Implementation Plan and Outcomes Frameworks (2008), Public Health Scotland's Strategic Plan 2020 to 2023	promoting road user responsibilities, establishing a lifelong learning approach to driving, reducing risks on roads including rural roads, driver impairment, seatbelt use, speeds and driver distraction, and road design. **Access to Healthcare** This national policy framework and evidence base sets out the role of transport in the delivery of healthcare services and achieving objectives for increased personal independence, reduced social isolation and improved access to employment and other services that help reduce impacts of socio-economic deprivation on physical and mental health. **Placemaking and Built Environment** This national policy framework identifies the links between health & wellbeing, place and transport with an emphasis towards positively improving health through creating healthy, attractive	

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		and accessible environments and places that encourage healthy behaviours, including more walking and cycling and increasing opportunities for social interaction. **Health Inequalities and Life Expectancy** This national policy framework recognises the underlying causes of health inequalities, including poverty and deprivation, needed to be tackled through holistic, cross-governmental approaches. Key transport interventions identified to support reducing health inequalities include increasing active travel, improving access to open/green space, improving access to healthcare, education and employment, and reducing adverse environmental impacts of transport that may have greater impact on the health of some groups or communities than others including road accidents, pollution, noise and severance. Healthy Life Expectancy (HLE) is a key measure of health	

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		inequalities. HLE is significantly lower in the most deprived areas than in the least deprived areas in Scotland.	
Biodiversity, Flora & Fauna	Nature Conservation (Scotland) Act 2004, Wildlife and Natural Environment (Scotland) Act 2011, Habitats Regulations (as amended), Scottish Government: Scottish Forestry Strategy 2019-2029, It's in your Hands: Scotland's Biodiversity Strategy (2005), 2020 Challenge for Scotland's Biodiversity (2013), Scotland's Biodiversity, a Route Map to 2020 (6 Big Steps for Nature), Scotland's Biodiversity List, Scottish Biodiversity Strategy indicators	The Nature Conservation Act relates to the conservation of biodiversity and protection of birds, animals and plants, and conservation and enhancement of Scotland's natural features. The Act places duty on every public body to further the conservation and enhancement of biodiversity, establishes requirement for Scottish Biodiversity Strategy and strengthens legal protection for threatened species.

The Wildlife and Natural Environment Act amends existing legislation on the protection of certain birds, habitats and species for the purpose of making more effective and proportionate legislation for the protection and management of wildlife and the natural environment. | In line with the identified documents, the SRBS will directly, or indirectly, support conservation of protected species and habitats, promote biodiversity and seek to reduce harmful impacts of transport systems and development on species, habitats and biodiversity including habitat loss or fragmentation, severance, pollution, and climate change. As noted in **Table A:1**, the following large-scale SSSI's were identified in the region:

- Muirkirk Uplands
- Arran Northern Mountains & Arran Moors
- Renfrewshire Heights

Any species or sites of significance at international, national or local levels for purposes of conservation, protection or promotion of biodiversity are identified in **Table A:1** The SEA includes a specific objective to provide a framework for assessment of the predicted impacts of the SRBS on ecological receptors. |

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		The Scottish Forestry Strategy seeks to protect and expand Scottish woodlands and forests and increase their value to society and the environment. The key themes of the implementation plan are climate change, timber, business development, community development, access and health, environmental quality and biodiversity. The Scottish Biodiversity Strategy, "Scotland's Biodiversity: It's in Your Hands" (2005) sets out the rationale for conserving biodiversity for the health, enjoyment and wellbeing of the people of Scotland now and in the future. The 2020 Challenge for Scotland's Biodiversity is Scotland's response to the Aichi Targets set by the United Nations Convention on Biological Diversity, and the European Union's Biodiversity Strategy for 2020. It sets out the major steps necessary to improve nature and biodiversity in Scotland and to meet the	

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		international targets. The two documents together comprise the Scottish Biodiversity Strategy and aim to: 1) protect and restore biodiversity on land and in our seas, and to support healthy ecosystems; 2) connect people with the natural world, for their health and well-being, and to involve them more in decision making; and 3) maximise the benefits for Scotland of a diverse natural environment and the services it provides, contributing to sustainable economic growth. The key outcomes of the Biodiversity Strategy likely to be most relevant to regional transport strategies include: 1) Diverse natural environment recognized as a national asset we must protect; 2) Health and well-being improved through physical activity and contact with nature; and 3) Healthy natural environment is much more resilient to climate change.

The Route Map to 2020 / 6 Big Steps for Nature sets | |

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SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		out priorities and key projects to achieve healthy biodiversity including ecosystem restoration, investment in natural capital, quality greenspace for health and educational benefits, conserving wildlife in Scotland, sustainable management of land and freshwater, and sustainable management of marine and coastal ecosystems. The Biodiversity List is a list of animals, plants and habitats that are of principal importance for conservation in Scotland. The List is grouped by 4 categories for action – conservation action needed, avoid negative impacts, watching brief only and communicating with the public. Scotland's Biodiversity Strategy Indicators measure progress of the Biodiversity Strategy, with two groups of indicators measuring both changes in biodiversity and how people are interacting with biodiversity.	
Soil & Land	Scottish Government and its Key Agencies: The Scottish Soil	The Scottish Soil Framework aims to	In line with the identified documents, the SRBS should recognise the threats to soil quality arising from transport routes and systems and

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
	Framework (2009), State of Scotland's Soils Report 2011, National Soil Map of Scotland, Soil Monitoring Action Plan & Implementation Plan, Contaminated Land (Scotland) Regulations 2000 as amended, Scottish Government's Statutory Guidance: Edition 2 (2006), Getting the best from our land: A Land Use Strategy for Scotland 2021 – 2026, National Peatland Plan (2015)	promote the sustainable management and protection of soils as integral to the nation's economic, social and environmental needs, raise awareness of sustainable soil management, and achieve improved policy integration including with climate change/emissions, water quality, flood management, biodiversity, heritage and, land use and development. Key actions include reducing soil erosion, reducing pressures on soils through promoting brownfield development over greenfield, enhancing soil management to improve water quality and reducing greenhouse gas emissions from soils. The State of Scotland's Soils Reports, National Soil Map of Scotland and Soil Monitoring Action Plan provide information and evidence on Scotland's soils and increase awareness of the importance of soil. The State of Scotland's Soils report identified the key	support the policy frameworks to reduce adverse impacts on soil quality from transport sources (within the context of the SRBS's influence and objectives). It should support the protection of soils, improve soil quality, prioritise the redevelopment of brownfield land and address contamination. The SEA considers soils as part of an integrated objective with biodiversity and geodiversity.

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SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		threats to healthy soils as loss of organic matter, changes in soil biodiversity, erosion and covering soils with waterproof materials with the main challenges being improving policy integration, tackling the lack of systematic Scottish soil data and understanding of soil management. The construction and expansion of urban and industrial areas and transport routes andtransport systems are identified as a significant pressure on the most productive soils in Scotland, threatening loss of organic matter, sealing of soils, contamination, changes in biodiversity, and erosion. The Contaminated Land (Scotland) Regulations 2000 as amended and the Scottish Government's Statutory Guidance: Edition 2 (2006) support the implementation of Part IIA of the Environmental Protection Act 1990. Acting together, these documents provide the framework in Scotland for	

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		the identification, management and remediation of contaminated land that is causing or has the potential to cause significant harm or significant pollution to the water environment.	
Water	Water Environment and Water Services (Scotland) Act 2003, Water Environment (Controlled Activities) (Scotland) Regulations 2011 as amended (CAR), Groundwater Protection Policy for Scotland: Environmental Policy (SEPA, 2009), River Basin Management Plan for the Scotland River Basin 2015 – 2027, Flood Risk Management (Scotland) Act 2009, Scottish Canals Asset Management Strategy 2019-30, Marine (Scotland) Act 2010	The Water Environment and Water Services (Scotland) Act makes provision for protection and improvement of the water environment in Scotland including implementation of the Water Framework Directive. The WEWS makes provision to protect and improve the water environment, to promote sustainable water use, reduce discharges of priority substances and cease discharges of priority hazardous substances, and to contribute to mitigating the effects of floods and droughts. The CAR apply regulatory controls over activities which may affect Scotland's water environment including lochs, rivers, estuaries, coastal waters, groundwater, and groundwater dependent	In line with the identified documents, the SRBS must, directly or indirectly, recognise the need to avoid adverse effects on the water environment. It must also recognise the objectives of the FRMPs and any transport proposals must support the mitigation of any identified relevant flooding risks.

The potential for impacts on the water environment is considered in the SEA under the framework of an SEA Objective addressing water resources and flooding. |

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		wetlands. The Groundwater Protection Policy aims to provide a sustainable future for Scotland's groundwater resources by protecting legitimate uses of groundwater, minimising risk to groundwater from pollution sources and avoid adverse effects on groundwater quality by influencing development and authorising abstractions. The River Basin Management Plan implements the requirement of the WFD for a holistic approach to management of the water environment. The RBMP set out objectives and a programme of measures to protect and improve the water environment including managing sources of pollution, changes in the flow of water and changes to the physical characteristics of the water environment. The Flood Risk Management (Scotland) Act 2009 creates a coordinated process to manage flood risk sustainably, taking into	

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SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		account climate change risk, at national and local levels, including new responsibilities for SEPA, Scottish Water and Local Authorities. The Act created a framework for all organisations involved in flood risk management and sets out requirements for the assessment and preparation of flood risk management plans. Organisations involved in flood risk management can coordinate actions to deliver sustainable and modern approaches to flood risk management.

The Scottish Canals Asset Management Strategy sets out how Scottish Canals will manage, care and prioritise investment in the Scottish Canals infrastructure.

The Marine (Scotland) Act 2010 provides a framework for the safeguarding of Scotland's seas and simplified planning and management system. The Act introduces a Duty to protect and enhance the marine environment. | |

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
Air & Noise	Air Quality (Scotland) Regulations (amended) 2016, Cleaner Air for Scotland 2 (CAFS2) - Towards a Better Place for Everyone, The Environment Act 1995 & Part IV of the Environment Act 1995 Local Air Quality Management Policy Guidance, The Environmental Noise (Scotland) Regulations 2006, Transportation Noise Action Plan, Planning Advice Note 1/2011: Planning and Noise.	**Clean Air** This policy framework sets out the transport-related causes of air pollution, air quality standards and the legal responsibilities for these, and the cross-government, multi-stakeholder actions necessary to improve air quality including actions for transport policy to increase walking, cycling and public transport use, use of less polluting fuels and electric vehicles and improvements for the freight industry. CAFS2 is shaped around 10 general themes for air quality improvement. Transport forms one of these themes and the Strategy sets out the need for increased modal shift to active travel and public transport to reduce transport emissions through provision of better active travel facilities and public transport services. Reference is also made to Scotland's four Low Emissions Zones (LEZs), one of which is located in Glasgow. **Noise**	In line with the identified documents, the SRBS must, directly or indirectly, recognise transport as a significant source of air and noise pollution and support the policy framework to reduce emissions and the adverse impacts of air and noise pollution from transport sources. Transport emissions is a core element of the SRBS and the SEA has included an assessment of potential air quality and noise impacts from each group of transport packages in the principal Strategy corridors.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		This policy framework presents evidence linking noise pollution and poor health and wellbeing outcomes, and therefore establishes standards and actions to reduce adverse impacts of noise on human health. Transport is the greatest source of environmental noise in Scotland.	
Climatic Factors	Climate Change (Scotland) Act 2009 and Orders + Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, The Scottish Government's Climate Change Plan (and 2020 update), Third Report on Proposals and Policies 2018-2032, Switched On Scotland: A Roadmap to Widespread Adoption of Plug-in Vehicles 2013, 'Climate Ready Scotland'- Scotland's Climate Change Adaptation Programme, Route Map to a 20% reduction in car kilometres by 2030 (2022)	The Climate Change Scotland Act 2009 and 2019, and related Orders, sets GHG emission reduction targets for Scotland up to 2045 including requirement to set annual reduction targets and the policies and proposals to achieve these reductions. The Climate Change Plan 2018-2032 aims to achieve 66% reduction in GHG emission (on 1990 baseline) by 2032 including through actions in the transport sector, which is expected to achieve a 37% reduction over the period of the Plan. Specific policies for the transport sector include phasing out petrol and diesel engine cars and vans by 2032, uptake of ultra-low emission vehicles,	The transport sector is a significant source of GHG emissions. In line with the identified documents, the SRBS must, directly or indirectly, contribute towards Scotland's GHG emissions reductions targets for the transport sector through polices and projects that reduce the use of diesel and petrol vehicles, promote more sustainable lower carbon modes, promote walking and cycling, reduce the need to travel and promote more sustainable development.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		modal shift towards walking and cycling and management of freight activities. Climate Ready Scotland SCCAP sets out the national objectives, policies and proposals for adaptation, as required by the Climate Change Scotland Act 2009.	
Material Assets	Transport (Scotland) Act 2005, Scotland's Energy Strategy 2017, Switched On Scotland Roadmap 2013, Switched On Scotland Phase Two: An Action Plan for Growth, Strategic Transport Projects Review 2 (2022), Infrastructure Investment Plan (2021-22 to 2025-26), Scotland's National Transport Strategy NTS2, 2020 (and delivery plans), Scottish Planning Policy (2014), Draft National Planning Framework 4, 2021	*Scotland's Energy Strategy* (2017) sets out the Scottish Government's vision for the future energy system in Scotland and describes the ways in which the Scottish Government will strengthen the development of local energy, protect and empower consumers, and support Scotland's climate change ambitions. It sets two new targets for the Scottish energy system by 2030: ▪ The equivalent of 50% of the energy for Scotland's heat, transport and electricity consumption to be supplied from renewable sources; and ▪ An increase by 30% in the productivity of	In line with the identified documents, the SRBS must, directly or indirectly, contribute to the achievement of the targets set out in Scotland's Energy Strategy (2017) and promote the uptake of electric and low emission vehicles. The SRBS must, directly or indirectly, also support the Scottish Government's ambition to phase out the need for new petrol and diesel cars and vans by 2032. The SRBS must, directly or indirectly, reflect committed infrastructure projects and ensure that existing infrastructure is used in a sustainable and efficient manner, whilst supporting the development of new or upgraded infrastructure in future to meet identified needs.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		energy use across the Scottish economy. The Strategy envisages renewable and low carbon solutions providing the basis for secure and affordable heat, mobility and power in future decades. It also notes the ambition to phase out the need for new petrol and diesel cars and vans by 2032. *Switched On Scotland Roadmap 2013 Phase Two* sets out a long-term vision and strategic approach to advance widespread adoption of electric vehicles (EVs) whereby in 2050 Scotland's towns, cities and communities will be free from the damaging emissions of petrol and diesel fueled vehicles. The second phase of implementing the Roadmap, in the period 2017-2020, places an emphasis on growth, focusing on actions that accelerate the uptake of EVs as part of both a wider sustainable transport system and a smart energy grid.	

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SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		The *Scottish Government's Strategic Transport Projects Review* (2022) sets out the Scottish Government's 45 recommendations for transport investment priorities. Similarly, the *Infrastructure Investment Plan* sets out priorities for investment and a long-term strategy for the development of public infrastructure in Scotland. Commitments are identified across key sectors. It promotes the sustainable use and management of existing infrastructure and the alignment of future infrastructure / resource provision with planning activities. The *National Transport Strategy* (NTS2) sets out the Scottish Government's ambitions for transport, including four priorities: ▪ Reduces inequalities ▪ Takes climate action ▪ Helps deliver inclusive economic growth ▪ Improves our health and wellbeing	
Cultural Heritage	The Historic Environment Policy for Scotland 2019, "Our Past, Our	These documents set out a framework at the national	In line with the identified documents, the SRBS should take account of the policies and proposals to preserve and protect sites highlighted

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
	Future" 2023, Historic Environment Circular 1, The Town and Country Planning (Historic Environment Scotland) Amendment Regulations 2015, The Historic Environment (Scotland) Act 2014, Ancient Monuments and Archaeological Areas Act 1979 (as amended, 2014), Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 (as amended, 2014), PAN71 Conservation Area Management 2004	level to conserve, protect, enhance and manage cultural and historical heritage in Scotland. The various policies establish the requirements for the identification, designation and protection of the historic environment including historic built environment, ancient monuments and archaeological sites including Scheduled Ancient Monuments, Areas of Archaeological Importance, listed buildings, Conservation Areas and designed landscapes and gardens. The *Historic Environment Policy for Scotland, SPP, Historic Environment Circular 1 and PAN 71* together provide the direction and guidance in relation to planning matters and the historic environment. "Our Past, Our Future" is Scotland's new strategy for the historic environment that sets out a national mission to sustain and enhance the benefits of Scotland's historic	in **Table A.1** (where relevant and within the context of the SRBS's influence and objectives) and for potential effects on non-designated heritage assets and their settings. A specific SEA Objective on Cultural Heritage has been included in the assessment framework to provide a basis for assessment of SRBS policies and (future) interventions on cultural heritage resources. The review of policy highlights the importance of conservation, protection and enhancement of cultural heritage resources in the Strategy region. Key criteria have been captured for this in the SEA assessment framework.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		environment, for people and communities now and into the future. The Strategy sets out strategic priorities to improve knowledge about historic environment, to conserve and protect historic environment and to improve access to the historic environment.	
Landscape	Scotland's Scenic Heritage, SNH Landscape Policy Framework, Planning etc. (Scotland) Act 2006, Creating Places: The Scottish Government's policy statement on architecture and place, National Parks (Scotland) Act 2000, Scotland's Landscape Charter	These documents provide a framework at the national level to protect and enhance Scotland's landscapes, important landscape features and distinctive landscape characters. In particular: ▪ *Scotland's Scenic Heritage* identifies 40 National Scenic areas (2 within the SPT area). Provision under the Planning etc. (Scotland) Act 2006, in place from 2010 requires that new development does not detract from quality or character of the landscape. ▪ The *SNH Landscape Policy Framework* sets out SNH's approach for Scotland's landscape with the aim "to safeguard and	In line with the identified documents, the SRBS should seek to protect and enhance public access to land and protect and enhance Scotland's landscapes (within the context of the SRBS's influence and objectives). Of particular note are designations including Loch Lomond and Trossachs National Park, National Scenic Areas and other local designations.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole, so as to ensure tomorrow's landscapes contribute positively to people's environment and are at least as attractive and valued as they are today." ▪ Part 10 of the Planning etc. (Scotland) Act 2006 provides protection through the planning system for National Scenic Areas in terms of the desirability of safeguarding or enhancing its character or appearance. Creating Places recognises landscape's contribution to better places, and the need to consider landscape character and capacity to guide landscape change.	
Interrelated Effects	Scotland's National Strategy for Economic Transformation 2022, Infrastructure Investment Plan 2021, Scotland's National Transport Strategy (NTS2), Cycling Action Plan for Scotland, National Walking	*Scotland's Economic Strategy* is the national framework to create a fairer society and achieve long term sustainable economic growth, based on the	In line with the identified documents, the SRBS should set out policies and proposals which support the delivery of sustainable development in the region and its island communities(within the context of the SRBS's influence and objectives).

