



Strathclyde Regional Bus Strategy

Strategic Environmental Assessment (SEA) Report: Non-Technical Summary

On behalf of the
Strathclyde Partnership for Transport



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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**.

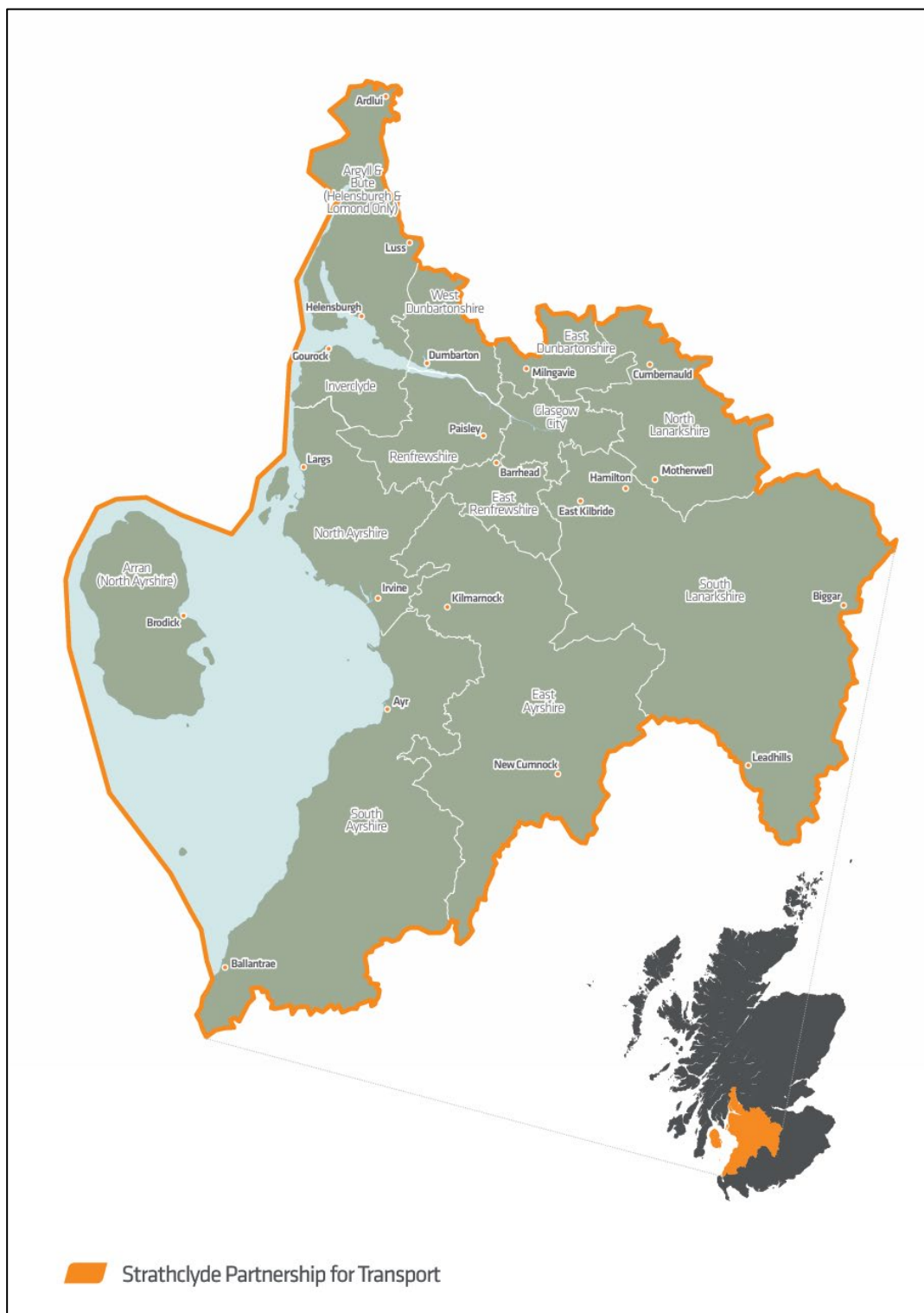


Figure 1.1: SPT Region

- 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 of the Full ER.

