NORTH LANARKSHIRE COUNCIL
COMHAIRLE SIORRACHD LANNRAIG A TUATH

LOCAL TRANSPORT STRATEGY

SEA Environmental Report

Draft for Consultation - December 2025

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Non-Technical Summary

North Lanarkshire Local Transport Strategy

AECOM has been commissioned by North Lanarkshire Council to undertake a Strategic Environmental Assessment (SEA) in support of the emerging 10-year Local Transport Strategy. The new strategy will replace the existing version, which was published in 2010.

The current strategy set out a long-term vision for transport in North Lanarkshire. However, it no longer reflects more recent national policies and strategic priorities. The new strategy will provide an updated framework that aligns with current objectives and future needs.

It will define how North Lanarkshire Council intends to manage, improve, and maintain transport infrastructure across the area. It will also explain how the Council will meet national and regional transport obligations, while addressing local challenges and delivering on community objectives.

To support this, the strategy will include a set of transport policies and actions, along with indicators to monitor progress and measure success over time.

What is Strategic Environmental Assessment

SEA is a structured process used to assess the potential environmental effects of proposed plans, strategies, or programmes. Its purpose is to ensure that environmental considerations are integrated into decision-making at an early stage, helping to support more sustainable development.

This Environmental Report has been prepared in accordance with the European Directive 2001/42/EC and Section 15 of the Environmental Assessment (Scotland) Act 2005.Under the 2005 Act, all qualifying plans, programmes, and strategies are required to undergo Strategic Environmental Assessment.

This Environmental Report

This Environmental Report accompanies the Draft Local Transport Strategy for consultation. It presents:

- An overview of the stages undertaken to date for the SEA, including scoping;
- An assessment of a series of Local Transport Strategy actions, which have been assessed as reasonable alternatives;
- An assessment of the Draft Local Transport Strategy; and
- Next steps for the SEA process.

What is the Scope of the SEA?

In line with the Environmental Assessment (Scotland) Act 2005, North Lanarkshire Council is required to consult with key environmental authorities before finalising the scope and detail of the Environmental Report. These authorities include Historic Environment Scotland, the Scottish Environment Protection Agency, and NatureScot.

To meet this requirement, a Strategic Environmental Assessment Scoping Report was prepared by AECOM and submitted via the SEA Gateway in June 2025. This report outlined the proposed scope of the assessment for the Local Transport Strategy.

An acknowledgement was received from the consultation bodies, but no further comments were provided. It is therefore assumed that the consultation authorities are satisfied with the scope and content of the Scoping Report. The full report is included as Appendix A.

The scope of the SEA is summarised by a series of SEA objectives that form the structure for the assessment, under eight SEA 'topics'. Each option and proposal in the plan identified for SEA has been assessed against each of these SEA objectives. The SEA topics and SEA objectives are presented in the main body of the Environmental Report in Table 3 1.

Appraisal of Reasonable Alternatives

Assessing 'reasonable alternatives' is a key requirement of the Strategic Environmental Assessment process, as set out in the Environmental Assessment (Scotland) Act 2005. The Act requires that the Environmental Report must identify, describe, and evaluate the likely significant environmental effects of both the proposed strategy and any reasonable alternatives.

The legislation does not define what constitutes a reasonable alternative, allowing flexibility depending on the nature of the plan and the options realistically available to decision-makers.

Developing and Assessing Alternatives

For the Local Transport Strategy, the reasonable alternatives considered in this assessment focus on different ways the proposed actions could be delivered. While the overall vision, themes, and outcomes of the strategy set the direction for transport in North Lanarkshire, the SEA has explored how varying the level of ambition or emphasis across 12 action areas could result in different environmental outcomes.

These assessments help inform decision-makers and stakeholders about the relative environmental benefits and trade-offs of different approaches, supporting the development of a more sustainable strategy.