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
	Strategy, Delivering the Goods - Scotland's Rail Freight Strategy, Rail Enhancements & Capital Investment Strategy, Scottish Ferries Plan, STPR (2021), SPP (2014), Draft NPF4 (2021), Designing Streets (2010), The Islands (Scotland) Act 2018.	principle that reducing inequalities and achieving sustainable growth are mutually reinforcing objectives.

The *Infrastructure Investment Plan* sets out the Scottish Government's infrastructure investment priorities and plans up to 2040 including EGIP, strategic roads projects, high speed rail, Glasgow subway modernisation, low emission vehicle infrastructure, active travel infrastructure and accessibility improvements to infrastructure.

Aligned with the NTS, the *Cycling Action Plan* sets out a national vision to achieve 10% of all journeys made by bike by 2020 and contains a range of actions to deliver the vision for local, regional and national partners. The *National Walking Strategy* similarly aims to promote walking as part of everyday activity for transport and leisure purposes.

The *Rail Freight Strategy* sets out the Scottish | |

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		Government's vision for a competitive, sustainable rail freight sector playing an increasing role in Scotland's economic growth by providing a safer, greener and more efficient way of transporting products and materials. The Strategy is structured around 4 levers of success - innovation, facilitation, promotion and investment. The *Rail Enhancements and Capital Investment Strategy* sets out the Scottish Government's new approach to planning and funding rail projects, setting out how the project pipeline is managed and the process for promoting new infrastructure. The *Scottish Ferries Plan* sets out how ferry services will be planned, funded, procured and operated to 2022. The *STPR2* identifies strategic transport investment priorities to support the delivery of sustainable economic growth and the achievement of the	

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		Scottish Government's strategic objectives. This includes the Clyde Metro. The *NPF4 (2021)* designates a suite of National Developments which benefit from Scottish Government support in policy terms and sets out a national spatial strategy to deliver sustainable economic growth. This includes planned investment in key economic sectors and infrastructure.	
SPT Region - all policy frameworks are informed by relevant higher-level Scotland, UK, European and international frameworks			
Population (including relevant socio-economic issues)	Glasgow City Region Economic Action Plan, Clydeplan (2017) Strategic Development Plan, Emerging Glasgow City Region Regional Spatial Strategy (RSS) Regional Spatial Strategies (RSS) and Local Development Plans covering Ayrshire & Arran and relevant parts of Argyll & Bute, and Loch Lomond & Trossachs National Park	The GCR Economic Action Plan sets a vision to 2025 to create a strong, inclusive, competitive and outward-looking economy, sustaining growth and prosperity with every person and business reaching their full potential. Eleven objectives support the vision with specific actions for transport to improve links between communities, jobs and learning opportunities and deliver the suite of Glasgow City Deal	In line with the identified documents, key economic assets, including transport assets, should be maximised. Future development of the Glasgow City Region RSS and the other LDP's and RSS's in the region will be taken into account in the SRBS development as far as they are relevant at the strategic level of detail of the Strategy.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		infrastructure investment projects.

The Strategic Development Plan (SDP) sets out a vision and spatial strategy for land use and development issues at the strategic level across the eight local authorities in the Clydeplan area (which overlaps extensively with the SPT region). | |
| Human Health | No region-specific plans have been identified. | N/A | N/A |
| Biodiversity, Flora & Fauna | Central Scotland Green Network Outcomes, Glasgow and Clyde Valley (GCV) Green Network Strategy / Blueprint | The CSGN is a national development in NPF4 which aims to transform the environment of Central Scotland by 2050 to contribute towards sustainable economic growth and population wellbeing. The CSGN is framed around 5 themes and several outcomes are relevant to biodiversity and conservation including improving resilience of habitats and species as a result of integrated habitat networks and increasing/creating habitat including woodland and green infrastructure / green networks. The vision of the GCV Green Network Partnership is to create a | In line with the identified document, biodiversity interests, including the CSGN, should be taken into account in SRBS development to ensure key sites and habitats are protected and enhanced (within the context of the SRBS's influence and objectives). |

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SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		transformed environment to improve lives and communities and support business through the provision of well-connected, high quality, multi-functional green spaces throughout the region that provide access to the outdoor for everyone	
Soil & Land	No region-specific plans have been identified.	N/A	N/A
Water	Clyde and Loch Lomond Flood Risk Management Strategy, Ayrshire Flood Risk Management Plan	The Clyde and Loch Lomond Flood Risk Management Plan and Ayrshire Flood Risk Management Plan provide a short overview of the Local Plan Districts and the flood risk authorities involved. The Plans set out actions for flood risk management within the Clyde and Loch Lomond District and Ayrshire Districts.	The FRMPs have an overall objective to reduce flood risk, set out the economic costs of low, medium and high flooding scenarios and set out actions for the management and mitigation of floods.
Air & Noise	Glasgow Agglomeration Draft Noise Action Plan 2019-2023	Prepared as part of the Scottish Government's implementation of the Environmental Noise Directive. Estimates population exposure to noise from transport and other sources. Identifies Candidate Noise Management Areas (CNMAs) which form the focus of actions to reduce	There are 80 road related CNMAs and 19 rail related CNMAs in the agglomeration, including within Glasgow City, Renfrewshire, West Dunbartonshire, South Lanarkshire and North Lanarkshire.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		exposure to noise in the Glasgow agglomeration.	
Climatic Factors	Climate Ready Clyde Regional Adaptation Strategy and Action Plan, Glasgow's Climate Plan	This Action Plan sets out the key challenges and ambitions for the Glasgow conurbation in relation to adapting to climate change in the short and long term (up to 2050).	The SRBS must, directly or indirectly, support adaptation programmes, including Climate Ready Clyde, and seek to reduce adverse impacts of climate change, including flooding and temperature stresses on transport systems and networks and to promote resilience of transport systems and networks.
Material Assets	No region-specific plans have been identified.	N/A	N/A
Cultural Heritage	No region-specific plans have been identified.	N/A	N/A
Landscape	Loch Lomond and Trossachs National Park Management Plan	This plan sets out a vision framed around Conservation & Land Management; Visitor Experience; and Rural Development as key components of the management of the Loch Lomond and the Trossachs National Park in support of its four statutory objectives.	In line with the identified document, the SRBS should take account of the importance of landscape features, including the Loch Lomond and Trossachs National Park (within the context of the SRBS's influence and objectives). Landscape impacts of the SRBS have been specifically assessed within one of the SEA objectives.
Interrelated Effects	Clydeplan Strategic Development Plan (2017)	The SDP recognises the need for a modal shift from private car to more sustainable choices to achieve carbon reduction objectives and in line with the need to increase active travel to achieve a range of objectives including health improvements.	The SDP outlines the development of a regional active travel network, improving access to Glasgow airport and support for high-speed rail into Glasgow. The SRBS should take account of the strategic planning commitments and policies in this document.
Constituent Local Authorities within the SPT Region - all policy frameworks are informed by relevant higher-level regional, Scotland, UK, European and international frameworks			

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
Population (including relevant socio-economic issues)	Local development Plans IRSS Local Outcome Improvement Plans (LOIPs) (for each constituent local authority and associated Community Planning Partnership) Glasgow City Region City Deal, Ayrshire Growth Deal and Rural Growth Deal for Argyll.	The LOIPs set out a range of local priorities and outcomes to reduce inequalities across local authority areas and increase inclusive growth. The City and Growth Deals will fund major infrastructure projects: creating jobs and attracting new business; assisting people back to work and existing companies to expand; improving public transport and connectivity and driving business innovation and growth.	Accessibility to health, employment and learning are identified as key priorities in many of the current LOIPs within the SPT region.
Human Health	Local Open Space Strategies, Local Walking, Cycling and Active Travel Strategies (for each constituent local authority and associated Community Planning Partnership).	These local plans and strategies set out local priorities and actions to improve access to high quality open spaces, to create healthier places and to increase the uptake of active travel.	The SEA assesses impacts of the proposed SRBS on Health, taking account of measures to enhance active travel.
Biodiversity, Flora & Fauna	Argyll and Bute Council Biodiversity Duty Action Plan, Ayrshire Local Biodiversity Action Plan, Ayrshire Green Network Strategy, East Dunbartonshire LBAP 2017-2021, East Dunbartonshire GeoDiversity Charter 2017-2021, East Dunbartonshire Green Network Strategy 2017-2021, East Dunbartonshire / Campsies Strategy 2011, East Renfrewshire/Renfrewshire/Inverclyde	Local Biodiversity Action Plans and Partnerships operate at a local level to conserve and enhance biodiversity and provide local focus for the national strategies. The local action plans support delivery of the national Biodiversity strategy targets and priorities as well as locally	In line with the identified documents, the conservation and enhancement of biodiversity in the region should be taken into account in development of the SRBS (within the context of the SRBS's influence and objectives).

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
	LBAP, Glasgow LBAP (2017 -2027), North Lanarkshire LBAP 2015 -2020, Renfrewshire LBAP 2018-2022, South Lanarkshire LBAP 2018-2022 (draft), West Dunbartonshire Biodiversity Report 2015	valued species and habitats. Local green network strategies / plans support delivery of the regional & national strategies as well as local green networks.	
Soil & Land	No local area specific plans have been identified.	N/A	N/A
Water	Local Flood Risk Management Plans - Clyde and Loch Lomond Local Plan District & Ayrshire Local Plan District	The LRFMs are the local delivery plans for the FRMS, including providing detail on the costs, benefits and delivery timescales for local actions.	There are two local plan districts (LPDs) in the SPT area that must be considered.
Air & Noise	Air Quality Action Plans covering the following Air Quality Management Areas (AQMAs) designated within the SPT region due to transport related pollutants: Bearsden, Bishopbriggs, Byres Road/Dumbarton Road, Chapelhall, Coatbridge, Glasgow City Centre, Johnstone, Lanark, Motherwell, Paisley Town Centre, Parkhead Cross, Renfrew Town Centre, Rutherglen and Whirlies Roundabout (East Kilbride) Glasgow Agglomeration Noise Action Plan	These documents set out the AQMAs in the regional and the associated Action Plans. The action plans and noise maps are key tools in Local Development Planning and Local Transport Strategies and are linked to Air Quality Action Plans where actions/measures may support environmental noise mitigation as well as improve local air quality.	There are 15 AQMAs in the SPT area for transport-related pollutants which need to be considered. The associated Action Plans set out a range of actions and interventions to improve local air quality, including infrastructure and traffic management measures and modal shift to more sustainable modes.
Climatic Factors	Local Authority Climate Change Strategies (for each constituent local authority)	All 12 Local authorities in the SPT area signed the Climate Change Declaration in 2007, which commits them to take action in relation to mitigation and adaptation.	Transport is a key source of climate emissions which will form a focus for the SRBS. The SEA includes a high-level assessment of impacts of transport measures on climate.

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		The majority of local strategies include actions for transport including increasing walking and cycling and promoting public transport to reduce use of private cars.	
Material Assets	Active Travel Strategies, Core Path Plans and Minerals Local Development Plans (LDPs) / LDP policies (for each constituent local authority). The following councils within the SPT region have published Active Travel Strategies*; - East Dunbartonshire Council 2015-2020 - West Dunbartonshire Council (Westbound Green Travel Plan) - Glasgow City Council Active Travel Future City Glasgow[41] - North Lanarkshire Council (Walking and Cycling Strategy) - South Lanarkshire Council Cycling Strategy 2015-2020 - North Ayrshire Council Outdoor Access Strategy - South Ayrshire Council Sustainable Travel Plan - Inverclyde Council Active Living Strategy (forthcoming; approved 30/08/18) - East Renfrewshire Council Active Travel Action Plan	Core Path Plans set out a framework or network of the most useful and important paths both for recreation and everyday journeys for local people and visitors. These core paths networks should provide opportunities for walking, cycling, horse riding and other non-motorised activities, including access to coastal and inland waters, by people of all ages and abilities. Plans are put together in close consultation with local people and land managers to try to make sure that the paths meet community needs whilst minimising any impact on farming and other land management practices. Minerals Local Development Plans (LDPs) / LDP policies set out the	The aims and actions set out in the current LTS within the SPT region must be considered, including protecting and enhancing the Core Path Network to create an integrated cross boundary network. The implementation of existing and emerging land use strategies at the local level within the SPT region is also relevant.

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[41] Glasgow City Council http://futurecity.glasgow.gov.uk/active-travel/

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
	▪ Renfrewshire Council Outdoor Access Strategy 2016-2026.	settled view of local authorities on where minerals development should and should not occur and set out the proposals for the future use of abandoned and unrestored minerals sites.	
Cultural Heritage	Antonine Wall Management Plan and New Lanark Management Plan (UNESCO world heritage sites)	The Antonine Wall Management Plan and the New Lanark Management Plans set out the requirements to manage, protect and preserve these World Heritage Sites including buffer zones around them.	In line with the identified document, the preservation, protection and enhancement of the historic environment including key sites such as the Antonine Wall has been taken into account in the SRBS and SEA.
Landscape	No local area specific plans have been identified.	N/A	N/A
Interrelated Effects	Local Transport Strategies and Local Development Plans (for each constituent local authority)	The 12 LDPs in the SPT area set out local frameworks for growth and development in the short and long term, with a presumption in favour of development that contributes to sustainable development as set out Scottish Planning Policy (2014).

LTS set out policies and actions to address local transport issues as identified by local authorities. They must be prepared in line with Scottish Government | Both the LDPs and LTSs should be taken into consideration in development of the SRBS and integration of measures with existing local transport planning (within the context of the SRBS's influence and objectives). |

SEA Topic	Relevant Plans, Programmes and Strategies	Overview of Purpose and Key Requirements	Key Issues and Environmental Projection Objectives
		Guidance and in conformity with the current SRBS applicable to their area.	

B.2   Key Policy Considerations

B.2.1   As set out in **Table B.1**, an extensive policy review was carried out on relevant plans, programmes and strategies which need to be taken into account of in the development of the emerging SRBS and its associated SEA. This section highlights the most critical policy targets and implications which the emerging SRBS will be required to address.

B.2.2   The development of the RTS recognises the vision for public transport in the region forms part of a rich wider local, regional and national policy context (as highlighted in **Figure B.1**). The RTS supports the wider aims and objectives for the region, often acting as a core catalyst to their delivery. In this regard, bus has an important role in the successful delivery of both transport policy and wider social, environmental and economic policy.
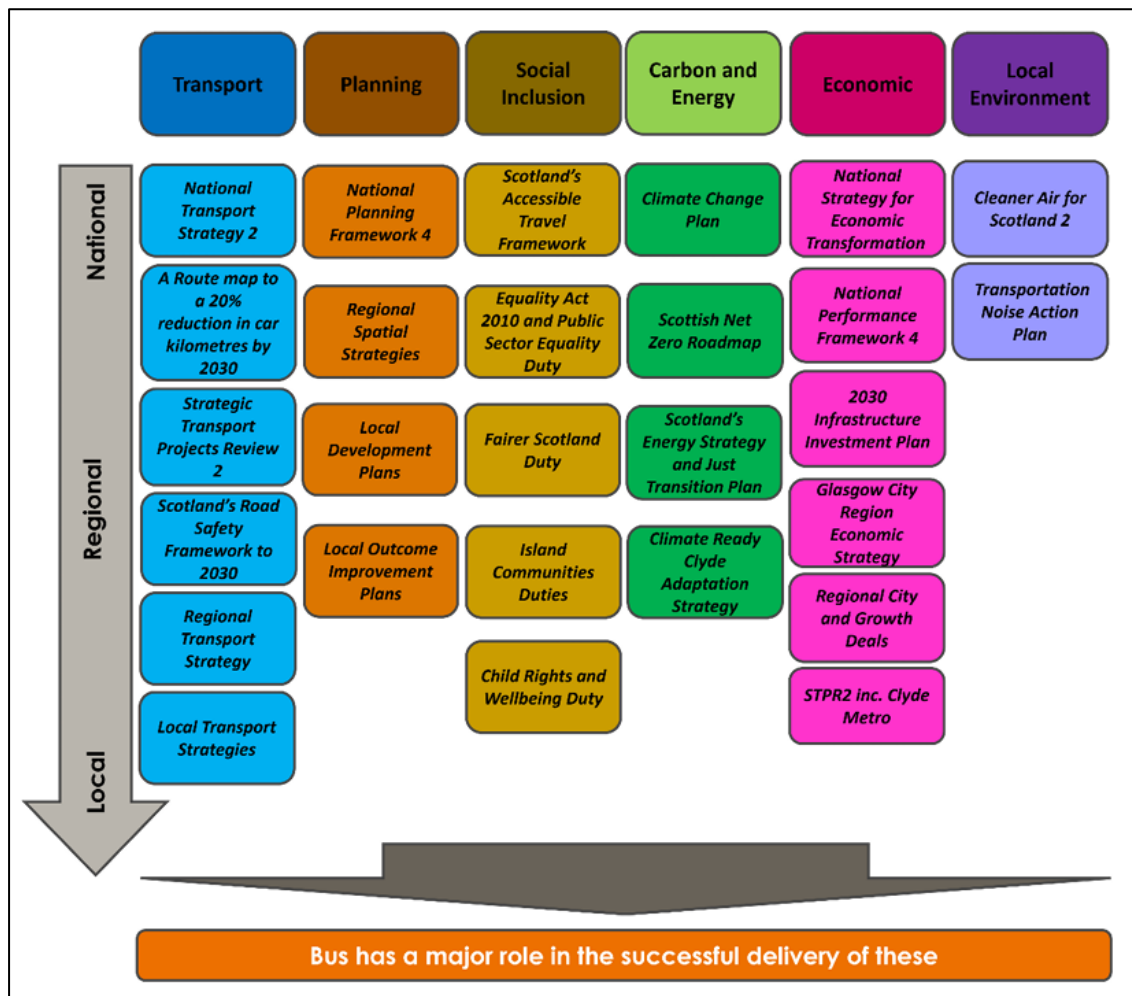
Figure B.1 National, Regional and Local Policy

B.2.3   Other policies (set out in **Figure B.1**) where bus has a clear role in supporting their successful delivery include, regionally, the Regional Spatial Strategies, Regional City / Growth Deals, Regional Economic Strategies, Climate Adaptation Strategy, and Glasgow and the local authorities' Local Transport Plans, Local Development Plans, and Local / Outcome Improvement Plans.