1.3 How to Comment on this NTS and the Full Environmental Report

- 1.3.1 This Non-Technical Summary (NTS) and the associated full Environmental Report (ER) were issued for consultation alongside the draft SRBS and associated documents for a period of 12 weeks. The representations received in the consultation have been taken into account in revising the SRBS.

1.4 Report Structure

- 1.4.1 The remainder of this NTS 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** provides an overview of the SEA process undertaken to date, explains how the
 - **Section 4** presents key findings of the SEA
 - **Section 5** sets out proposals for mitigation of environmental effects and outlines potential monitoring arrangements to be put in place when the SRBS is implemented; and
 - **Section 6** sets out the next steps in the SRBS and SEA process

2 SRBS Context

2.1 Strathclyde Regional Bus Strategy

2.1.1 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.

2.1.2 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."

2.1.3 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.

2.1.4 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

2.1.5 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.
- 2.1.6 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.

2.2 Relevant Environmental Information

- 2.2.1 The identification of key environmental issues has been informed by consideration of the environmental topics prescribed within Schedule 3 of the SEA Act and from an evaluation of baseline environmental conditions, which is set out in more detailed in Section 3 and Appendix A of the full ER. These issues were analysed from an early stage in the SEA process and have been taken into account in the development of the emerging SRBS and in the development and application of a framework for the environmental assessment.

2.3 Review of Plans, Programmes and Strategies

- 2.3.1 In accordance with SEA statutory requirements a review of the relationship between the developing draft SRBS and other relevant plans and programmes (including current legislation, policies and strategies at national and regional levels) has been carried out. This review identified key requirements, objectives and priorities of relevant plans and their implications for both the emerging SRTS and for the SEA. A review of these plans and programmes is set out in Appendix B of the full ER and relevant information from the review was used in developing the SRBS and in identifying key issues for the SEA.

3 The SEA Process

3.1 SEA Purpose and Objectives

- 3.1.1 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.
- 3.1.2 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 of the full ER.

3.2 Approach to SEA

- 3.2.1 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

- 3.2.2 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 of the Full ER. 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)

Assessment Methods

- 3.2.3 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) which was then used to inform consideration of the compatibility between the SEA and SRBS objectives.
- 3.2.4 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).
- 3.2.5 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.
- 3.2.6 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.
- 3.2.7 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 to determine their likely significance.
- 3.2.8 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.
- 3.2.9 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.
- 3.2.10 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.
- 3.2.11 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.
- 3.2.12 A high-level commentary on potential cumulative effects of the Draft SRBS has also been included 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

- 3.2.13 Statutory consultation with the SEA Consultation Authorities was undertaken at the Scoping Report stage of the SRBS and SEA processes.
- 3.2.14 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)
- 3.2.15 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.
- 3.2.16 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.
- 3.2.17 Afterwards, the SEA Report and its NTS were prepared and published for consultation alongside the Draft SRBS which were 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. The consultation process reached a broad range of stakeholders and the general public who were able to provide their feedback through a dedicated website facility (see below). The Draft SRBS and SEA Report, together with other supporting reports, have been made available for public access on SPT's website (www.spt.co.uk).
- 3.2.18 The SEA Report and a copy of the Draft SRBS (the 'relevant documents') have also been 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.
- 3.2.19 Statutory advertising of the publication of the Draft SRBS together with associated documents, including an ER and an ER NTS took place between 5th March 2025 and 29th May 2025 (a period of at least 12 weeks).
- 3.2.20 Following public and stakeholder consultation on the Draft SRBS and the ER, all of the comments received were analysed. SPT determined how the document should be amended based on the feedback received. A report of public and stakeholder comments received and how these have been dealt with was prepared. This is available separately. SPT has also prepared documents setting out how feedback from the public and stakeholders was considered in the revision of the SRBS from its draft to finalised status, and these have been reported to the SPT Partnership Board.