The assessment considered sets of reasonable alternatives across transport-related groups. Each group includes a 'do minimum' option and one or more 'do something' options, representing a range of delivery approaches. The groups and their reasonable alternatives are:

- Active Travel and Behaviour Change:
  - Alternative AT/BC-A Do Minimum
  - Alternative AT/BC-B Active Travel Infrastructure
  - Alternative AT/BC-C Behaviour Change
- Public Transport and Shared Transport:
  - Alternative PT/ST-A Do Minimum
  - Alternative PT/ST-B Public Transport Infrastructure
  - Alternative PT/ST-C Integration and Accessibility
  - Alternative PT/ST-D Expanded Public and Shared Transport Offer
- Road Safety:
  - Alternative RS-A Do Minimum
  - Alternative RS-B Behaviour Change and Education
  - Alternative RS-C Physical Road Safety Measures

- Improving Road Use
  - Alternative RU-A Do Minimum
  - Alternative RU-B Infrastructure and Network
  - Alternative RU-C Parking Management
  - Alternative RU-D Maintenance
- Environment and Decarbonisation
  - Alternative ENV-A Do Minimum
  - Alternative ENV-B Transport Solutions for Environmental Sustainability
- Freight
  - Alternative RN-A Do Minimum
  - Alternative RN-B Freight Network
- Digital and Technology
  - Alternative DT-A Do Minimum
  - Alternative DT-B Smart Mobility and Infrastructure Enhancements

For further detail on the development and assessment of alternatives, see the main body of the Environmental Report (Section 4.2 of the Environmental Report).

Appraisal of Local Transport Strategy Actions

Summary appraisal findings for the established growth strategy options are presented below by SEA topic. The detailed narrative explaining these findings is presented in Section 4.3 of the Environmental Report.

Active Travel and Behaviour Change

Overall, the assessment indicates that Alternatives AT/BC-B (Active Travel Infrastructure) and AT/BC-C (Behaviour Change) generally perform more favourably than the Do Minimum option (AT/BC-A) across most SEA topics. AT/BC-B offers the strongest benefits for air quality, climatic factors, material assets, and population & human health, although it introduces moderate risks of adverse effects to biodiversity, landscape, and cultural heritage due to physical works. These risks are identified on a precautionary basis, as detailed mitigation measures are not assumed at this stage. AT/BC-C performs well for themes where non-intrusive measures are advantageous, such as biodiversity, soil and water, and cultural heritage, while also supporting health and climate objectives. In contrast, AT/BC-A consistently provides the least environmental benefit, reflecting its limited scope for change beyond existing commitments.

Public Transport and Shared Transport

The assessment indicates that PT/ST-D (Expanded Public and Shared Transport Offer) performs most favourably across all SEA topics, indicating strong alignment with environmental outcomes. PT/ST-C (Integration and Accessibility) also ranks well, particularly in areas where non-intrusive measures are advantageous (such as biodiversity, heritage, landscape, and material assets). PT/ST-B (Public Transport Infrastructure) performs positively across several SEA topics, including air quality and noise, climatic factors, and population and human health; however, it carries risks of adverse effects due to potential direct impacts associated with infrastructure provision. These risks are identified on a precautionary basis, as mitigation measures are not assumed at this stage. PT/ST-A (Do Minimum) consistently ranks lowest, offering the least environmental benefit due to its limited scope for change beyond existing commitments.

Road Safety

The assessment shows that RS-B (Behaviour Change and Education) performs most favourably across SEA topics, particularly in areas where non-intrusive interventions are beneficial (such as biodiversity, landscape and soil and water resources). RS-C (Physical Road Safety Measures) performs well in terms of population and human health, but its reliance on infrastructure-led interventions introduces potential risks of adverse effects to landscape, soil and water resources, and biodiversity. These risks are identified on a precautionary basis, as mitigation measures are not assumed at this stage. RS-A (Do Minimum) offers limited environmental benefit, reflecting its reliance on pre-approved schemes; however, it performs favourably for certain SEA topics where no physical interventions are preferred.