B.2.4   The following sections discuss some key international, national, regional and local policy.

International

B.2.5   Mitigating and adapting to climate change is a critical policy consideration at an international level with multiple agreements in place to address the climate emergency. The UNFCCC is the forum for international action on climate change with the aim of stabilising GHG concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. The UNFCCC focuses on mitigating (reducing) GHG emissions, adapting to climate change, reporting of national emissions, and financing of climate action in developing countries. Agreed at COP 21, the Paris Agreement commits signatories to reducing global greenhouse gas emissions with the long-term goal of withholding a temperature increase by no more than 2%. In addition, the Cancun Adaptation Framework recognises that adaptation required to be given same priority as mitigation including reducing vulnerability and increasing resilience. Any major transport infrastructure development set out in the emerging SRBS should contribute to meeting the requirements and targets set out in international climate change policies and agreements.

B.2.6   As the United Kingdom formally left the European Union (EU) in 2020, European legislation and associated policies are no longer of direct relevance to domestic policies or strategies such as the SRBS. However, EU legislation has historically developed policy frameworks to address environmental issues which have subsequently been implemented at UK and Scotland levels, and prior to leaving the EU, existing EU legislation was transposed and incorporated into UK and Scottish legislation. This means some EU legislation remains of indirect relevance to the emerging SRBS in terms of having established frameworks and requirements which the SRBS will still need to implement in accordance with UK and Scottish legislation.

National

B.2.7   Under the 2019 Climate Change Act, the Scottish Government made a legally binding commitment to deliver net-zero carbon emissions by 2045. In addition, two interim targets were developed:

- A **75% reduction in greenhouse gas (GHG) emissions by 2030** relative to 1990 levels of carbon dioxide and 1995 levels of hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride.
- A **90% reduction in GHGs by 2040**, again relative to the 1990/95 baseline.

The Climate Change Plan Update also included two further commitments designed to support the delivery of the above targets:

- An aim **to reduce vehicle kilometres travelled by car by 20% by 2030**
- A **commitment to phase out the need for new petrol and diesel cars and vans** and for the conditions to be created to phase out the need for all new petrol and diesel vehicles in Scotland's public sector fleet by 2030

The commitments set out in the Climate Change Act and subsequent Climate Change Plan Update are significant and, if achieved, will have a fundamental impact on traffic levels in Scotland and SPT area.

B.2.8   The upgrade to the Climate Change Plan follows on from the publication of Climate Ready Scotland Adaptation Programme in 2019 which sets out the current state of the climate in Scotland including average rainfall increases, temperature rises and changes in mean sea level around the UK. The Programme sets out low and high emission scenarios, predicts a high emissions prediction of a summer temperature increase of 2.6°C and a winter temperature increase of 2.2 °C by 2070 with associated changes in rainfall in the summer (14% drier) and in winter (18% wetter). The transition to a low-carbon transport system will be critical to mitigating and adapting to the impacts of climate change in Scotland. This is backed up by several national policy documents, including NTS2.

B.2.9   The National Transport Strategy 2 (2020) sets out the transport strategy for Scotland over the next 20 years, seeking to deliver a transport system which is sustainable, inclusive, safe and accessible across Scotland. NTS2 provides a strategic framework comprising four key priorities and associated enablers to ensure that NTS2:

- **"Reduces inequalities:** providing fair access to services that are accessible and affordable for all.

- **Takes Climate action:** to help deliver the net-zero emissions target, adapting to the effects of climate change and promoting greener, cleaner choices.

- **Helps to deliver inclusive economic growth**; which is efficient, reliable, high quality and innovative.

- **Improves our health and wellbeing:** delivering a safer and secure Scotland, with a wide variety of travel choices for communities".

B.2.10 NTS2 also sets out proposals (as stated in the Scottish Government's Climate Change Plan) to reduce reliance on private transport to help to address the ongoing climate emergency, including a reduction in car kilometres by 20% in 2030, an ambition to phase out new petrol and diesel cars by 2032, decarbonise Scotland's passenger railways by 2035 and decarbonise scheduled internal Scottish flights by 2040. The delivery of inclusive economic growth is also a key pillar of NTS2, seeking to increase the resilience of Scotland's transport system and foster greater integration of transport and wider infrastructure policies and investments. It aims to increase Scotland's competitiveness and helps Scotland to become an innovative leader in beneficial transport innovations.

B.2.11 A Route Map to Achieve a 20 per cent Reduction in Car Kilometres by 2030 (2022) sets out a route map of how Scotland will achieve a 20% reduction in car kilometres by 2030. The document presents a framework of sustainable travel behaviours (namely: reducing the need to travel; living well locally; switching modes to walk, wheel, cycle or public transport where feasible; and combining trips or sharing journeys) and sets out a series of actions which will be taken to support each of these. The latter includes extending superfast broadband; improving town centres; increasing investment in active travel; introducing LEZ; investing in the public transport network; and testing Mobility as a Service (MaaS).

B.2.12 The Scottish Government's Programme for Government (2020-2021) is guided by the National Performance Framework 4. This edition focuses on protecting and renewing Scotland, addressing the ongoing impact of Covid-19 on health, the economy and society and in supporting the transition to net-zero emissions.

B.2.13 The Scottish Government's Infrastructure Investment Plan 2021-22 to 2025-26 (2021) sets out priorities for public investment through a long-term strategy. With progress updated annually, it sets out why the Scottish Government invests, how it invests and what it intends to invest up to 2040 by sector. This Infrastructure Investment Plan focuses on the importance of infrastructure investment to aid in the recovery from the economic, health and social harm from Covid-19 and also to address the adjustments required following the UKs exit from the EU in December 2020.

B.2.14 The Scottish Government published its fourth National Planning Framework (NPF4) in February 2023. This sets out proposed priorities and policies for the planning system up to 2045 and includes a ten year Minimum All Tenure Housing Land Requirement (MATHLR) for each planning authority. The document identifies six spatial principles which will guide the development of future places, namely:

- Just transition – ensuring the transition to net zero is fair and inclusive

- Conserving and recycling assets – making productive use of existing buildings, places, infrastructure, and services

- Living locally – support local liveability and ensure people can easily access services, greenspace, learning, work, and leisure locally

- Compact urban growth – limiting urban expansion

- Rebalanced development – targeting development in areas of past decline

- Rural revitalisation – encourage sustainable development in rural areas

B.2.15 NPF4 also identifies the following priorities for:

- Sustainable Places -

- Liveable Places

- Productive Places

B.2.16 The Strategic Transport Projects Review 2 (STPR2) sets out the Scottish Government's transport investment programme over the 20-year period 2022-2042, detailing how the government will deliver the Vision, Priorities and Outcomes of the NTS2. The document splits Scotland into 11 regions and includes recommendations which are relevant to all regions, recommendations which are general but have particular benefit for certain regions, and recommendations which are specific to each region. The STPR2 recommends bus priority interventions are implemented within Scotland's cities and towns where congestion is highest and that bus priority measures continue to be identified and implemented on the trunk road and motorway network. These could be taken forward within local networks using the Bus Partnership Fund process or similar. For the Clyde Metro, the integration with the Region's current bus network would provide much improved connectivity between the city and the surrounding communities, and between the communities themselves. This would tackle deprivation issues in the Region and encourage a switch from private car use to public transport and other more sustainable travel options.

B.2.17 Apart from above, the Scottish Government's Programme (PfG) for Scotland sets out the Government's ambitions for each fiscal year. PfG published in September 2023, states the bold and ambitious actions on net zero in the transport sector, including supporting operators to change the market for zero emission bus travel through our Scottish Zero Emission Bus Challenge Fund. The PfG delivery plan for 2023 includes laying secondary legislation before the end of this year, to enable bus franchising and partnership options to be developed, providing even more powers to Councils.

B.2.18 The Scottish Government's Cleaner Air for Scotland 2 publication noted above sets out an air quality policy framework for the next five years and a series of actions to deliver further air quality improvements. The framework notes NTS2's recognition that Scotland's current transport system is a significant contributor to poor air quality, and that there is a need to reduce vehicle journeys and reduce the need to travel unsustainably and accelerate sustainable modal shift. Indeed, the framework states that buses are arguably the single most important mode for reducing transport related air pollution due to their central role in reducing congestion, improving journey time reliability, and as a key component of future Mobility as a Service (MaaS) solutions.

B.2.19 Transport Scotland published a draft vision for Scotland's public electric vehicle (EV) charging network in late January 2022. The plan aims to encourage the uptake of zero emission vehicles through increasing the number of publicly available EV chargers. Funding has been made available for each Local Authority to produce its own public EV Infrastructure Strategy. The SPT RTS facilitates development of public charging infrastructure for bus and community transport particularly at SPT bus stations and integrate with sustainable mobility hubs as appropriate.

B.2.20 The Transport (Scotland) Act 2019 is an important legal framework that was designed to help make Scotland's transport network cleaner and more accessible. The law grants new powers to

local authorities in the areas of bus provision, parking, low emission zones, road works, and smart ticketing.

B.2.21 The Clyde Metro, a recommendation in the Strategic Transport Projects Review (STPR2) sets out the development of a metro transport system for the Glasgow City Region. The Clyde Metro is to be multi-modal system with a combination of bus rapid transit, tram, light rail, and metro rail to complement the service by traditional railways and Glasgow Subway. Clyde Metro is also included in the National Planning Framework 4 as an opportunity to substantially reduce levels of car-based commuting, congestion and emissions from transport at scale.

B.2.22 The Clyde Metro project would be a multi-billion investment over a 30-year period to better connect 1.5 million people to employment, education, and health services in and around Glasgow. While freeing up rail capacity for longer distance trips, Metro seeks to tackle social exclusion, encourage fewer car journeys, and reduce greenhouse gas emissions. Clyde Metro will have major impacts on the way public transport interacts across Glasgow and the wider area and its success requires an increasing need for deep integration of public transport services and fares, currently not easily provided through the existing commercial bus delivery model – with the current deregulated bus market accentuating issues around competition and integration.

B.2.23 The emerging SRBS must, directly or indirectly, take account of all priorities identified in this policy review, including NTS2, Scotland's Economic Strategy, NPF4, Transport (Scotland) Act 2019, the Infrastructure Investment Plan especially with regard to transport climate change and inclusive growth, etc. The emerging SRBS also needs to be aligned with emerging policy priorities including the recommendations of STPR2.

Appendix C   Responses to Comments on SEA Scoping Report

Comment	Response
Scottish Environmental Protection Agency (Date: 25th November 2024)	
Appendix: Comments on the scoping consultation	
1. Environmental baseline and key issues	
We consider the environmental baseline review to be a comprehensive review highlighting the main issues of relevance for the SEA topics within our remit. Table A.2 under the soil topic highlights the importance of protecting undeveloped soils and particularly areas with peat content from development. As well as peat other carbon rich soils should be protected. NatureScot's Carbon and Peatland map 2016 should be used to identify the presence of peatland and other carbon-rich soils.	Noted with thanks. NatureScot's Carbon and Peatland map 2016 will be used to identify the presence of peatland and other carbon-rich soils, if required. The text in Table A.2 has been updated.
We welcome the strategic consideration of flood risk in assessing the effects of future climate change on new proposals for transport infrastructure. Version 2.1 is the latest version of our flood maps and includes present day flood maps as well as future flood maps which take into account the potential effects of climate change. You can find out more about what the Future Flood maps show here: Future Flood Maps - Flood Maps | SEPA	Noted with thanks
In relation to the River Clyde, the River Clyde Tidal Flood Model provides the best available understanding of current and future flood risk for the tidal Clyde for coastal flooding events. The model covers the area on the river between Dalbeth in Glasgow and Greenock. South Lanarkshire Council will be able to provide details of the flood model for the non-tidal reach of the River Clyde.	Noted with thanks
2. Alternatives	
It is noted that it is unlikely that alternatives to the emerging SRBS goals and objectives will be identified as this would change the strategic direction of the strategy. However alternative broad strategy components and detailed transport options will be considered. We are satisfied with this approach to considering alternatives.	Noted with thanks
3. Scoping in / out of environmental topics	
We agree that for this strategy all environmental topics should be scoped into the assessment.	Noted with thanks
4. Methodology for assessing environmental effects	
We support the use of SEA objectives and related questions as assessment tools as they allow a systematic, rigorous and consistent framework with which to assess environmental effects.	Noted with thanks
We are content with the proposed detailed assessment matrix and particularly welcome the commentary box to fully explain the rationale	Noted with thanks

Comment	Response
behind the assessment results. We also welcome the link between effects and mitigation / enhancement measures in the proposed assessment framework and the consideration of mitigation of impacts.	
It is noted that following the initial assessment a further round of assessment will be carried out to identify any likely cumulative or synergistic effects we are satisfied with this approach.	Noted with thanks
5. Consultation period	
We are satisfied with the proposal for a 12 week consultation period for the Environmental Report.	Noted with thanks
Scotland's Nature Agency (Date: 22 November 2024)	
Environmental Assessment (Scotland) Act 2005 - Strathclyde Partnership for Transport (SPT) - Strathclyde Regional Bus Strategy - Scoping Report Thank you for consulting us on the above scoping report which we received on 23 October 2024. Our comments on the scope, level of detail and methodology for the Environmental Report, and on the duration of the proposed consultation period, are set out below.	
Scope of Assessment and Level of Detail We are content with the scope and level of detail proposed for the Environmental Report.	Noted with thanks
Proposed SEA Framework and Objectives We welcome all issues being scoped-in to the SEA process for the Strathclyde Regional Bus Strategy. We are pleased with the holistic approach taken to developing the SEA Objectives, to ensure that wider context is considered in relation to transport. We are content with SEA Objectives relevant to our remit, and we are happy with the proposed guide questions. In particular, we are really pleased with guide questions proposed for the Biodiversity, Geodiversity and Soil Objective and we support the inclusion of the question on improving access to nature.	Noted with thanks
Proposed SEA Methodology We note that the methodology proposed for this SEA is to use a matrix with the SEA Objectives to assess for significant environmental effects, which is a tried and tested approach. The proposed methodology set out in Section 5 of the Scoping Report presents a thorough and robust approach to SEA. We note that the proposed assessment matrices, as set out in Tables 5.1 and 5.3, incorporate consideration of enhancement measures in addition to mitigation. This will support identification of specific mitigation and enhancement measures, and these should be used to directly inform the Regional Bus Strategy by identifying precise requirements.	Noted with thanks
Consultation Period for the SEA Environmental Report	Noted with thanks

Comment	Response
We note the proposed consultation period for the Environmental Report is 12 weeks, and we are content with this. I hope these comments are helpful. If you wish to discuss anything further, please do not hesitate to contact me via NatureScot's SEA gateway (sea_gateway@nature.scot) or on 0131 314 6751.	
Historic Environment Scotland (Date: 25 November 2024)	
Thank you for your consultation on the scoping report for the Strathclyde Regional Bus Strategy, which we received on 23 October 2024. We have reviewed this in our role as a Consultation Authority under the above Act. This letter contains our views on the scope and level of detail of the information to be included in the Environmental Report. Our view is based on our main area of interest for the historic environment.	
Scope and level of detail	
We note that the historic environment has been scoped into the assessment. On the basis of the information provided, we are content with the proposed approach and are satisfied with the scope and level of detail proposed for the assessment, subject to the detailed comments provided below.	Noted with thanks
Appendix B: Plans, Programmes and Strategies We note that the plan/programmes and strategies section relevant to cultural heritage references "Our Place in Time: The Historic Environment Strategy for Scotland." This was superseded in 2023 by "Our Past, Our Future," which is Scotland's new strategy for the historic environment that sets out a national mission to sustain and enhance the benefits of Scotland's historic environment, for people and communities now and into the future.	Noted and the relevant text has been updated.
Consultation period for the Environmental Report	
We are content with the proposed consultation period of 12 weeks for the proposed plan and the accompanying Environmental Report. Please note that, for administrative	Noted with thanks

Appendix D   Environmental Appraisal of SRBS Policies

D.1   Introduction

D.1.1   This appendix supports **Section 5.3** of the Environmental Report by presenting the detailed assessment of each SRBS policy, split into the seven overarching policy themes.