- 3.2.21 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 of the full ER.

Assumptions and Limitations

- 3.2.22 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.
- 3.2.23 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.
- 3.2.24 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.
- 3.2.25 No significant difficulties or limitations have been encountered in preparing the ER Report.

3.3 Consideration of Reasonable Alternatives

- 3.3.1 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.
- 3.3.2 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.
- 3.3.3 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.
- 3.3.4 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.
- 3.3.5 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.
- 3.3.6 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.

3.4 How the SEA informed the SRBS

- 3.4.1 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 the full ER.
- 3.4.2 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.
- 3.4.3 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 the full ER.

4 Findings of the Environmental Assessment

4.1 Assessment of Goal and Objectives

4.1.1 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 the Full ER.

4.1.2 The SRBS Goal states that:

- More people using buses, and people using buses more often
- More communities have access to bus for everyday travel

4.1.3 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.

4.1.4 The assessment considers the compatibility of the SRBS Vision and Objectives with the SEA Framework. 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.

4.2 Assessment of Policies

- 4.2.1 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.
- 4.2.2 Following consultation of the draft SRBS, the responses received were given due consideration. Redrafting of the SRBS was undertaken where appropriate to reflect the main themes of the consultation responses. Based on the responses received, some of the policies have been refined. Appendix D of the full ER summarises the key changes in the revised policies. 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 E of the full ER.
- 4.2.3 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 4.1** below 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 4.1 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 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 (for Policies P7 and P8) and productivity, competitiveness and Innovation. The policies 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 several 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, competitiveness and Innovation. It may also give rise to some beneficial changes for people accessing and enjoying facilities, services and the wider environment.

Policy Theme	Overall Score	Commentary
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, competitiveness and Innovation. 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 Policies 15 and P16). The policies are also predicted to have some beneficial effects for SEA topics of health, accessibility (for Policies P14 and P17), material asset (for Policies P15 and P16), productivity, competitiveness and Innovation, air quality and amenity (for Policies P15 and P16), climate change mitigation (for Policies P15 and P16), biodiversity (for Policies P15 and P16) and cultural heritage (for Policy P16). The policies are also predicted to have uncertain effects for SEA topics of landscape (for Policy P16) due to the construction of interchange and mobility hubs.
A more environmentally sustainable, resilient and adaptable bus network and fleet	+	The policies are generally compatible with the SEA objectives and in several cases significant beneficial effects are predicted including for Health (for Policy P18) accessibility (for Policies P19 and P20), air quality (for Policies P18 and P20), and climate change (for Policies P18 and P20). The policies are also predicted to have some beneficial effects for SEA topics of health (for Policies P19 and P20), material asset (for Policy P19), productivity, air quality (for Policy P19), climate change (for Policy P19), biodiversity (for Policies P18 and P19), Water, Flood Risk and Resilience (for Policy P20) and cultural heritage. The policies are also predicted to have uncertain effects for SEA topics of material asset (for Policy P18 and P20), biodiversity (for Policy P20) and landscape (for Policy P20) due to new infrastructure development and vehicles.

4.2.4 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.

4.2.5 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
- 4.2.6 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

- 4.2.7 Most policy themes assessed are predicted to have a beneficial effect on this objective. Several of the policies 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 policies aim to provide a safe and secure bus network.
- 4.2.8 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.
- 4.2.9 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	P18. Transition the regional bus fleet to zero emission vehicles.

- 4.2.10 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

- 4.2.11 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.
- 4.2.12 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 services and networks are closely integrated across the region with other modes. P16. 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	P19. Ensure high-quality and well-maintained vehicles across the region P20. Ensure the regional bus fleet supports a resilient and operationally efficient bus network.

- 4.2.13 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

- 4.2.14 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.
- 4.2.15 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.

- 4.2.16 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.
- 4.2.17 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

- 4.2.18 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.
- 4.2.19 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.
- 4.2.20 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

- 4.2.21 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

- 4.2.22 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.
- 4.2.23 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.
- 4.2.24 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	P18. Transition the regional bus fleet to zero emission vehicles. P20. Ensure the regional bus fleet supports a resilient and operationally efficient bus network.