Improving Road Use

The assessment shows that RU-C (Parking Management) performs most favourably across many SEA topics, indicating minimal adverse environmental impacts. RU-D (Maintenance) also performs well, particularly in areas such as biodiversity, cultural heritage, and landscape, though it presents slightly higher impacts on certain topics (such as soil and water resources) due to the nature of maintenance activities. RU-B (Infrastructure and Network) performs well for population and human health, but direct physical interventions to the road network present several risks of adverse effects across multiple SEA topics. These risks are identified on a precautionary basis, as mitigation measures are not assumed at this stage. RU-A (Do Minimum) consistently ranks low, reflecting its reliance on pre-approved schemes; however, it performs relatively well for some SEA topics that are sensitive to direct physical changes.

Environment and Decarbonisation

The assessment indicates that ENV-B (Transport Solutions for Environmental Sustainability) performs most favourably across all SEA topics. Although it introduces minor risks to biodiversity, landscape, and water and soil during infrastructure delivery, these are localised and manageable, with long-term beneficial effects outweighing any residual short-term adverse effects. Additional electricity infrastructure to support electric vehicle (EV) charging may also be required, but early planning and siting can limit impacts. ENV-A (Do Minimum) consistently provides the least benefit, reflecting its reliance on existing initiatives without additional measures.

Freight

The assessment indicates that RN-B (Freight Network) performs more favourably across most SEA topics, particularly for air and noise pollution, climatic factors, cultural heritage, landscape, and population and human health, while introducing negligible environmental risks. RN-A (Do Minimum) consistently provides the least benefit, reflecting its reliance on maintaining existing infrastructure without proactive measures. Some uncertainty exists, with effects to be determined by the location of any potential new freight routes.

Digital and Technology

The assessment shows that DT-B (Smart Mobility and Infrastructure Enhancements) performs most favourably across many SEA topics, with consistently low rankings indicating minimal environmental impact, offering notable potential benefits for air quality and noise pollution, climatic factors, and population and human health. While DT-B introduces some minor risks associated with material use and physical works, these are still expected to be limited and manageable. DT-A (Do Minimum) generally performs equally or least favourably, providing limited environmental benefit due to its reliance on maintaining existing infrastructure without proactive measures, though it ranks slightly better for material assets as it avoids new infrastructure requirements.

Preferred Approach for the Local Transport Strategy

The preferred approach for the Local Transport Strategy has been shaped through a multi-stage process. It began with identifying transport-related challenges and opportunities, which informed the development of a Vision Statement, Priorities, and Objectives. These were supported by a set of guiding policies.

An alignment exercise ensured that the strategy's objectives were consistent with national and regional priorities, including the National Transport Strategy 2, the Strathclyde Partnership for Transport's Regional Transport Strategy, and The Plan for North Lanarkshire.

A long list of potential actions was then generated, drawing on stakeholder and public consultation feedback, baseline data analysis, input from Council officers, and existing policy documents. Particular attention was given to policies such as Infrastructure First and Local Living from National Planning Framework 4, which promote sustainable travel and local accessibility. The process also considered the Sustainable Travel Hierarchy and Sustainable Investment Hierarchy from the National Transport Strategy 2.

The long list of actions was refined through a sifting process, removing duplicates

and options that were unclear or not transport-related. The remaining actions were grouped and appraised against the strategy's objectives, Scottish Transport Appraisal Guidance criteria (Environment, Climate Change, Health, Safety and Wellbeing, Economy, Equality and Accessibility), and deliverability risks (Feasibility, Affordability, and Public Acceptability). The resulting short list forms the basis of the Action Plan (see Table 5 1 in the main body of the report).

The preferred approach integrates elements from all of the 'do something' reasonable alternatives assessment in the SEA. It places a strong emphasis on promoting non-private vehicle modes of transport, such as active travel, public transport, and shared mobility, in line with national policy and sustainability objectives. Physical interventions are included only where necessary and are generally limited in scale, reflecting the SEA findings which identified greater environmental risks associated with physical infrastructure.