D.1.2   Each policy theme is described in turn, including the transport policies within that theme and the correlating transport options (see **Appendix E**). The policies have been assessed against each of the SEA Objectives, drawing on consideration of the predicted environmental effects of the polices (and where relevant linked option) within each theme.

D.1.3   Relevant assumptions, proposed mitigation and monitoring indicators are also presented for each policy theme.

D.1.4   The predicted environmental effects of the policies were evaluated with reference to a set of impact criteria as shown in **Table 4.3**, which was extracted below.

Key

Major beneficial effect	++	Major adverse effect	--
Minor beneficial effect	+	Minor adverse effect	-
Neutral / negligible effect	0	Uncertain effect	?
No clear relationship	~		

D.2   Buses where they are needed, when they are needed

Buses where they are needed, when they are needed
This policy theme focuses on the improvement of the coverage and periods of operation of the bus network, frequency of bus services and improvement of the operational effectiveness and efficiency of the bus network
SPT proposes three regional bus policies, as listed below, to enable everyone to be able to use the bus system where and when they are needed and ensure the bus system contributes to tackling wider societal challenges.

Bus Policy	Relevant Measures
P1. Improve periods of operation and geographic coverage of the bus network, where required *Improve the coverage and periods of operation of the bus network, helping to ensure that people have access to bus services when and where they are needed, supporting socially and economically important trips, and reducing the reliance on private modes of transport, such as car.*	▪ M1. A regional bus network based upon defined principles for frequency, capacity, periods of operation, coverage and connectivity ▪ M2. Minimum levels of service for all towns, key destinations (e.g. hospitals) and off-peak time periods to ensure basic accessibility, working towards more convenient service levels
P2. Improve the frequency of bus services, where required *Improve the frequency of bus services, in order to improve the attractiveness of services, support better integration of services and modes, and enhance the resilience of the bus network*	▪ M3. High frequency services (every 10 minutes minimum) on core routes, working towards a turn-up-and-go service level for some services at appropriate times
P3. Improve the efficiency of the regional bus network *Improve the operational effectiveness and efficiency of the bus network, delivering an attractive bus network that creates a virtuous cycle of growth and improvement for sustainable travel.*	▪ M4. An integrated bus network with better coordination between services and modes, particularly for journeys where interchange is more common (e.g. rural to regional express or bus to rail)

Environmental Assessment of Policy / Package		
Commentary on Predicted Effects	▪ These policies are generally compatible with the SEA objectives and in a number of cases significant beneficial effects are predicted including for health (for Policy P1), accessibility and productivity. In general, the policies provide opportunities for people to access and enjoy facilities, services and the wider environment. The policies are also predicted to have some beneficial effects for SEA topics of health (for Policy P2 and P3), material asset, air quality, climate change, biodiversity and cultural heritage.	**+**
Proposed Mitigation and Enhancement	▪ Increased provision of public transport capacity and services should deploy zero or ultra-low emission vehicles. ▪ Bus operators should be supported to achieve rapid decarbonisation on existing vehicle fleets ▪ By utilising Scottish Government's Urban - Rural classifications, approximate levels of connectivity from different settlements to key services can take into account the size and wider accessibility of the settlement.	

Monitoring Indicators	▪ Monitoring indicators proposed in the Draft SRBS of relevance to this policy theme include:
	  - Number of bus passenger journeys
	  - Modal share of all journeys
	  - Modal share of all journeys to work
	  - Modal share of all journeys to school
	  - Proportion of adults who use local bus services at least 2 times per week
	  - Proportion of households by public transport journey time (categories/ranges) to hospital, town centre, etc
	  - Proportion of households within 400m of a bus stop, by service frequency
	  - Bus vehicle kilometres
	  - CO2e emissions estimates from road transport
	  - Proportion of adults who are satisfied with local public transport
	
	▪ Monitoring and Tracking indicators proposed in the RTS of relevance to this policy theme include:
	  - MyBus Usage
	  - Bus network coverage and service frequency
	  - Grammes CO2e per passenger km by mode/vehicle type
	  - Number of Air Quality Management Areas (AQMAs)
	  - Percentage of adults who have attended or visited a cultural event or place in the last 12 months
	  - Employment rate
	  - Percentage of young adults participating in education, training or employment
	  - Healthy Life Expectancy
	  - Mental Wellbeing (Mean WEMWBS score)
	
	▪ Supplementary SEA specific indicators for future consideration in RTS monitoring and evaluation framework include:
	  - A health-based indicator such as reported incidences of respiratory disease or asthma
	  - Concentrations of roadside local air pollutants at key monitoring locations	

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Environmental Assessment of Policy / Package				
	- State of historic sites - Visitor numbers recorded at the region's key cultural heritage sites ▪ Proposed Tracking indicators for future consideration in SRBS: - Number of total vehicle kilometres - Number of total passenger journeys - Toxic air pollutants (e.g NOx, PM10 and PM2.5) emissions estimates from bus transport - Toxic air pollutants emissions estimates (e.g NOx, PM10 and PM2.5) from road transport -			

SEA Objective	P.1	P.2	P.3	Commentary
1. **Health:** Improve the health of the resident and workplace population, including with respect to physical and mental health and social wellbeing.	++	+	+	Policies P1, P2 and P3 would reduce the reliance on private modes of transport, such as car. This would reduce vehicular emissions, which has minor benefit to the health. In particular, Policy P1 would enhance opportunities for access to services, healthcare facilities, open space and employment with potential mental health and wellbeing benefits for some people.
2. **Accessibility:** Reduce the need to travel and ensure appropriate and affordable access for all to facilities, services, economic opportunities and social activities.	++	++	++	Policies P1, P2 and P3 would enhance the coverage of the bus network, frequency and efficiency which are inherently compatible with the SEA objective for accessibility with significant beneficial effects predicted where these polices were implemented effectively and comprehensively.
3. **Material Assets:** Manage, maintain and where possible improve the efficient and effective use of natural resources, land and infrastructure to meet identified needs.	+	+	+	The policies would have some minor beneficial effects on the SEA objective for material assets through reducing the reliance on private modes of transport, such as car.
4. **Productivity, Competitiveness and Innovation**: Deliver an integrated and efficient	++	++	++	The policies for enhancing the level of service are generally compatible with this SEA objective for productivity because they

SEA Objective	P.1	P.2	P.3	Commentary
transport system to increase economic prosperity, support the growth of key economic sectors and deliver increased and more inclusive employment.				potentially support improved access to employment opportunities and improved physical access for all. This would enhance the regional economy and businesses efficiency.
5. **Air Quality and Amenity**: Tackle poor air quality, reduce concentrations of harmful atmospheric pollutants and minimise exposure to noise and vibration.	+	+	+	Policies P1, P2 and P3 would reduce the reliance on private modes of transport, such as car. This would reduce the air emission and would have minor benefit to the air quality.
6. **Climate Change Mitigation**: Decarbonise the transport sector and support wider efforts to mitigate climate change.	+	+	+	Policies P1, P2 and P3 would reduce the reliance on private modes of transport, such as car. This would reduce the greenhouse gas emission which would have minor benefit to the climate change.
7. **Biodiversity, Geodiversity and Soil:** Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by protecting green infrastructure.	0	0	0	Policies P1, P2 and P3 are predicted to have the potential for indirect beneficial effects on some aspects of this SEA objective where they contribute to reduced traffic emissions although effects are not predicted to be significant.
8. **Water, Flood Risk and Resilience:** Conserve, protect and enhance water environments, water quality and water resources, whilst adapting to climate change and reducing flood risks.	0	0	0	Implementation of the polices are generally not predicted to have significant effects on water resources and flooding
9. **Cultural Heritage:** Conserve, protect and enhance the historic environment and cultural assets.	+	+	+	Policies P1, P2 and P3 would provide opportunities for people to visit sites of cultural heritage interest more easily and promote the cultural heritage. Hence, it would have minor benefit to the SA objective.

SEA Objective	P.1	P.2	P.3	Commentary
10. **Landscape:** Protect and enhance the landscape character, townscape character and visual amenity.	0	0	0	The policies are not predicted to result in significant change to landscape resources or visual amenity. There is some potential on key corridors where traffic levels were reduced for minor beneficial effects on visual amenity for some receptors

D.3   Reliable and quicker journeys

Reliable and quicker journeys	
This policy theme focuses on the service reliability and punctuality of the bus network	
SPT proposes two regional bus policies, as listed below, to improve the reliability and punctuality.	
Bus Policy	**Relevant Measures**
P4. Improve the reliability and punctuality of bus services *Improve the performance of bus services in meeting standards related to reliability and punctuality in order to improve the quality of travel in terms of attractiveness, safety, security, and equity of service across the populations and areas served. This will be achieved by enhancing vehicle reliability, vehicle and driver availability, improving the resilience of the bus network, and by prioritising consistent bus journey times alongside other sustainable modes.* *.*	▪ M5. Bus priority infrastructure on high frequency routes (every 10 minutes minimum) and routes that are prone to congestion, including motorways ▪ M6. Bus services that better meet performance (e.g. punctuality and patronage) standards and objectives, supported by more performance monitoring and the open sharing of performance data ▪ M7. Better coordination of rural services with region/express services and rail services ▪ M8. Better co-ordination of appropriate fleets for appropriate routes and services, maximising fleet and boarding capacity ▪ M9. Support wider car demand management and centralised network disruption management policies, measures and operations ▪ M10. Traffic management and enforcement measures (e.g. bus lane cameras, parking patrol) ▪ M11. More efficient network planning via a whole of region approach to provide faster and more reliable journeys ▪ M12. Network-wide communication and monitoring teams to manage and respond to disruption, including the development with partners of a regional control centre
P.5 Improve the attractiveness of bus journey times compared to car journey times *Improve the performance and attractiveness of bus journey times and service reliability compared to car journeys in order to achieve mode shift.*	▪ M13. Faster bus journey times on busier routes, supported by bus priority, faster boardings (through smart ticketing, bus stop rationalisation and faster vehicle access/egress) and express services

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Commentary on Predicted Effects	▪ The policies are generally compatible with the SEA objectives and significant beneficial effects are predicted for accessibility. They may also give rise to some beneficial changes for people accessing and enjoying facilities, services and the wider environment. The policies are also predicted to have some	+

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	beneficial effects for SEA topics of health, material asset, productivity, competitiveness and Innovation, air quality and amenity, climate change mitigation, and cultural heritage.
Proposed Mitigation and Enhancement	▪ Enhancement to bus services and facilities should be designed and operated to ensure that the needs of all users and disabilities groups are accommodated ▪ Setting up an internal KPI to monitor the journey time and punctuality
Monitoring Indicators	▪ Monitoring indicators proposed in the Draft SRBS of relevance to this policy theme include: - Number of bus passenger journeys - Modal share of all journeys - Modal share of all journeys to work - Modal share of all journeys to school - Proportion of adults who use local bus services at least 2 times per week - Proportion of households by public transport journey time (categories/ranges) to hospital, town centre, etc - Proportion of households within 400m of a bus stop, by service frequency - Bus vehicle kilometres - Proportion of adults who feel that local bus services are on time ▪ Monitoring and Tracking indicators proposed in the RTS of relevance to this policy theme include: - MyBus Usage - Bus network coverage and service frequency - Grammes CO_2e per passenger km by mode/vehicle type - Number of Air Quality Management Areas (AQMAs) - Percentage of adults who have attended or visited a cultural event or place in the last 12 months - Employment rate - Percentage of young adults participating in education, training or employment - Healthy Life Expectancy - Mental Wellbeing (Mean WEMWBS score) ▪ Supplementary SEA specific indicators for future consideration in RTS monitoring and evaluation framework include: - A health-based indicator such as reported incidences of respiratory disease or asthma - Concentrations of roadside local air pollutants at key monitoring locations - State of historic sites - Visitor numbers recorded at the region's key cultural heritage sites ▪ Proposed Tracking indicators for future consideration in SRBS: - Number of total vehicle kilometres - Number of total passenger journeys

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	- Toxic air pollutants (e.g NOx, PM10 and PM2.5) emissions estimates from bus transport - Toxic air pollutants emissions estimates (e.g NOx, PM10 and PM2.5) from road transport		

SEA Objective	P.4	P.5	Commentary
1. **Health:** Improve the health of the resident and workplace population, including with respect to physical and mental health and social wellbeing.	+	+	Policies P4 and P5 would improve the reliability and punctuality of bus services and improve the journey time. This will help to reduce the reliance on private modes of transport, such as car. The reduction of vehicular emission would be beneficial to the health. The policies would also enhance the reliability in accessing to services, healthcare facilities, open space and employment with potential mental health and wellbeing benefits for some people.
2. **Accessibility:** Reduce the need to travel and ensure appropriate and affordable access for all to facilities, services, economic opportunities and social activities.	++	++	Policies P4 and P5 would provide a reliable and quicker journey, which are inherently compatible with the SEA objective for accessibility with significant beneficial effects predicted where these polices were implemented effectively and comprehensively.
3. **Material Assets:** Manage, maintain and where possible improve the efficient and effective use of natural resources, land and infrastructure to meet identified needs.	+	+	The policies may have some minor beneficial effects on the SEA objective for material assets. through more efficient bus network and reducing the reliance on private modes of transport, such as car.
4. **Productivity, Competitiveness and Innovation**: Deliver an integrated and efficient transport system to increase economic prosperity, support the growth of key economic sectors and deliver	+	+	The policies are generally compatible with this SEA objective for productivity because they potentially support improved access to employment opportunities. This would have minor beneficial effects on the economy and businesses efficiency.

SEA Objective	P.4	P.5	Commentary
increased and more inclusive employment.			
5. **Air Quality and Amenity**: Tackle poor air quality, reduce concentrations of harmful atmospheric pollutants and minimise exposure to noise and vibration.	+	+	The policies would provide reliable and quicker journeys. These would reduce the reliance on private modes of transport, such as car. and the vehicular emission. Hence, the policies would have minor benefit to the air quality.
6. **Climate Change Mitigation**: Decarbonise the transport sector and support wider efforts to mitigate climate change.	+	+	The policies would provide reliable and quicker journeys. These would reduce the reliance on private modes of transport, such as car. and the vehicular greenhouse emission. Hence, the policies would have minor benefit to the climate change mitigation.
7. **Biodiversity, Geodiversity and Soil:** Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by protecting green infrastructure.	0	0	Policies P4 and P5 are predicted to have the potential for indirect beneficial effects on some aspects of this SEA objective where they contribute to reduced traffic emissions although effects are not predicted to be significant.
8. **Water, Flood Risk and Resilience:** Conserve, protect and enhance water environments, water quality and water resources, whilst adapting to climate change and reducing flood risks.	0	0	Implementation of the polices are generally not predicted to have significant effects on water resources and flooding

SEA Objective	P.4	P.5	Commentary
9. **Cultural Heritage:** Conserve, protect and enhance the historic environment and cultural assets.	+	+	There is some potential that providing a reliable and quicker journey would provide opportunities for people to visit sites of cultural heritage interest more easily and promote the cultural heritage
10. **Landscape:** Protect and enhance the landscape character, townscape character and visual amenity.	0	0	The policies are not predicted to result in significant change to landscape resources or visual amenity.

D.4 Affordable and attractive fares and ticketing

Affordable and attractive fares and ticketing
This policy theme focuses on the improvement of affordability and attractiveness of bus fare and ticketing
SPT proposes three regional bus policies, as listed below, to enable everyone to be able to pay for affordable and attractive fares and ticketing.

Bus Policy	Relevant Measures
P6. Improve the affordability of bus fares, especially for people living in poverty, disadvantaged communities and rural or remote communities. *Improve the affordability of fares, especially for those that need it the most.*	▪ M14. Concessionary / discounted fares prioritised for groups most in need, progressing towards overall fare reductions for all ▪
P7. Improve the attractiveness of bus fares compared to the cost of motoring *Improve the competitiveness of bus fares with those of other modes and parking charges.*	▪ M15. Automatic fare capping for single and multi-journey (ensuring best fare is applied for the actual journey made)
P8. Ensure that bus fares are easy to understand and flexible *Ensure that fares are easy to understand, provide flexibility, and help to ensure users can access the best value fare for their journey.*	▪ M16. Simplified fare structures providing customers with the best value for money ticket for all journeys ▪ M17. Accessible and easy to understand fares information ▪ M18. Consistent and well-communicated approaches to any fare increases

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Commentary on Predicted Effects	▪ These policies are generally compatible with the SEA objectives. Significant beneficial effects are predicted for accessibility (for Policy P6). The policies on affordable and attractive fares and ticketing are also predicted to have some beneficial effects for SEA topics of health (for policy P6), accessibility and productivity. The polices would provide opportunities for people to access and enjoy facilities, services and the wider environment.	+
Proposed Mitigation and Enhancement	▪ Cost modelling will provide insight into fare options potential, and it may be possible to rationalise / better determine the scale of options that are deliverable. For targeted products modelling can apply fare reductions to a subset of the population, for example based on local demographic data.	
Monitoring Indicators	▪ Monitoring indicators proposed in the Draft SRBS of relevance to this policy theme include: - Number of bus passenger journeys - Modal share of all journeys - Modal share of all journeys to work - Modal share of all journeys to school - Proportion of adults who use local bus services at least 2 times per week - Proportion of households by public transport journey time (categories/ranges) to hospital, town centre, etc - Transport components of retail prices index - Bus vehicle kilometres - Concessionary Card Take up - Proportion of adults who feel that local bus fares are good value - Proportion of adults who feel that it is simple deciding the type of ticket I need on local bus services ▪ Monitoring and Tracking indicators proposed in the RTS of relevance to this policy theme include: - Affordability of public transport fares - MyBus Usage - Employment rate - Percentage of young adults participating in education, training or employment ▪ Proposed Tracking indicators for future consideration in SRBS: - Number of total vehicle kilometres - Number of total passenger journeys	

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SEA Objective	P.6	P.7	P.8	Commentary
1. **Health:** Improve the health of the resident and workplace population, including with respect to physical and mental health and social wellbeing.	+	0	0	P6: Affordable transportation can make it easier for people to attend medical appointments, access preventive care, and receive timely treatments. This would have benefits to the SA objective. P7 and P8: Implementation of the policies is generally not predicted to have significant effects on this SA objective.
2. **Accessibility:** Reduce the need to travel and ensure appropriate and affordable access for all to facilities, services, economic opportunities and social activities.	++	+	+	P6: The policy would improve the affordability of bus fares, especially for people living in poverty, disadvantaged communities and rural or remote communities. This would have significant improvement to accessibility for vulnerable group P7 and P8: These policies are inherently compatible with the SEA objective for accessibility with minor beneficial effects predicted where these polices are implemented as stated.
3. **Material Assets:** Manage, maintain and where possible improve the efficient and effective use of natural resources, land and infrastructure to meet identified needs.	0	0	0	Implementation of the policy is generally not predicted to have significant effects on this SA objective.
4. **Productivity, Competitiveness and Innovation**: Deliver an integrated and efficient transport system to increase economic prosperity, support the growth of key economic sectors and deliver increased and more inclusive employment.	+	+	+	The policies for affordable and attractive fares and ticketing are generally compatible with the SEA objective for productivity because they potentially support improved access to employment opportunities and improved physical access for all. Affordable bus fee can improve the quality of life by providing reliable and efficient travel options. This can make cities more attractive places to live and work, enhancing their competitiveness in attracting businesses and talent.
5. **Air Quality and Amenity**: Tackle poor air quality, reduce concentrations of harmful atmospheric pollutants and minimise exposure to noise and vibration.	0	0	0	Implementation of the policy is generally not predicted to have significant effects on this SA objective.