- 4.2.25 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

- 4.2.26 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.
- 4.2.27 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.
- 4.2.28 *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
- 4.2.29 The policies predicted to have significant beneficial effects on climate change mitigation are summarised below:

Policy Theme	Policy
A more environmentally sustainable, resilient and	P18. Transition the regional bus fleet to zero emission vehicles.

Policy Theme	Policy
adaptable bus network and fleet	P20. Ensure the regional bus fleet supports a resilient and operationally efficient bus network.

- 4.2.30 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

- 4.2.31 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.
- 4.2.32 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.
- 4.2.33 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.
- 4.2.34 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.
- 4.2.35 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

- 4.2.36 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.
- 4.2.37 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.
- 4.2.38 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.

- 4.2.39 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

- 4.2.40 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.
- 4.2.41 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.
- 4.2.42 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.
- 4.2.43 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

- 4.2.44 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.
- 4.2.45 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.
- 4.2.46 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.
- 4.2.47 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.

4.3 Assessment of Bus Services Delivery Options

- 4.3.1 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 F of the Full ER.

- 4.3.2 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
- 4.3.3 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.
- 4.3.4 A summary of the findings of the environmental appraisal of the options within each group of options is presented in the Full ER. 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/>.
- 4.3.5 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.
- 4.3.6 The recommendations were taken forward into the development of the draft strategy and delivery plan.

4.4 Assessment of Actions

- 4.4.1 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 development process, actions to support engagement and liaison, actions for bus infrastructure and traffic management, and wider actions and activities to support bus, integrated with other key programmes and policies. In total, 26 actions have been developed:
- Three actions covering the Franchising development process
 - Seven actions covering Engagement and liaison
 - 12 actions covering Bus infrastructure and traffic management
 - Four actions covering wider actions and activities to support bus
- 4.4.2 The detailed findings of the assessment, including the scoring of each individual action are set out in the tables in Appendix G of the Full ER.
- 4.4.3 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.

4.5 Cumulative Effects

- 4.5.1 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 the Full ER 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.
- 4.5.2 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

- 4.5.3 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.

- 4.5.4 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.
- 4.5.5 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.
- 4.5.6 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.
- 4.5.7 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

- 4.5.8 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 of the Full ER. 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.
- 4.5.9 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).

- 4.5.10 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.
- 4.5.11 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 the Full ER). 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.
- 4.5.12 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.
- 4.5.13 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 constraints and opportunities. It is considered that an integrated approach together with implementation of the other environmental mitigation principles set out in this SEA would avoid the potential for significant adverse cumulative environmental effects with other key plans and programmes in the region.

5 Mitigation and Monitoring

- 5.1.1 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.
- 5.1.2 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.

5.2 SEA Mitigation

- 5.2.1 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 5.1** below.

Table 5.1 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: <i>Buses where they are needed, when they are needed.</i> <i>A more environmentally sustainable, resilient and adaptable bus network and fleet</i>	

Group	Mitigation Commitment
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. <i>Buses where they are needed, when they are needed.</i> 2. <i>Reliable and quicker journey</i> 3. <i>Affordable and attractive fares and ticketing</i> 7. <i>A more environmentally sustainable, resilient and adaptable bus network and fleet</i>	
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: 4. <i>Accessible and Safer Bus Journeys</i> 6. <i>Seamless and integrated network</i> 7. <i>A more environmentally sustainable, resilient and adaptable bus network and fleet</i>	
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. <i>A more environmentally sustainable, resilient and adaptable bus network and fleet</i>	

- 5.2.2 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 4**.

5.3 Monitoring Framework

- 5.3.1 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.
- 5.3.2 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 of the Full ER in relation to each policy theme. A collated summary of the indicators proposed for monitoring progress against the SRBS objectives is presented in **Table 5.2** below which identifies those considered to be relevant for monitoring against SEA objectives.