Appraisal of the Draft Local Transport Strategy

Chapter 5 of the Environmental Report presents an appraisal of the latest version of the draft Local Transport Strategy, as currently consulted on. A series of narratives are presented under each SEA topic, providing a commentary on the Local Transport Strategy policy provisions, cumulative effects, and overall conclusions. The appraisal identifies and evaluates 'likely significant effects' of the plan on the baseline, drawing on the SEA objectives identified through scoping as a methodological framework.

The following overview summarises the appraisal findings.

Air quality and noise pollution

Overall, the LTS presents mixed but generally beneficial effects in relation to air quality and noise pollution. There is potential for significant long-term beneficial effects from: decarbonisation of the vehicle fleet; promotion of active, shared, and public transport; and integration with existing environmental strategies. However, potential for significant (short-, medium-, and long-term) adverse effects may arise from the construction and operation of new infrastructure developments.

Biodiversity, flora and fauna, and geodiversity

Overall, the LTS presents a mixed set of effects in relation to biodiversity, flora and fauna, and geodiversity. Moderate (potentially significant) beneficial long-term effects are likely to arise from actions that reduce car dependency and promote sustainable transport modes; however, there is also potential for significant adverse effects in the short-, medium-, and long-term that result from new infrastructure developments and maintenance. The significance of these adverse effects will vary depending on mitigation, location and ecological context of individual projects.

Climatic factors

Overall, the LTS is anticipated to result in significant long-term beneficial effects in relation to the climatic factors SEA topic, particularly through its support for low emission vehicles, active travel, and public transport. Potential adverse effects (significance uncertain) may arise from construction and maintenance activities.

Cultural heritage

Overall, the LTS has the potential for mixed effects in relation to cultural heritage. Potential significant permanent adverse effects may arise from infrastructure development near sensitive heritage assets, while moderate (potentially significant) medium-term beneficial effects may result from improved access, reduced traffic pressure, and opportunities for heritage-sensitive maintenance. The significance of the adverse effects will depend on proximity to heritage features and the extent to which mitigation is embedded in project design.

Landscape

Overall, the LTS presents a mixed set of effects in relation to landscape. Potential significant permanent adverse effects may arise from new infrastructure developments, particularly in rural or visually sensitive areas, while medium-to-long-term moderate (potentially significant) beneficial effects may result from active travel infrastructure, sustainable maintenance practices, and increases in tranquillity. The significance of effects will depend on location and design quality, with short-term impacts likely during construction and longer-term outcomes determined by landscape planning and mitigation.

Material assets

Overall, actions in the LTS are likely to result in mixed effects. Moderate (potentially significant) medium-term beneficial effects are anticipated through maintenance of the existing transport network, while sustainability-focused measures promote more efficient and environmentally responsible use of resources. However, there is the potential for significant permanent adverse effects related to the resource use associated with infrastructure projects.

Population and human health

Overall, the LTS is anticipated to result in significant short-, medium-, and long-term beneficial effects with regard to population and human health, for example, through the delivery of active travel infrastructure, public transport improvements, and safety measures. Potential significant adverse effects are mostly associated with infrastructure development, which can be mitigated through appropriate design and engagement.

Soil and water resources

The LTS presents the potential for long-term moderate (potentially significant) adverse effects on soils and water resources from infrastructure development. However, the significance may be reduced through sustainable maintenance practices, green infrastructure, and pollution reduction measures.

Cumulative Effects with Other Plans and Strategies

Adverse cumulative effects may arise from construction activities associated with new infrastructure proposed in other plans and strategies, which could strain local resources and infrastructure, and lead to increased traffic congestion and a temporary reduction in the quality of life for residents.

Additionally, the cumulative effect of multiple infrastructure projects could exacerbate local environmental degradation. For example, increased impermeable surfaces from new roads, parking facilities, and buildings could lead to higher runoff and potential water contamination.

The loss of green spaces and habitats from projects delivered through other plans/ strategies alongside the LTS could also negatively impact local biodiversity and ecosystem services.