SEA Objective	P.6	P.7	P.8	Commentary
6. **Climate Change Mitigation**: Decarbonise the transport sector and support wider efforts to mitigate climate change.	0	0	0	Implementation of the policy is generally not predicted to have significant effects on this SA objective.
7. **Biodiversity, Geodiversity and Soil:** Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by protecting green infrastructure.	0	0	0	Implementation of the policy is generally not predicted to have significant effects on this SA objective.
8. **Water, Flood Risk and Resilience:** Conserve, protect and enhance water environments, water quality and water resources, whilst adapting to climate change and reducing flood risks.	0	0	0	Implementation of the polices are generally not predicted to have significant effects on water resources and flooding
9. **Cultural Heritage:** Conserve, protect and enhance the historic environment and cultural assets.	0	0	0	Implementation of the policy is generally not predicted to have significant effects on this SA objective.
10. **Landscape:** Protect and enhance the landscape character, townscape character and visual amenity.	0	0	0	The policies are not predicted to result in significant change to landscape resources or visual amenity. There is some potential on key corridors where traffic levels were reduced for minor beneficial effects on visual amenity for some receptors.

D.5   Accessible and Safer Bus Journeys

Accessible and Safer Bus Journeys	
This policy theme focuses on providing a safe and secure bus network	
SPT proposes one regional bus policy, as listed below, to provide a safe and secure environment to passenger.	
Bus Policy	**Relevant Measures**
P9. Improve the accessibility and safety of bus travel for all passengers. *To improve the perceptions of personal safety and security related to using buses:* • *Ensure that safety by design is promoted at all stages of the development, maintenance or improvement of new and existing bus services, networks and facilities.* • *Ensure that consultation with equality and welfare groups is made at all stages of the design and operational process and is maintained at regular intervals.*	▪ M19. Accessibility and equality training for bus drivers, bus station staff and bus planning teams ▪ M20. Inclusive and accessible travel information, including audio-visual information on buses ▪ M21. Passenger assistance services on buses, aiming for a single, network-wide approach ▪ M22. Accessible vehicles, bus stops and bus stations, and routes to bus stops and stations ▪ M23. CCTV on buses and at bus stations ▪ M24. High quality, well-lit and maintained bus stops

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Commentary on Predicted Effects	▪ The policy is generally compatible with the SEA objectives and in a number of cases significant beneficial effects are predicted including for health and accessibility. The policy is also predicted to have some beneficial effects for SEA topics of productivity. It may also give rise to some beneficial changes for people accessing and enjoying facilities, services and the wider environment.	+
Proposed Mitigation and Enhancement	▪ New transport infrastructure (e.g. bus stops and bus stations) should be developed wherever possible through re-use and reallocation of existing transport assets / road space and where new facilities, or infrastructure are required these should be designed and constructed following circular economy principles to minimise use of primary resources ▪ Any new transport infrastructure (e.g. bus stops and bus stations) would be subject to appropriate level of environmental assessment and consenting, this would involve development of designs, mitigation measures and sensitive construction environmental management to ensure that wherever possible significant adverse environmental effects were avoided.	

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Monitoring Indicators	Monitoring indicators proposed in the Draft SRBS of relevance to this policy theme include: - Proportion of households within 400m of a bus stop, by service frequency - Proportion of adults who feel personally safe and secure on the bus (day and evening) - Proportion of bus stops with a high access kerb	

SEA Objective	P.9	Commentary
1. **Health:** Improve the health of the resident and workplace population, including with respect to physical and mental health and social wellbeing.	++	The policy for accessible and safer bus Journeys are inherently compatible with the SEA objective for health with significant beneficial effects predicted by providing a safe and secure bus network.
2. **Accessibility:** Reduce the need to travel and ensure appropriate and affordable access for all to facilities, services, economic opportunities and social activities.	++	The policy will ensure that consultation with equality and welfare groups is made at all stages of the design and operational process and is maintained at regular intervals. This would have benefits to the SA objective. It is supported by measure to provide high quality infrastructure and vehicles that can be used by all passengers, particularly for people with disabilities.
3. **Material Assets:** Manage, maintain and where possible improve the efficient and effective use of natural resources, land and infrastructure to meet identified needs.	0	Implementation of the policy is generally not predicted to have significant effects on this SA objective.
4. **Productivity, Competitiveness and Innovation**: Deliver an integrated and efficient transport system to increase economic prosperity, support the growth of key economic sectors and deliver increased and more inclusive employment.	+	Implementation of the policy would improve the accessibility and safety of bus travel for all passengers. More people, including those with disabilities, the elderly, and low-income individuals, can use public transportation. This increases their access to jobs, education, and other essential services, thereby increase overall productivity.
5. **Air Quality and Amenity**: Tackle poor air quality, reduce concentrations of harmful	0	Implementation of the policy is generally not predicted to have significant effects on this SA objective.

SEA Objective	P.9	Commentary
atmospheric pollutants and minimise exposure to noise and vibration.		
6. **Climate Change Mitigation**: Decarbonise the transport sector and support wider efforts to mitigate climate change.	0	Implementation of the policy is generally not predicted to have significant effects on this SA objective.
7. **Biodiversity, Geodiversity and Soil:** Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by protecting green infrastructure.	0	Implementation of the policy is generally not predicted to have significant effects on this SA objective.
8. **Water, Flood Risk and Resilience:** Conserve, protect and enhance water environments, water quality and water resources, whilst adapting to climate change and reducing flood risks.	0	Implementation of the polices are generally not predicted to have significant effects on water resources and flooding
9. **Cultural Heritage:** Conserve, protect and enhance the historic environment and cultural assets.	0	Implementation of the polices are generally not predicted to have significant effects on water resources and flooding
10. **Landscape:** Protect and enhance the landscape character, townscape character and visual amenity.	0	Implementation of the polices are generally not predicted to have significant effects on water resources and flooding

D.6   A Trusted and Recognisable Bus Network

A Trusted and recognisable bus network	
This policy theme focuses on delivering a bus/public transport network which is more recognisable, legible and attractive to potential users	
SPT proposes four regional bus policies, as listed below, to help users to know what to expect from the service that has consistent quality standards.	
Bus Policy	**Relevant Measures**
P10. Develop a consistent network identity across the region ▪ *Develop a positive, recognisable and trusted bus network identity across the region, delivering consistency across information, ticketing, interchanges and stops, vehicles, and other key network assets* ▪ *Explore opportunities to strengthen this network identity with other sustainable transport modes.*	▪ M25. A strong network-wide identity across key assets, services and information (e.g. vehicles, stops and stations, online and app services)
P11. Ensure passengers receive a consistent, high quality standard of customer service across the region ▪ *Develop a region-wide Customer Charter, outlining the quality that can be expected by users of the bus network.* ▪ *Develop a common customer support and feedback process for users across the region, delivering a consistent, accessible and inclusive level of service to bus users.*	▪ M26. A network-wide Customer Charter ▪ M27. Network-wide passenger engagement and monitoring of passenger satisfaction
P12. Develop and ensure a consistent approach to bus service changes across the region that minimises disruption to passengers ▪ *Improve the stability of the bus network by establishing minimum standards and protocols relating to scale, communication and frequency for any changes to bus services, to reduce impact on users, and to ensure users and key stakeholders are suitably informed.*	▪ M28. Restrict significant service changes to well-defined dates each year (like trains) with a clearly reported rationale for change
P13. Develop and ensure high quality and consistent driver standards across the region. ▪ *Improve and standardise driver training regimes and the quality standards of existing drivers to ensure a more positive customer interaction experience*	▪ M29. Consistent, high quality customer service provided by drivers and other customer-facing staff (e.g. travel centres, contact centres, customer services)

A Trusted and recognisable bus network
This policy theme focuses on delivering a bus/public transport network which is more recognisable, legible and attractive to potential users
SPT proposes four regional bus policies, as listed below, to help users to know what to expect from the service that has consistent quality standards.

Bus Policy	Relevant Measures
▪ *Review policies related to wider driver responsibilities, to ensure the bus service and network as a whole is being suitably represented*	

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Commentary on Predicted Effects	▪ The policies are predicted to have some beneficial effects for SEA topics of health (for Policy P13), accessibility and productivity. Ensure high quality and consistent driver standards will ensure delivering a consistently safe and accessible network for all users.	+
Proposed Mitigation and Enhancement	▪ Not Anticipated.	
Monitoring Indicators	▪ Monitoring indicators proposed in the Draft SRBS of relevance to this policy theme include: - Number of bus passenger journeys - Modal share of all journeys - Modal share of all journeys to work - Modal share of journeys to school - Proportion of adults who use local bus services at least 2 times per week - Proportion of households by public transport journey time (categories/ranges) to hospital, town centre, etc - Proportion of adults who feel that local bus services are stable and are not regularly changing - Bus vehicle kilometres - Proportion of adults who are satisfied with local bus facilities - Proportion of adults who feel that it is easy to change from local bus services to other forms of transport - Proportion of adults who feel personally safe and secure on the bus (day and evening) ▪ Monitoring and Tracking indicators proposed in the RTS of relevance to this policy theme include: - Employment Rate - Percentage of young adults participating in education, training or employment	

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	■ Proposed Tracking indicators for future consideration in SRBS:
	    - Number of total vehicle kilometres
	    - Number of total passenger journeys				

SEA Objective	P.10	P.11	P.12	P.13	Commentary
1. **Health:** Improve the health of the resident and workplace population, including with respect to physical and mental health and social wellbeing.	0	0	0	+	P10: A consistent network identity for buses can have several indirect health benefits although effects are not predicted to be significant. P11: This policy is not predicted to result in significant change to the SA objective. P12: This policy is not predicted to result in significant change to the SA objective. P13: This policy would provide a high-quality customer service. This will ensure delivering a consistently safe and accessible network for all users. Hence, it would have minor benefits to health.
2. **Accessibility:** Reduce the need to travel and ensure appropriate and affordable access for all to facilities, services, economic opportunities and social activities.	+	+	+	+	The policies are compatible with the SEA objective for accessibility with minor beneficial effects predicted where these polices are implemented effectively and comprehensively.
3. **Material Assets:** Manage, maintain and where possible improve the efficient and effective use of natural resources, land and infrastructure to meet identified needs.	0	0	0	0	The policies are not predicted to result in significant change to this SEA Objective.

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SEA Objective	P.10	P.11	P.12	P.13	Commentary
4. **Productivity, Competitiveness and Innovation**: Deliver an integrated and efficient transport system to increase economic prosperity, support the growth of key economic sectors and deliver increased and more inclusive employment.	+	+	+	+	The policies can help to develop a more efficient bus network. Hence, this would have minor benefit to the productivity.
5. **Air Quality and Amenity**: Tackle poor air quality, reduce concentrations of harmful atmospheric pollutants and minimise exposure to noise and vibration.	0	0	0	0	The policies are not predicted to result in significant change to this SEA Objective.
6. **Climate Change Mitigation**: Decarbonise the transport sector and support wider efforts to mitigate climate change.	0	0	0	0	The Policies are not predicted to result in significant change to this SEA Objective.
7. **Biodiversity, Geodiversity and Soil:** Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by protecting green infrastructure.	0	0	0	0	The policies are not predicted to result in significant change to this SEA Objective.
8. **Water, Flood Risk and Resilience:** Conserve, protect and enhance water environments, water quality and water resources,	0	0	0	0	The policies are not predicted to result in significant change to this SEA Objective.

SEA Objective	P.10	P.11	P.12	P.13	Commentary
whilst adapting to climate change and reducing flood risks.					
9. **Cultural Heritage:** Conserve, protect and enhance the historic environment and cultural assets.	0	0	0	0	The policies are not predicted to result in significant change to this SEA Objective.
10. **Landscape:** Protect and enhance the landscape character, townscape character and visual amenity.	0	0	0	0	The policies are not predicted to result in significant change to this SEA Objective.

D.7 A seamless and integrated network

A seamless and integrated network	
This policy theme focuses on ticketing system, interchange and bus stops quality, and provision of information	
SPT proposes three regional bus policies, as listed below, to simplify the ticketing structure, enhance the quality of interchange and bus stops and improve information	
Bus Policy	**Relevant Measures**
P14. Develop a smart and integrated ticketing system for the bus network that makes it easy to use bus across the region and supports wider multi-modal integration and MaaS *Ensure ticketing is easy to understand and use, provides flexibility, and helps to guarantee that users can access the best ticketing product for their needs.* *To be consistent with the MaaS policy in the RTS: Develop and facilitate Mobility as a Service in the region, building upon existing opportunities including ZoneCard where appropriate. Ensure MaaS platforms are inter-operable, incorporate regional bus services as part of a multi-modal offer, with cross-regional and national MaaS solutions where appropriate.*	- M30. Smart and cashless ticketing options and simplified product offer - M31. Bus integrated more closely with ferry, rail, Subway, cross-regional routes and the emerging Clyde Metro - networks/services/hub, ticketing and information
P15. Ensure bus stops and interchanges are high quality and located conveniently and efficiently across the region *Enhance the quality and consistency of interchanges and bus stop facilities to increase the attractiveness of travel by bus and ensure that bus services are accessible to all.* *Explore new and improved locations for interchange and mobility hubs alongside bus stop rationalisation, to enhance interchange options while ensuring the delivery of a bus network that is efficient, and easy to understand and use.*	- M32. High quality passenger waiting facilities (stops/hubs/stations) across the region - M33. Integrate waiting facilities with active, accessibility and micro-mobility modes, and with wider mobility hub and place-making proposals in appropriate locations - M34. Review, improve and rationalise waiting facility infrastructure and locations to provide a more seamless, welcoming and efficient network.
P16. Ensure bus travel information is provided consistently as high quality, accurate and integrated for all bus users across the region *Deliver consistently high-quality, accurate and accessible information to bus users across the region, before during and after travel.*	- M35. Accurate and reliable real time travel information across the region - M36. Open and transparent performance monitoring of services to assess performance and target improvements.

A seamless and integrated network
This policy theme focuses on ticketing system, interchange and bus stops quality, and provision of information
SPT proposes three regional bus policies, as listed below, to simplify the ticketing structure, enhance the quality of interchange and bus stops and improve information

Bus Policy	Relevant Measures
▪ *Ensure that all users have access to the information they need to confidently and safely travel on the bus network.* ▪ *Integrate information across region on the bus network, between operators, and with other modes, to provide users with a one-stop-shop experience.*	

Environmental Assessment of Policy / Package		
Commentary on Predicted Effects	▪ The policies are generally compatible with the SEA objectives and significant beneficial effects are predicted for accessibility (for Policy P15). The policies are also predicted to have some beneficial effects for SEA topics of health, accessibility (for Policies P14 and P16), material asset (for Policy P15), productivity, competitiveness and Innovation, air quality and amenity (for Policy P15), climate change mitigation (for Policy P15), biodiversity (for Policy P15) and cultural heritage (for Policy P15).	+
Proposed Mitigation and Enhancement	▪ New transport infrastructure should be developed wherever possible through re-use and reallocation of existing transport assets / road space and where new facilities, or infrastructure are required these should be designed and constructed following circular economy principles to minimise use of primary resources ▪ Where materials are required to develop transport infrastructure then priority should be given to the use of secondary, recycled and remanufactured materials and products before use of non-renewable resources ▪ Any new transport infrastructure would be subject to appropriate level of environmental assessment and consenting, this would involve development of designs, mitigation measures and sensitive construction environmental management to ensure that wherever possible significant adverse environmental effects were avoided. ▪ Information should be easy to understand, using simple language and visual representation of changes where possible. It should also be available in accessible formats, for example included in audio and visual announcements.	
Monitoring Indicators	▪ Monitoring and tracking indicators proposed in the Draft SRBS of relevance to this policy theme include: - Proportion of adults who are satisfied with local public transport - Proportion of adults who feel personally safe and secure on the bus (day and evening) - Proportion of adults who feel that it is easy to change from local bus services to other forms of transport	

Environmental Assessment of Policy / Package
- Proportion of adults who feel that it is simple deciding the type of ticket I need on local bus services - Number of bus passenger journeys - Modal share of all journeys - Modal share of all journeys to work - Modal share of journeys to school - Bus vehicle kilometres ■ Monitoring and Tracking indicators proposed in the RTS of relevance to this policy theme include: - MyBus Usage - Employment rate - Percentage of young adults participating in education, training or employment - Natural Capital Asset Index - Percentage of adults who have attended or visited a cultural event or place in the last 12 months ■ Supplementary SEA specific indicators for future consideration in RTS monitoring and evaluation framework include: - Condition of protected nature sites - Area of habitat delivered which provides biodiversity net gain - State of historic sites - Visitor numbers recorded at the region's key cultural heritage sites - Indicator on quality of public realm / built heritage ■ Proposed Tracking indicators for future consideration in SRBS: - Number of total vehicle kilometres - Number of total passenger journeys

SEA Objective	P.14	P.15	P.16	Commentary
1. **Health:** Improve the health of the resident and workplace population, including with respect to physical and mental health and social wellbeing.	+	+	+	P14: The policy on providing a smart ticketing system can simplify the process of purchasing and using tickets, making public transportation more user-friendly. This can reduce the stress and anxiety associated with navigating complex fare systems. In addition. P15: The policy would provide high quality passenger waiting facilities, which is beneficial to the safety of the passenger.