Table 5.2 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 - 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	Objectives: 1,2 and 3

SEA Objective	Monitoring Indicators	Relevant SRBS Objectives
	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 CO₂e from road transport has been proposed in the draft SRBS. The trend of CO₂e 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 5.3.	Objectives: 1, 2 and 3
6. Climate Change Mitigation	Monitoring Indicator: CO₂e 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 5.3.	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 5.3	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 5.3.	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 5.3.	Objectives: 1, 2 and 3

5.3.3 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 indicators 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 5.3** and draw from existing indicator and data sets wherever possible.

Table 5.3 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 (<i>source: Transport Scotland</i>) • Number of total vehicles kilometres (<i>source: Transport Scotland</i>)
3. Material Assets		<u>Proposed Tracking Indicators</u> • Number of EV enabled bus depot facilities and supporting infrastructure (<i>data source: bus operators</i>) • Number of new bus stops, interchange and mobility hub (<i>data source: bus operators</i>) • Number of total vehicles kilometres (<i>source: Transport Scotland</i>) • Number of total passenger journeys (<i>source: Transport Scotland</i>) • Circular economy indicator(s) for materials used in bus transport infrastructure and for vehicle/battery recovery and re-use (<i>data source: bus operators</i>)
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	
5. Air Quality and Amenity	<u>Monitoring Indicators proposed in RTS</u> • Number of AQMS	<u>Proposed Tracking Indicators</u>

SEA Objective	Indicators proposed in RTS, which can be shared with SRBS	Proposed Indicators for future consideration in SRBS and Potential Data Sources
	<u>Supplementary SEA specific indicators for future consideration in RTS (subject to adoption)</u> Concentrations of roadside local air pollutants at key monitoring locations	- Toxic air pollutants (e.g NO_x, PM₁₀ and PM_{2.5}) emissions estimates from bus transport (<i>data source: bus operators</i>) - Toxic air pollutants emissions estimates (e.g NO_x, PM₁₀ and PM_{2.5}) from road transport (<i>data source: Transport Scotland</i>) - Proportion of buses that are ULEZ / zero emission vehicles (<i>data source: bus operators</i>)
6. Climate Change Mitigation	<u>Monitoring Indicators proposed in RTS</u> Grammes CO₂e per passenger km by mode/vehicle type	<u>Proposed Tracking Indicators</u> - CO₂e emissions estimates from bus transport (<i>data source: bus operators</i>) - Proportion of buses that are ULEZ / zero emission vehicles (<i>data source: bus operators</i>)
7. Biodiversity, Geodiversity and Soil	<u>Monitoring Indicators proposed in RTS</u> - Natural Capital Asset Index <u>Supplementary SEA specific indicators for future consideration in RTS (subject to adoption)</u> - Condition of protected nature sites - Area of habitat delivered which provides biodiversity net gain	
8. Water, Flood Risk and Resilience		<u>Proposed Tracking Indicators</u> - Number of bus facilities at risk of flooding (<i>data source: bus operators</i>) - Number of bus route affected by flooding (<i>data source: bus operators</i>) - Number and type of annual flood incidences affecting bus services (<i>data source: bus operators</i>)
9. Cultural Heritage	<u>Monitoring Indicators proposed in RTS</u> Percentage of adults who have attended or visited a cultural event or place in the last 12 months <u>Supplementary SEA specific indicators for future consideration in RTS (subject to adoption)</u>	

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

- 5.3.4 The indicators set out in **Tables 5.2** and **5.3** 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.
- 5.3.5 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.

6 Next Steps

6.1 Next Stages of SRBS Preparation and SEA

- 6.1.1 The SEA Report has been consulted on in tandem with the Draft SRBS, EQIA, ICIA, CRWA, and FSDA. All feedback received regarding these documents has been analysed by Systra and Stantec, on behalf of SPT. SPT has considered the recommendations from the analysis of the consultation feedback and has revised the policies and mitigation. 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, an 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 considered in finalising the Strategy. The PAS will also set out proposals for future monitoring of the environmental effects of the SRBS.