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SEA Objective	P.14	P.15	P.16	Commentary
				P16: The policy on providing consistently high-quality, accurate and accessible information would help the passenger to travel more safely. This would have minor benefits to the health.
2. **Accessibility:** Reduce the need to travel and ensure appropriate and affordable access for all to facilities, services, economic opportunities and social activities.	+	++	+	P14: The promotion of MaaS has a potential major role in pulling together the various improvements in fares, ticketing, and wider transport integration in order to provide users with an easy to use one-stop-shop offering for transport. This would enhance the accessibility and have minor benefits to the SA objective. P15: The policy would ensure the bus stop and interchange are accessible to all. It inherently compatible with the SEA objective for accessibility with significant beneficial effects predicted where these polices are implemented effectively and comprehensively. P 16: The policy on providing consistently high-quality, accurate and accessible information would help the passenger to travel more confidently. This would have minor benefits to the SA objective.
3. **Material Assets:** Manage, maintain and where possible improve the efficient and effective use of natural resources, land and infrastructure to meet identified needs.	0	+	0	P14 and 16: Implementation of the policies is generally not predicted to have significant effects on this SA objective. P15: The policy requires bus rationalisation, to enhance interchange options while ensuring the delivery of a bus network that is efficient, and easy to understand and use
4. **Productivity, Competitiveness and Innovation**: Deliver an integrated and efficient transport system to increase economic prosperity, support the growth of key economic sectors and deliver increased and more inclusive employment.	+	+	+	The policies would support improved access to employment opportunities and improved physical access for all. This would have minor beneficial effects on the economy and businesses efficiency.

SEA Objective	P.14	P.15	P.16	Commentary
5. **Air Quality and Amenity**: Tackle poor air quality, reduce concentrations of harmful atmospheric pollutants and minimise exposure to noise and vibration.	0	+	0	P14 and P16: Implementation of the policies is generally not predicted to have significant effects on this SA objective. P15: The policy would ensure that bus stops and interchanges are high quality and located conveniently and efficiently across the region. This help to reduce the reliance on private modes of transport, such as car. This would reduce vehicular emissions, which has minor benefit to the air quality.
6. **Climate Change Mitigation**: Decarbonise the transport sector and support wider efforts to mitigate climate change.	0	+	0	P14 and P16 The policies would encourage public transport. It may have benefit to climate change through reducing the greenhouse emission. However, it is uncertain that the options would lead to a substantial modal shift or a subsequent material significant impact on traffic levels and emissions. P15: The policy would ensure that bus stops and interchanges are high quality and located conveniently and efficiently across the region. This help to reduce the reliance on private modes of transport, such as car. This would reduce greenhouse gas emissions, which has minor benefit to the climate change mitigation.
7. **Biodiversity, Geodiversity and Soil:** Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by protecting green infrastructure.	0	+	0	P14 and P16 Implementation of the policies is generally not predicted to have significant effects on this SA objective. P15: The policies are predicted to have the potential for minor beneficial effects on some aspects of this SEA objective where they contribute to reduced traffic emissions. However, it is assuming that appropriate level of environmental assessment is undertaken, and key mitigation measures implemented for the development of interchanges and mobility hubs, these effects are predicted to be acceptable at this stage
8. **Water, Flood Risk and Resilience:** Conserve, protect and enhance water environments, water quality and water resources, whilst adapting to climate change and reducing flood risks.	0	0	0	Implementation of the policies is generally not predicted to have significant effects on this SA objective.

SEA Objective	P.14	P.15	P.16	Commentary
9. **Cultural Heritage:** Conserve, protect and enhance the historic environment and cultural assets.	0	+	0	P14 and P16: The policies are predicted to have the potential for indirect beneficial effects on some aspects of this SEA objective where they contribute to reduced traffic emissions although the effects are not predicted to be significant. P15 requires bus stop rationalisation and locate conveniently and efficiently across the region. This would help attracting the visitors to access the heritage site.
10. **Landscape:** Protect and enhance the landscape character, townscape character and visual amenity.	0	?	0	P14, P16 Implementation of the policies is generally not predicted to have significant effects on this SA objective. P15: It should be noted that interchange and mobility hubs would have some potential for adverse landscape impact. This would have uncertain effect on this SA objective.

D.8 A more environmentally sustainable, resilient and adaptable bus network and fleet

A more environmentally sustainable, resilient and adaptable bus network and fleet *This policy theme focuses on providing a high quality and sustainable bus network and fleet* *SPT proposes three regional bus policies, as listed below, to deliver a consistent and viable vehicle quality.*	
Bus Policy	**Relevant Measures**
P17. Transition the regional bus fleet to zero emission vehicles. ▪ *Drive the decarbonisation of the bus fleet, to support ambitions for the region to reduce emissions, improve air quality and minimise climate change impacts.* ▪ *Develop a consistent minimum standard of engine and age of vehicle to deliver decarbonisation, air quality and reliability benefits across the network.*	▪ M37. High quality bus fleet that is transitioning fully to 100% zero emission vehicles in line with Scottish Government targets
P18. Ensure high-quality and well-maintained vehicles across the region ▪ *Ensure consistently high-quality vehicles are operating in the region, to deliver attractive and accessible services for users.*	▪ M38. Efficient, resilient and well-maintained depot network

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A more environmentally sustainable, resilient and adaptable bus network and fleet
This policy theme focuses on providing a high quality and sustainable bus network and fleet
SPT proposes three regional bus policies, as listed below, to deliver a consistent and viable vehicle quality.

Bus Policy	Relevant Measures
▪ *Ensure that vehicles are well maintained, to minimise reliability issues for the delivery of services.*	
P19. Ensure the regional bus fleet supports a resilient and operationally efficient bus network. ▪ *Ensure the number and capacity of vehicles is managed across the network, to ensure demand can met for both fixed-route and on-demand forms of passenger transport and that there is resilience to deliver services. This includes to deliver an improved level of service for the network.* ▪ *Make best use of existing assets and consider delivery models that facilitate making best use of vehicles across areas such as healthcare, education and community transport.* ▪ *Ensure the scale, facilities and management of depots support ambitions for the vehicle fleet in the region, including decarbonisation needs, and the effective and efficient provision of bus services across the network.*	▪ M39. A road and bus infrastructure network that is resilient and adaptable to the effects of climate change ▪ M40. Resilient and skilled-up workforce ▪ M41. EV enabled bus depot facilities and supporting infrastructure that are future proofed to facilitate the conversion of the bus fleet to zero emissions

Environmental Assessment of Policy / Package		
Commentary on Predicted Effects	▪ The policies are generally compatible with the SEA objectives and in a number of cases significant beneficial effects are predicted including for Health (for Policy P17) accessibility (for Policies P18 and P19), air quality (for Policies P17 and P19), and climate change (for Policies P17 and P19). ▪ The policies are also predicted to have some beneficial effects for SEA topics of health, material asset (for Policy P18), productivity, air quality (for Policy P18), climate change (for Policy P18), biodiversity (for Policies P17 and P18), Water, Flood Risk and Resilience (for Policy P19) and cultural heritage. ▪ The policies are also predicted to have uncertain effects for SEA topics of material asset (for Policy P17 and P19), biodiversity (for Policy P19) and landscape (for Policy P19) due to new infrastructure development and vehicles.	+

Environmental Assessment of Policy / Package	
Proposed Mitigation and Enhancement	▪ Bus operators should be supported to achieve rapid decarbonisation of existing vehicle fleets. ▪ Where new electric vehicle (EV) charging infrastructure is developed, opportunities should be taken to provide as wide as possible access for local communities and other users. ▪ Enhancement to bus services and facilities should be designed and operated to ensure that the needs of all users and disabilities groups are accommodated. ▪ The need to consider funding and delivery models to deliver on these targets for a high-quality and low-and zero-carbon bus fleet. ▪ Transition to electric vehicles should be supported with circular economy activities and initiatives to support the re-use, re-manufacture and recycling of key materials such as battery components ▪ Any new transport infrastructure would be subject to appropriate level of environmental assessment and consenting, this would involve development of designs, mitigation measures and sensitive construction environmental management to ensure that wherever possible significant adverse environmental effects were avoided.

Monitoring Indicators	▪ Monitoring indicators proposed in the Draft SRBS of relevance to this policy theme include:
	  - CO2e emissions estimates from road transport
	
	▪ Monitoring and Tracking indicators proposed in the RTS of relevance to this policy theme include:
	  - Employment rate
	  - Percentage of young adults participating in education, training or employment
	  - Natural Capital Asset Index
	  - Healthy Life Expectancy
	  - Mental Wellbeing (Mean WEMWBS score)
	
	▪ Supplementary SEA specific indicators for future consideration in RTS monitoring and evaluation framework include:
	  - A health-based indicator such as reported incidences of respiratory disease or asthma
	  - Concentrations of roadside local air pollutants at key monitoring locations
	  - State of historic sites
	  - Visitor numbers recorded at the region's key cultural heritage sites
	  - Indicator on quality of public realm / built heritage
	  - Condition of protected nature sites
	  - Area of habitat delivered which provides biodiversity net gain
	
	▪ Proposed Tracking indicators for future consideration in SRBS
	  - Circular economy indicator(s) for materials used in bus transport infrastructure and for vehicle/battery recovery and re-use
	  - Toxic air pollutants (e.g NOx, PM10 and PM2.5) emissions estimates from bus transport
	  - Toxic air pollutants emissions estimates (e.g NOx, PM10 and PM2.5) from road transport

Environmental Assessment of Policy / Package		
	- CO2e emissions estimates from bus transport - Proportion of buses that are ULEZ / zero emission vehicles - Number of bus facilities at risk of flooding - Number of bus route affected by flooding - Number and type of annual flood incidences affecting bus services		

SEA Objective	P.17	P.18	P.19	Commentary
1. **Health:** Improve the health of the resident and workplace population, including with respect to physical and mental health and social wellbeing.	++	+	+	P17: The policy is predicted to be supportive of the SEA objective on health, in particular through reducing the negative impacts of transport on human health in terms of pollution and poor air quality. P18: The Policy would ensure a safety and security environment in bus. P19. The policy ensures the depots support the ambitions for the vehicle fleet in the region as required in Policies 17 and 18. In addition, the policy will make best use of existing assets and consider delivery models that facilitate making best use of vehicles across areas including healthcare.
2. **Accessibility:** Reduce the need to travel and ensure appropriate and affordable access for all to facilities, services, economic opportunities and social activities.	0	++	++	P17 As worded, the policy to decarbonise vehicles and improve air quality are not predicted to have significant effects on this SEA objective for accessibility. P18: The policy requires high-quality vehicles to deliver attractive and accessible services for users, which is compatible to the SA objective: P19: The policy will make best use of existing assets and consider delivery models that facilitate making best use of vehicles across areas such as healthcare, education and community transport, which is comparable to the SA objective.
3. **Material Assets:** Manage, maintain and where possible improve the efficient and effective	?	+	?	P17: The policy is not predicted to have significant beneficial effects on the SEA objective for material assets although vehicle efficiencies and upgrades have the potential to lower overall use of energy and particularly fossil fuels. Some effects are uncertain, particularly

SEA Objective	P.17	P.18	P.19	Commentary
use of natural resources, land and infrastructure to meet identified needs.				where new transport infrastructure and vehicles would involve a demand on new raw materials and electrical components. P18: The policy would have some minor beneficial effects on the SEA objective for material assets through delivering attractive and accessible services for users. This can reduce the reliance on private modes of transport, such as car. P19: The Policy aims to increase the adaptability and resilience of transport infrastructure to adverse weather effects and effects of climate change and thus would also have beneficial effects. The policy also ensures the number and capacity of vehicles is managed across the network, to ensure demand can met for both fixed-route and on-demand forms of passenger transport. It also makes best use of existing assets and consider delivery models that facilitate making best use of vehicles across areas. However, as of Policy P17 some effects are uncertain, particularly where EV enabled bus depot facilities and supporting infrastructure would involve a demand on new raw materials and electrical components.
4. **Productivity, Competitiveness and Innovation**: Deliver an integrated and efficient transport system to increase economic prosperity, support the growth of key economic sectors and deliver increased and more inclusive employment.	+	+	+	P17: Decarbonisation would also promote investment and demand in low carbon industries and energy generation and in the long term help businesses avoid the increasing costs of fossil fuels) P18: The policy would support improved access to employment opportunities and improved physical access for all. This would have minor beneficial effects on the economy and businesses efficiency. P19: The investment to meet carbonisation needs required in P17, and to provide the effective and efficient provision of bus services across the network would help on the employment opportunities for skilled worker and the business. Besides, there are some predicted minor beneficial effects to the economy from improving the resilience of the road network. Overall, Hence, the policy would have minor positive benefit to the SA objective.
5. **Air Quality and Amenity**: Tackle poor air quality, reduce concentrations of harmful atmospheric pollutants and	++	+	++	P17: The policy would support decarbonise vehicles and improve air quality are inherently supportive of the SEA objective for air quality and significant beneficial effects would be predicted where measures are delivered comprehensively.

SEA Objective	P.17	P.18	P.19	Commentary
minimise exposure to noise and vibration.				P18: The policy would support high quality and well maintained (i.e. lower emission) vehicles to operate in the region. This would have minor benefit the air quality P19: The policy ensures the scale, facilities and management of depots support ambitions for the vehicle fleet in the region, including decarbonisation needs as required in P17, and the effective and efficient provision of bus services across the network. This would have benefit to the air quality
6. **Climate Change Mitigation**: Decarbonise the transport sector and support wider efforts to mitigate climate change.	++	+	++	P17: The policy would support decarbonise vehicles and improve air quality are inherently supportive of the SEA objective for climate change mitigation and significant beneficial effects would be predicted where measures are delivered comprehensively. P18: The policy would support high quality (i.e. high fuel efficiency) vehicles to operate in the region. This would have minor benefit to the climate change mitigation P19: The policy ensures the scale, facilities and management of depots support ambitions for the vehicle fleet in the region, including decarbonisation needs as required in P17, and the effective and efficient provision of bus services across the network. This would have benefit to the climate change mitigation
7. **Biodiversity, Geodiversity and Soil:** Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by protecting green infrastructure.	+	+	?	P17 and 18: The polices are predicted to have the potential for indirect beneficial effects on some aspects of this SEA objectives where they contribute to reduced traffic emissions. P19: The policy would ensure the scale, facilities and management of depots support ambitions for the vehicle fleet in the region, including decarbonisation needs. This would have the potential for indirect beneficial effects on some aspects of this SEA objectives where they contribute to reduced traffic emissions. It should be noted that depot development has some potential for adverse natural heritage effects from changing in land use, habitat loss etc. This would have uncertain effect on this SA objective

SEA Objective	P.17	P.18	P.19	Commentary
8. **Water, Flood Risk and Resilience:** Conserve, protect and enhance water environments, water quality and water resources, whilst adapting to climate change and reducing flood risks.	0	0	+	P17 and 18: Implementation of the policy is generally not predicted to have significant effects on this SA objective. P19: The policy is supported by a road and bus infrastructure network that is resilient and adaptable to the effects of climate change. Hence, this would have minor benefit to the SA objective. However, the policy may involve some new transport infrastructure, such as the bus depots, bus stations, bus interchanges and mobility hubs. It may have some potential for adverse effects on the water environment particularly during their construction. However, assuming the appropriate level of environmental assessment is undertaken, and key mitigation measures implemented, these effects are not predicted to be significant adverse at this stage
9. **Cultural Heritage:** Conserve, protect and enhance the historic environment and cultural assets.	+	+	+	The policies would improve air quality, which would have indirect benefit to cultural heritage. For policy P19, where new infrastructure (e.g. bus depots, bus stations, bus interchanges and mobility hubs) to be developed on greenfield or previously undeveloped land, the potential for impacts on archaeological resources would need to be considered further as proposals were designed and assessed. It has been assumed in this SEA that mitigation principles to avoid, reduce and mitigate such adverse effects would be committed to in the later stages of Strategy delivery.
10. **Landscape:** Protect and enhance the landscape character, townscape character and visual amenity.	0	0	?	P17 and P18: Implementation of the policy is generally not predicted to have significant effects on this SA objective. P19: It should be noted that depot development has some potential for adverse landscape impact. This would have uncertain effect on this SA objective.

Appendix E   Environmental Appraisal of SRBS Delivery Options

E.1   Introduction

E.1.1   This appendix supports **Section 5.4** of the Environmental Report and presents the findings of the environmental and climate appraisals of each individual delivery option. This appraisal was undertaken in line with Scottish Transport Appraisal (STAG) guidance.

E.1.2   Further information on the process of transport option development and appraisal is set out in the options appraisal report (Stantec and Systra, 2024) which is available on SPT's website https://www.spt.co.uk/about-us/what-we-are-doing/regional-transport-strategy/bus-strategy/

E.1.3   To tally with the assessment in the Option Appraisal Report, the assessment criteria adopted in option appraisal has been adopted here and is shown below in the key diagram.

Key (adopted from STAG assessment in the Option Appraisal Report)

Major beneficial effect	✓✓✓	Major adverse effect	✗✗✗
Moderate beneficial effect	✓✓	Moderate adverse effect	✗✗
Minor beneficial effect	✓	Minor adverse effect	✗
Neutral / negligible effect	0		

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Option	Environment		Climate	
	Score	Commentary	Score	Commentary
Business as Usual	0	A number of routes in the SPT region are now operating with zero emission fleets, directly helping to reduce tailpipe emissions from the fleet. For example, 200 buses operated in Glasgow by First are zero emission (as of July 2023). McGills has invested £55m in total in electric buses and has the largest share of electric buses in its fleet compared to any other Scottish bus company. Electric buses are also in use across East, North and South Ayrshire. The LEZ in place for Glasgow is expected to help ensure that bus fleets entering the LEZ improve their environmental credentials. There is a risk, however, that without a coordinated plan this can result in the more polluting vehicles in operators' fleets being redeployed to areas outwith the LEZ. Therefore, a regional approach would be of benefit. Environmental impact improvements related to modal shift away from car to bus are expected to be limited under business as usual, as the recent trend of bus network provision and bus use in the SPT region is that of decline overall, as highlighted in the Case for Change. This could continue in a BAU situation. The Scottish Zero Emission Bus Challenge Fund (ScotZEB) is currently closed for future bids since the deadline for applications to Phase 2 closed in September 2023, constraining the ability to deliver zero emission vehicles in the current model and potentially disproportionately impacting the less commercially attractive routes and services.	✓	A number of routes in the SPT region are now operating with zero emission fleets, directly helping to reduce tailpipe emissions from the fleet. For example, 200 buses operated in Glasgow by First are zero emission (as of July 2023). McGills has invested £55m in total in electric buses and has the largest share of electric buses in its fleet compared to any other Scottish bus company. Electric buses are also in use across East, North and South Ayrshire. The LEZ in place for Glasgow is expected to help ensure that bus fleets entering the LEZ improve their environmental credentials. However, other fleets across the region may take longer to decarbonise, in the absence of the LEZ push factor. The Scottish Zero Emission Bus Challenge Fund (ScotZEB) is currently closed for future bids since the deadline for applications to Phase 2 closed in September 2023, constraining the ability to deliver zero emission vehicles in the current model and potentially disproportionately impacting the less commercially attractive routes and services. CO_2 reduction related to modal shift away from car to bus are expected to be limited under business as usual, as the recent trend of bus network provision and bus use in the SPT region is that of decline overall, as highlighted in the Case for Change. This could continue in a BAU situation.
Voluntary Partnership	✓	A voluntary partnership has the potential to enhance the delivery of low- and zero- emission vehicles and co-ordination of their deployment. Similarly, improvements to the bus network to encourage modal shift from car to bus are also possible. However, based on the current voluntary partnership arrangements in the area, initiatives delivered under this	✓	A voluntary partnership has the potential to enhance the delivery of low- and zero- emission vehicles and co-ordination of their deployment. Similarly, improvements to the bus network to encourage modal shift from car to bus are also possible. Driver training for fuel efficient driving and

Option	Environment		Climate	
	Score	Commentary	Score	Commentary
		arrangement are unlikely to generate significant or sustained growth in passenger demand. Should arrangements be enhanced, however, then there may be more scope for this but likely at a lesser scale than BSIP or franchising options which would be more likely to set and deliver more ambitious targets.		on-vehicle feedback systems could also be encouraged through a voluntary partnership.

However, based on the current voluntary partnership arrangements in the area, initiatives delivered under this arrangement are unlikely to generate significant or sustained growth in passenger demand. Should arrangements be enhanced, however, then there may be more scope for this but likely at a lesser scale than BSIP or franchising options which would be more likely to set and enforce more ambitious targets. |
| BSIP | ✓✓ | A statutory partnership arrangement through a BSIP may be more likely to deliver improvements which could deliver modal shift from car to bus as it can underpin more ambitious investment. Especially as growing patronage is of benefit to operators, and BSIP arrangements can be a good avenue to deliver measures such as bus priority. BSIP arrangements may also be more likely to deliver expedited low- and zero-emission fleet improvements as part of quid pro quo arrangements. | ✓✓ | A statutory partnership arrangement through a BSIP may be more likely to deliver improvements which could deliver modal shift from car to bus. Especially as growing patronage is of benefit to operators, and BSIP arrangements can be a good avenue to deliver measures such as bus priority. BSIP arrangements may also be more likely to deliver expedited low- and zero-emission fleet improvements as part of quid pro quo arrangements. Driver training for fuel efficient driving and on vehicle feedback systems could also be encouraged through a BSIP. |
| Bus Franchising | ✓✓ | A franchising scheme could set out level of service, affordability and quality measures (as per the policies appraised in Section 4) which deliver modal shift from car to bus. This could help to improve air quality overall although, as mentioned above, growing bus operations will create more emissions from buses, which need to be offset by reductions in car use.

When in place, a franchising scheme could help to ensure improvements to bus fleets and aid delivery of a more consistent approach to rolling out cleaner buses effectively across the region. However, due to the length of time that it could take to | ✓✓ | A franchising scheme could set out level of service, affordability and quality measures (as per the policies appraised in Section 4) which deliver modal shift from car to bus. This could help to reduce CO_2 emissions from transport overall although, as mentioned above, growing bus operations will create more CO_2 emissions from buses themselves, which need to be offset by reductions in car use. Driver training for fuel efficient driving and on-vehicle feedback systems could also be specified in the scheme.

When in place, a franchising scheme could help to ensure improvements to bus fleets and aid delivery of a more |

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Option	Environment		Climate	
	Score	Commentary	Score	Commentary
		implement a franchising scheme, it is not a valid short-term fleet improvement mechanism.		consistent approach to rolling out cleaner buses effectively across the region. However, due to the length of time that it could take to implement a franchising scheme, it is not a valid short-term fleet improvement mechanism.
Municipal Ownership	✓ to	Municipal bus operations could be used to encourage modal shift from car to bus, potentially benefitting air quality. Fleets for operations could also be aligned with environmental improvement ambitions of the government, subject to funding being available.	✓ to	Municipal bus operations could be used to encourage modal shift from car to bus, potentially reducing CO_2 emissions. Fleets for operations could also be aligned with environmental improvement ambitions of the government, subject to funding being available.
	✓✓	As with other appraisal scorings, the scale of benefit achieved would relate to the scale and share of operations of the municipal bus company in relation to the overall network and the existence of any other relevant delivery model within which the municipal bus company was operating. However, municipal operations could be specifically targeted at areas that are most likely to deliver modal shift from car to bus and improve air quality and reduce noise and vibration impacts from transport.	✓✓	As with other appraisal scorings, the scale of benefit achieved would relate to the scale and share of operations of the municipal bus company in relation to the overall network and the existence of any other relevant delivery model within which the municipal bus company was operating. However, municipal operations could be specifically targeted at areas that are most likely to deliver modal shift from car to bus and reduce CO_2 impacts from transport.

Appendix F   Environmental Appraisal of SRBS Actions

F.1   Introduction

F.1.1   This appendix supports **Section 5.5** of the Environmental Report by presenting the detailed assessment of each SRBS actions, split into the four action themes.

F.1.2   Each action theme is described in turn, including the transport action within that theme. The actions have been assessed against each of the SEA Objectives, drawing on consideration of the predicted environmental effects of the action (and where relevant linked option) within each theme.

F.1.3   The predicted environmental effects of the policies were evaluated with reference to a set of impact criteria as shown in **Table 4.3**, which was extracted below.

Key

Major beneficial effect	++	Major adverse effect	--
Minor beneficial effect	+	Minor adverse effect	-
Neutral / negligible effect	0	Uncertain effect	?
No clear relationship	~		

F.2 Franchising Route Map

Action	Description	SPT Programme Linkages	Key partners and stakeholders	Funding
A1.1	Report an outline programme for bus franchising development to SPT Partnership within c. 3 months following approval of the final SRBS.	Clyde Metro		
A1.2	Develop and agree governance plan for bus franchising development programme		Local Authorities	
A1.3	Develop a bus operator forum to facilitate transition to franchising and to address concerns and issues throughout the process		Operators; CPT	
A1.4	Liaise with Transport Scotland and Competition and Marketing Authority regarding application of existing legislation for bus franchising		Transport Scotland; CMA	
A1.5	Hold regular briefing sessions and funding discussions with Transport Scotland, Councils and elected officials		Transport Scotland; Council Leaders and Council Senior Officers; MSPs; MPs	
A1.6	Develop a bus passenger forum to support the planning and engagement on bus franchising and other specific matters e.g. accessibility and inclusive design		Transport Focus; Bus Users Scotland; Passengers	
A1.7	Continue to engage with transport authorities across the UK to learn emerging best practice in relation to bus franchising		Urban Transport Group; other UK Transport Authorities	
A1.8	Consider and, as necessary, make the case for any changes to relevant Scottish legislation, including learning from the emerging legislative developments in England and Wales		Transport Scotland; Urban Transport Group; DfT	

SEA Objective	A1.1	A1.2	A1.3	A1.4	A1.5	A1.6	A1.7	A1.8	Commentary
Health: Improve the health of the resident and workplace population, including with respect to physical and mental health and social wellbeing.	~	~	~	~	~	~	~	~	A1.1 – A1.8: The actions are predicted to have no clear relationship to the SEA objective.
Accessibility: Reduce the need to travel and ensure appropriate and affordable access for all to facilities, services, economic opportunities and social activities.	~	~	~	~	~	+	~	~	A1.1 – A1.8 (except A1.6): The actions are predicted to have no clear relationship to the SEA objective. A1.6: The bus passenger forum would help to support the planning and engagement on bus franchising and other specific matters e.g. accessibility and inclusive design. This would have minor benefit on the SEA objective.
Material Assets: Manage, maintain and where possible improve the efficient and effective use of natural resources, land and infrastructure to meet identified needs.	~	~	~	~	~	~	~	~	A1.1 – A1.8: The actions are predicted to have no clear relationship to the SEA objective.
Productivity, Competitiveness and Innovation: Deliver an integrated and efficient transport system to increase economic prosperity, support the growth of key economic sectors and deliver increased and more inclusive employment.	~	~	+	+	+	~	+	+	A1.1, A1.2 and A1.6: The actions are predicted to have no clear relationship to the SEA objective. A1.3, A1.4, A1.5, A1.7 and A1.8: The actions will help to improve the franchise programme to enhance its efficiency. These would have some minor benefits on the SEA objective.
Air Quality and Amenity: Tackle poor air quality, reduce concentrations of harmful atmospheric pollutants and minimise exposure to noise and vibration.	~	~	~	~	~	~	~	~	A1.1 – A1.8: The actions are predicted to have no clear relationship to the SEA objective.
Climate Change Mitigation: Decarbonise the transport sector and	~	~	~	~	~	~	~	~	A1.1 – A1.8: The actions are predicted to have no clear relationship to the SEA objective.

SEA Objective	A1.1	A1.2	A1.3	A1.4	A1.5	A1.6	A1.7	A1.8	Commentary
support wider efforts to mitigate climate change.									
Biodiversity, Geodiversity and Soil: Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by protecting green infrastructure.	~	~	~	~	~	~	~	~	A1.1 – A1.8: The actions are predicted to have no clear relationship to the SEA objective.
Water, Flood Risk and Resilience: Conserve, protect and enhance water environments, water quality and water resources, whilst adapting to climate change and reducing flood risks.	~	~	~	~	~	~	~	~	A1.1 – A1.8: The actions are predicted to have no clear relationship to the SEA objective.
Cultural Heritage: Conserve, protect and enhance the historic environment and cultural assets.	~	~	~	~	~	~	~	~	A1.1 – A1.8: The actions are predicted to have no clear relationship to the SEA objective.
Landscape: Protect and enhance the landscape character, townscape character and visual amenity.	~	~	~	~	~	~	~	~	A1.1 – A1.8: The actions are predicted to have no clear relationship to the SEA objective.

F.3 Pre-Franchising Period

Action	Description	SPT Programme Linkages	Key partners and stakeholders	Funding
A2.1	SPT will continue its core activities in bus, including supporting socially necessary services subject to budgetary availability, managing bus stations, delivery of bus improvement capital projects with councils and others, provision of bus stops and shelters, information and school transport on an agency basis		Councils; Transport Scotland	
A2.2	SPT will work with councils and operators to develop the goals of the voluntary bus partnership, with a key focus on delivery of bus infrastructure		Councils; Operators; Bus Partnership	
A2.3	SPT will continue to work with Transport Scotland on funding, legislative issues, and bus policy		Transport Scotland	
A2.4	SPT will continue to work with bus operators to promote service continuity in the interim period		Operators	
A2.5	Continue to work with Transport Scotland on the delivery of the Fair Fares review action plan		Councils; Operators	
A2.6	Support the outcomes of the Bus Decarbonisation Task Force		Operators; Councils	
A2.7	Develop business case for small scale municipal bus operation, alongside identification of any area-based supply side challenges identified in the process to develop franchising		Councils	SPT

SEA Objective	A2.1	A2.2	A2.3	A2.4	A2.5	A2.6	A2.7	Commentary
Health: Improve the health of the resident and workplace population, including with respect to physical and mental health and social wellbeing.	~	~	~	~	~	++	~	A2.1 – A2.7 (except A2.6): The actions are predicted to have no clear relationship to the SEA objective. A2.6: The action is predicted to be supportive of the SEA objective on health, in particular through reducing the negative impacts of transport on human health in terms of pollution and poor air quality.
Accessibility: Reduce the need to travel and ensure appropriate and affordable access for all to facilities, services, economic opportunities and social activities.	+	+	~	~	~	+	~	A2.1, A2.2 and A2.6: The actions are predicted to supportive of the SEA objective on accessibility. A2.3, A2.4, A2.5 and A2.7: The actions are predicted to have no clear relationship to the SEA objective.
Material Assets: Manage, maintain and where possible improve the efficient and effective use of natural resources, land and infrastructure to meet identified needs.	~	~	~	~	~	?	~	A2.1 – A2.7 (except A2.6): The actions are predicted to have no clear relationship to the SEA objective. A2.6: Some effects are uncertain, particularly where new transport infrastructure and vehicles would involve a demand on new raw materials and electrical components.
Productivity, Competitiveness and Innovation: Deliver an integrated and efficient transport system to increase economic prosperity, support the growth of key economic sectors and deliver increased and more inclusive employment.	~	~	+	+	+	+	+	A2.1 and A2.2: The actions are predicted to have no clear relationship to the SEA objective. A2.3, A2.4, A2.5, and A2.7: The actions are predicted to supportive of the SEA objective on productivity, competitiveness and innovation through delivering an efficient transport system. A2.6: Decarbonisation would also promote investment and demand in low carbon industries and energy generation and in the long-term help businesses avoid the increasing costs of fossil fuels.

SEA Objective	A2.1	A2.2	A2.3	A2.4	A2.5	A2.6	A2.7	Commentary
Air Quality and Amenity: Tackle poor air quality, reduce concentrations of harmful atmospheric pollutants and minimise exposure to noise and vibration.	~	~	~	~	~	++	~	A2.1 – A2.7 (except A2.6): The actions are predicted to have no clear relationship to the SEA objective. A2.6: The action that support decarbonise vehicles and improve air quality are inherently supportive of the SEA objective for air quality and significant beneficial effects would be predicted where measures are delivered comprehensively.
Climate Change Mitigation: Decarbonise the transport sector and support wider efforts to mitigate climate change.	~	~	~	~	~	++	~	A2.1 – A2.7 (except A2.6): The actions are predicted to have no clear relationship to the SEA objective. A2.6: The action that support decarbonise vehicles are inherently supportive of the SEA objective for climate change mitigation and significant beneficial effects would be predicted where measures are delivered comprehensively.
Biodiversity, Geodiversity and Soil: Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by protecting green infrastructure.	~	~	~	~	~	+	~	A2.1 – A2.7 (except A2.6): The actions are predicted to have no clear relationship to the SEA objective. A2.6: The action supporting the bus decarbonisation would benefit to air quality improvement and climate change. Cleaner air can lead to healthier ecosystems, benefiting plants, animals, and humans alike. Mitigating climate change can help to preserve habitats and biodiversity. It is assumed that environmental assessment will be conducted on new infrastructure development and no adverse environment effect resulted with mitigation measures.
Water, Flood Risk and Resilience: Conserve, protect and enhance water environments, water quality and water resources, whilst adapting to climate change and reducing flood risks.	~	~	~	~	~	0	~	A2.1 – A2.7 (except A2.6): The actions are predicted to have no clear relationship to the SEA objective. A2.6: Implementation of this action is generally not predicted to have effects on this SA objective.
Cultural Heritage: Conserve, protect and enhance the historic environment and cultural assets.	~	~	~	~	~	+	~	A2.1 – A2.7 (except A2.6): The actions are predicted to have no clear relationship to the SEA objective.

SEA Objective	A2.1	A2.2	A2.3	A2.4	A2.5	A2.6	A2.7	Commentary
								A2.6: The action would improve air quality, which would have indirect benefit to cultural heritage. It is assumed that environmental assessment will be conducted on new infrastructure development and no adverse construction environment impact resulted with mitigation measures.
Landscape: Protect and enhance the landscape character, townscape character and visual amenity.	~	~	~	~	~	0	~	A2.1 – A2.7 (except A2.6): The actions are predicted to have no clear relationship to the SEA objective. A2.6: Implementation of the action is generally not predicted to have significant effects on this SA objective. It is assumed that environmental assessment will be conducted on new infrastructure development and no adverse landscape effect resulted with mitigation measures.

F.4   Bus Infrastructure and Traffic Management

Action	Description	SPT Programme Linkages	Key partners and stakeholders	Funding
A3.1	Deliver bus priority and other enhancements on the 5 bus corridors already appraised though the Bus Partnership Fund. As part of this, carry out a rapid review of the appraisal outcomes for the 5 bus corridors, ensuring that the level of ambition is sufficiently high across relevant local authorities, and identify funding and delivery plans. The 5 corridors include: - Dumbarton Road - Great Western Road - Maryhill Road - Paisley Road West - Pollokshaws Road	Clyde Metro, Regional Active Travel	Councils; Bus Partnership; Transport Scotland	Scottish Government; SPT capital programme
A3.2	**Enforcement of existing measures and 'quick wins'** Enforcement of existing measures and 'quick wins'. Work with operators and local authorities to develop targeted enforcement plans for priority locations. Work with local authorities to identify 'quick win' actions at priority locations e.g. renew road linings and signage.		Councils; Bus Partnership	Local authority resources
A3.3	**Regional bus corridor plan** Regional bus corridor plan. Development of key corridor principles including network identity, quality, journey times and accessibility, integrated with relevant Clyde Metro developments and wider active travel interventions as appropriate. Appraise and identify infrastructure requirements and projects for regional corridors, including relevant town centres and key interchange locations, integrated with the development of the bus network redesign plan, regional active travel network and Clyde Metro network development. Create a single, prioritised plan for bus corridor upgrading across the network and a programme for detailed design and construction for individual corridors/routes. This should build on existing work already carried out for the Bus Partnership Fund, avoiding duplication of work but ensuring a cohesive and ambitious region-wide approach linked to network plans under franchising.	Clyde Metro; Regional Active Travel	Councils; Transport Scotland; Bus Partnership	Scottish Government; SPT capital programme

Action	Description	SPT Programme Linkages	Key partners and stakeholders	Funding
A3.4	**Regional hospitals, Colleges/Universities and town centres** Review arrangements for bus at key sites including vehicle access/circulation, passenger waiting facilities, and RTPI. Develop and deliver solutions, as required. Ensure appropriate bus arrangements are developed for new Monklands Hospital.	Clyde Metro; Regional Active Travel	SPT; Councils; Health Boards; Other Stakeholders; Bus Partnership	SPT capital programme; Developer funding; Contribution s from business and institutions
A3.5	**Bus stops quality and access** Review bus stop design guidelines and update as required. This should include principles for accessible and inclusive design, provision of lighting, shelters, travel information and RTPI, and bus stop location. This should include consideration of vehicle access and passenger boarding needs. Assess bus stops in line with updated guidance and develop programme of upgrading as required. In tandem with local and regional active travel strategies, develop programme of assessing and upgrading walking, wheeling and cycling access to bus stops.	Regional Active Travel	SPT; Councils; Bus Partnership	SPT capital programme; Active travel funding; People and Place
A3.6	**Interchanges and Mobility Hubs** Identify suitable locations to provide interventions that promote easy, effective interchange between bus, rail, active travel, and private vehicles where appropriate (for example, rural hubs). These locations would entail bus stations and local bus stops within both urban and rural areas, ensuring that the region's population have appropriate solutions which reflect their specific needs.	Clyde Metro, Regional Active Travel	SPT; Councils; Bus Partnership	SPT capital programme
A3.7	**Bus termini / driver welfare** Review conditions for drivers at bus termini locations and develop proposals for improvements as required.		SPT; Bus Partnership	
A3.8	**Regional network communication and transport co-ordination centre** Develop and assess options for improving co-ordination of transport network communications, monitoring and management, including consideration of a regional transport co-ordination centre. Develop business case as required.	Clyde Metro; Transport Governance	Councils; Transport Scotland; Emergency Services; Operators	TBC
A3.9	**Road network resilience** Work with roads authorities to identify and develop mitigations for surface flooding affecting bus network. Continue to chair the Climate Ready Clyde Transport Resilience Working Group. Lobby for increased resources for local authority road maintenance.		Councils; Climate Ready Clyde	

SEA Objective	A3.1	A3.2	A3.3	A3.4	A3.5	A3.6	A3.7	A3.8	A3.9	Commentary
Health: Improve the health of the resident and workplace population, including with respect to physical and mental health and social wellbeing.	+	0	++	++	+	++	+	0	+	Action A3.1: The action would reduce the reliance on private modes of transport, such as car. This would further reduce vehicular emissions, which would have minor benefits to the health. Actions A3.2 and A3.8: The actions are predicted to have no significant effect to the SEA objective. Actions A3.3 and A3.6: The actions would reduce the reliance on private modes of transport, such as car. These would reduce vehicular emissions, which has benefits to the health. Besides, the actions would enhance opportunities for access to services, healthcare facilities, open space and employment with potential mental health and wellbeing benefits for some people. Hence, it would have significant effect on the SEA objective. Action A3.4: The action would ensure appropriate bus arrangements for new Monklands Hospital. This would have positive health benefit to the SEA objective. Action A3.5: The action on bus stop quality and access is inherently compatible with the SEA objective for health with beneficial effects predicted by providing a safe and secure bus stop design. Action A3.7: The action on bus termini / driver welfare is inherently compatible with the SEA objective for health with beneficial effects predicted by providing good conditions to drivers at bus termini. Action A3.9: The action would ensure the safety of bus operation and would have minor positive health benefits to the SEA objective
Accessibility: Reduce the need to travel and ensure appropriate and affordable access for all to facilities,	+	0	++	++	++	++	0	+	++	Action A3.1: The action would improve the bus accessibility at priority locations. These would have minor benefits to the SEA objective.

SEA Objective	A3.1	A3.2	A3.3	A3.4	A3.5	A3.6	A3.7	A3.8	A3.9	Commentary
services, economic opportunities and social activities.										Actions A3.2 and A3.7: The actions are predicted to have no significant effect to the SEA objective. Actions A3.3 and A3.4: The actions would enhance the coverage of the bus network, and efficiency which are inherently compatible with the SEA objective for accessibility with significant beneficial effects predicted where these actions were implemented effectively and comprehensively. Action A3.5: The action would ensure the bus stops are accessible to all. It is inherently compatible with the SEA objective for accessibility with significant beneficial effects predicted where the action is implemented effectively and comprehensively. Action A3.6: The action would identify suitable locations to provide interventions that promote easy, effective interchange between bus, rail, active travel, and private vehicles where appropriate. It is inherently compatible with the SEA objective for accessibility with significant beneficial effects predicted where the action is implemented effectively and comprehensively. Action A3.8: The action is compatible with the SEA objective for accessibility with minor beneficial effects predicted where this action is implemented effectively and comprehensively. Action A3.9: The action would reduce the surface flooding impact on the bus network. This would have major accessibility benefit to the SEA objective.
Material Assets: Manage, maintain and where possible improve the efficient and effective use of natural resources, land and infrastructure to meet identified needs.	+	0	+	+	0	+	+	0	+	Actions A3.1, A3.3, A3.4, A3.6: These actions would have some minor beneficial effects on the SEA objective for material assets through reducing the reliance on private modes of transport, such as car Actions A3.2, A3.5, A3.8: Implementation of these actions are generally not predicted to have significant effects on this SEA objective.

SEA Objective	A3.1	A3.2	A3.3	A3.4	A3.5	A3.6	A3.7	A3.8	A3.9	Commentary
										Action A3.9: The action aims to increase the adaptability and resilience of transport infrastructure to adverse weather effects and effects of climate change and thus would also have minor beneficial effects to the SEA objective.
Productivity, Competitiveness and Innovation: Deliver an integrated and efficient transport system to increase economic prosperity, support the growth of key economic sectors and deliver increased and more inclusive employment.	+	0	+	+	+	+	+	+	+	Actions A3.1 to A3.9 (except A3.2 and A3.7): These actions would support improved access to employment opportunities and improved physical access for all. This would have minor beneficial effects on the economy and businesses efficiency. Action A3.2: Implementation of the action is generally not predicted to have significant effects on this SEA objective. Action A3.7: The improvement in conditions of drivers would improve the productivity. This would have minor beneficial effect on the SEA objective..
Air Quality and Amenity: Tackle poor air quality, reduce concentrations of harmful atmospheric pollutants and minimise exposure to noise and vibration.	+	0	+	+	0	+	0	0	+	Actions A3.1, A3.3, A3.4 and A3.6 would reduce the reliance on private modes of transport, such as car. This would further reduce the air emission and would have minor benefit to the air quality. Actions A3.2, A3.5, A3.7and A3.8: Implementation of these actions are generally not predicted to have significant effects on this SEA objective. Action A3.9: The action would encourage the use of public transport. It may have minor benefit to air quality.
Climate Change Mitigation: Decarbonise the transport sector and support wider efforts to mitigate climate change.	+	0	+	+	0	+	0	0	+	Actions A3.1, A3.3, A3.4 and A3.6 would reduce the reliance on private modes of transport, such as car. This would reduce the air emission and would have minor benefit to the climate change mitigation. Actions A3.2, A3.5, A3.7, and A3.8: Implementation of these actions are generally not predicted to have significant effects on this SEA objective.

SEA Objective	A3.1	A3.2	A3.3	A3.4	A3.5	A3.6	A3.7	A3.8	A3.9	Commentary
										Action A3.9: The action on continuation to chair the Climate Ready Clyde Transport Resilience Working Group is inherently compatible with the SEA objective with minor beneficial effects on climate change mitigation.
Biodiversity, Geodiversity and Soil: Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by protecting green infrastructure.	0	0	0	0	0	?	0	0	?	Actions A3.1, A3.3, A3.4 and A3.6 are predicted to have the potential for indirect beneficial effects on some aspects of this SEA objective where they contribute to reduced traffic emissions although effects are not predicted to be significant. However, for action 3.6, it should be noted that new interventions development would have some potential for adverse natural heritage effects from changing in land use, habitat loss etc. This action would have uncertain effect on this SEA objective. Environmental assessment shall be conducted before the implementation of the action. Actions A3.2, A3.5, A3.7 and A3.8: Implementation of these actions are generally not predicted to have significant effects on this SEA objective. Action A3.9: The action would have uncertain effect on this SEA objective to mitigate surface flooding. It should be noted that flood measures would have some potential for adverse natural heritage effects from changing in land use, habitat loss etc. This would have uncertain effect on this SA objective. Environmental assessment shall be conducted before the implementation of the action.
Water, Flood Risk and Resilience: Conserve, protect and enhance water environments, water quality and water resources, whilst adapting to climate change and reducing flood risks.	0	0	0	0	0	0	0	0	++	Actions A3.1- A3.9 (except Action 3.9): Implementation of the actions are generally not predicted to have significant effects on this SA objective Action 3.9: The action is inherently compatible with the SEA objective with significant beneficial effects predicted where the action was implemented effectively and comprehensively.

SEA Objective	A3.1	A3.2	A3.3	A3.4	A3.5	A3.6	A3.7	A3.8	A3.9	Commentary
Cultural Heritage: Conserve, protect and enhance the historic environment and cultural assets.	+	0	+	0	+	+	~	0	+	Actions A3.1 and A3.3 would provide opportunities for people to visit sites of cultural heritage interest more easily and promote the cultural heritage. Hence, it would have minor benefit to the SEA objective. Actions A3.2, A3.4 and A3.8: Implementation of these actions are generally not predicted to have significant effects on this SA objective. Action A3.5 requires bus stop rationalisation and to locate conveniently and efficiently across the region. This would help attracting the visitors to access the heritage site. Action 3.6: The action would provide opportunities for people to visit sites of cultural heritage interest more easily and promote the cultural heritage. Where new infrastructure (e.g. interchanges and mobility hubs) to be developed on greenfield or previously undeveloped land, the potential for impacts on archaeological resources would need to be considered further as proposals were designed and assessed. It has been assumed in this SEA that mitigation principles to avoid, reduce and mitigate such adverse effects would be committed to in the later stages of Strategy delivery. Hence, the action would have minor benefit to the SEA objective. Action 3.7: The action is predicted to have no clear relationship to the SEA objective. Action 3.8: The action is predicted to result in no significant change to this SEA Objective. Action 3.9: The action on developing mitigation for surface flooding may help to protect the cultural heritage as well. Hence, it has minor benefits to the SEA objective.
Landscape: Protect and enhance the landscape character,	0	0	0	0	0	?	~	0	0	A3.1 - A3.5, A3.8 and A3.9: Implementation of these actions are generally not predicted to have significant effects on this SEA objective.

SEA Objective	A3.1	A3.2	A3.3	A3.4	A3.5	A3.6	A3.7	A3.8	A3.9	Commentary
townscape character and visual amenity.										A3.6: It should be noted that interchange and mobility hubs would have some potential for adverse landscape impact. This would have uncertain effect on this SEA objective. Landscape and visual assessment shall be conducted before the implementation of the action. A3.7: The action is predicted to have no clear relationship to the SEA objective.

F.5 Bus Friendly Environment

Action	Description	SPT Programme Linkages	Key partners and stakeholders	Funding
A4.1	**Reducing need to travel and car demand management** SPT will advocate for development of car demand management measures including road user charging at a national level. SPT will encourage and work with councils to develop local parking policies that support sustainable transport. SPT will also continue to participate in the Local Development Plan process.		Councils; Transport Scotland	
A4.2	**Behaviour Change** SPT will continue to work with partners to deliver travel behaviour change focused on encouraging and promoting sustainable travel choices. SPT will continue to work with Bus Users Scotland, operators and other partners on bus promotions and events such as Catch the Bus Week. SPT will continue to work with Transport Scotland, councils and other partners to deliver the People and Place Programme to support behaviour change.		Councils; Transport Scotland; Community and Sustainable Travel Organisations; Bus Partnership	People and Place Programme; SPT
A4.3	**Clyde Metro and integrated sustainable transport network** SPT, with council partners, will continue to progress the development of Clyde Metro, and to align Clyde Metro and bus developments. SPT will develop an integrated network plan incorporating the long term Metro proposals, bus network and active travel networks.	Clyde Metro	Councils; Transport Scotland	Glasgow City Region City Deal; SPT

Action	Description	SPT Programme Linkages	Key partners and stakeholders	Funding

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SEA Objective	A4.1	A4.2	A4.3	Commentary
Health: Improve the health of the resident and workplace population, including with respect to physical and mental health and social wellbeing.	++	+	++	Actions A4.1, A4.2 and 4.3: The actions are predicted to be supportive of the SEA objective on health, in particular through reducing the negative impacts of transport on human health in terms of pollution and poor air quality. Besides, Actions 4.1 and 4.3 would further enhance opportunities for access to services, healthcare facilities, open space and employment with potential mental health and wellbeing benefits for some people. Hence, these two actions would nave significant benefit to the SEA objective.
Accessibility: Reduce the need to travel and ensure appropriate and affordable access for all to facilities, services, economic opportunities and social activities.	+	+	++	Actions A4.1 and A4.2: The actions would help to reduce traffic congestion, make convenience for people switch from cars to other mean of public transport. Hence, this would have minor benefit to the SEA objective. Action A4.3: The action would enhance the connectivity with Metro proposals, bus network and active travel networks which are inherently compatible with the SEA objective for accessibility with significant beneficial effects predicted where these polices were implemented effectively and comprehensively.
Material Assets: Manage, maintain and where possible improve the efficient and effective use of natural resources, land and infrastructure to meet identified needs.	+	+	+	The actions would have some minor beneficial effects on the SEA objective for material assets through reducing the reliance on private modes of transport, such as car.
Productivity, Competitiveness and Innovation: Deliver an integrated and efficient transport system to increase economic prosperity, support the growth of key economic sectors and deliver increased and more inclusive employment.	+	0	+	Actions A4.1 and A4.3 would support improved access to employment opportunities. This would have minor beneficial effects on the economy and businesses efficiency. A4.2: The action is predicted to have no significant effect to the SEA objective.
Air Quality and Amenity: Tackle poor air quality, reduce concentrations of	+	+	+	A4.1, A4.2 and 4.3: The actions are predicted to be supportive of the SEA objective on air quality through modal shift.

SEA Objective	A4.1	A4.2	A4.3	Commentary
harmful atmospheric pollutants and minimise exposure to noise and vibration.				
Climate Change Mitigation: Decarbonise the transport sector and support wider efforts to mitigate climate change.	+	+	+	A4.1, A4.2 and 4.3: The actions are predicted to be supportive of the SEA objective on greenhouse emission through modal shift.
Biodiversity, Geodiversity and Soil: Conserve, protect and enhance biodiversity and geodiversity interests, including through safeguarding important sites, species, soil resources and habitats and by protecting green infrastructure.	0	0	0	Actions A4.1, A4.2, and A4.3 are predicted to have the potential for indirect beneficial effects on some aspects of this SEA objective where they contribute to reduced traffic emissions although effects are not predicted to be significant.
Water, Flood Risk and Resilience: Conserve, protect and enhance water environments, water quality and water resources, whilst adapting to climate change and reducing flood risks.	0	0	0	Implementation of the actions are generally not predicted to have significant effects on water resources and flooding
Cultural Heritage: Conserve, protect and enhance the historic environment and cultural assets.	+	0	+	Actions A4.1 and A4.3 would provide opportunities for people to visit sites of cultural heritage interest more easily and promote the cultural heritage. Hence, it would have minor benefit to the SA objective.

Action A4.2: Implementation of the action is generally not predicted to have significant effects on cultural heritage |
| **Landscape:** Protect and enhance the landscape character, townscape character and visual amenity. | 0 | 0 | 0 | Actions A4.1 and A4.3 are not predicted to result in significant change to landscape resources or visual amenity. There is some potential on key corridors where traffic levels were reduced for minor beneficial effects on visual amenity for some receptors. |

SEA Objective	A4.1	A4.2	A4.3	Commentary
				Action A4.2: Implementation of the action are generally not predicted to have significant effects on landscape.