To mitigate these adverse cumulative effects, it will be important to coordinate the implementation of the LTS with other local plans/ strategies, and to engage with locals through consultation events. Additionally, promoting sustainable practices, such as using renewable materials (as included in action MA-4), coupling infrastructure development with the delivery of green infrastructure, and encouraging low-emission transport actions, can help reduce the overall impact on the environment and communities. With these in place, no significant adverse cumulative effects are anticipated from the LTS.

Positive cumulative effects across the SEA topics are also anticipated from actions in the LTS and other plans and strategies. In this respect, many of the Policies complement and reinforce the objectives and actions of Scotland's NTS2, Environment Strategy, Climate Change Plan, National Strategy for Economic Transformation, NPF4 and other key plans and strategies nationally.

Recommendations for Implementation of the LTS

As part of the Strategic Environmental Assessment, a number of recommendations have been identified across the environmental topics considered. These recommendations are intended to support the development and delivery of schemes and proposals within the Local Transport Strategy.

They highlight opportunities to avoid or reduce potential environmental effects and to enhance positive outcomes. These should be taken into account during the design and implementation of transport interventions.

A summary of these recommendations is provided in Table 5 2 of the main Environmental Report.

Monitoring

Monitoring is an important part of the Strategic Environmental Assessment process. It helps track the environmental performance of the Local Transport Strategy and ensures that the predicted effects occur as expected. It also allows for the identification of any unforeseen impacts, enabling timely action if needed.

Monitoring supports the strategy's core aim of promoting sustainable development and protecting the environment, while providing valuable information to guide future updates to the strategy and related transport projects.

The Environmental Report includes a proposed monitoring programme, which outlines how the implementation of the strategy will be tracked. This programme focuses on areas where significant environmental effects were identified and sets out:

- the environmental change or effect to be monitored
- the relevant SEA topic
- the indicator to be measured
- the source of information and frequency of monitoring
- the trigger for intervention if issues arise

These indicators are designed to align with North Lanarkshire Council's wider monitoring activities for the strategy. If monitoring shows that mitigation measures are not working as intended, adjustments can be made to prevent negative environmental impacts.

For further detail, see the proposed monitoring programme in Table 6 1of the Environmental Report.

Next Steps

This Environmental Report is being published alongside the draft Local Transport Strategy for public consultation during winter 2025-26.

Following the consultation period, all comments received will be reviewed and considered. Any changes made to the strategy as a result of this feedback will be assessed through the Strategic Environmental Assessment process, where required.

1. Introduction

1.1 Background

AECOM has been commissioned to undertake a Strategic Environmental Assessment (SEA) in support of the emerging 10-year Local Transport Strategy for North Lanarkshire (hereafter referred to as "the LTS") on behalf of North Lanarkshire Council (NLC). The LTS will replace the current strategy, which was produced in 2010.

SEA is a systematic process for evaluating the environmental consequences of proposed plans, strategies, or programmes to ensure environmental issues are fully integrated and addressed at the earliest appropriate stage of decision making, with a view to promoting sustainable development.

This Environmental Report, which is the main output of the SEA process, accompanies the Draft Local Transport Strategy for consultation in Winter 2025.

1.2 The North Lanarkshire LTS

North Lanarkshire's LTS was published in 2010 and presented a future vision for transport in the council area (shown in Table 1 1). The adopted LTS is now 15 years old and therefore does not fully align with current national policies and strategies that have since been published.

Table 1 1: Key Facts Relating to the Local Transport Strategy	
Name of Responsible Authority	North Lanarkshire Council
Title of the strategy	North Lanarkshire Local Transport Strategy
Subject	Transport Strategy
Purpose	The North Lanarkshire Local Transport Strategy will provide a strategic framework for future transport planning across North Lanarkshire.
Timescale	10 years
Area covered by the strategy	The council area of North Lanarkshire (Figure 1).
Summary of content	The North Lanarkshire Local Transport Strategy will set strategic transport planning policy for North Lanarkshire in the next 10 years. It will set out which transport interventions North Lanarkshire Council intends to deliver during the LTS period.

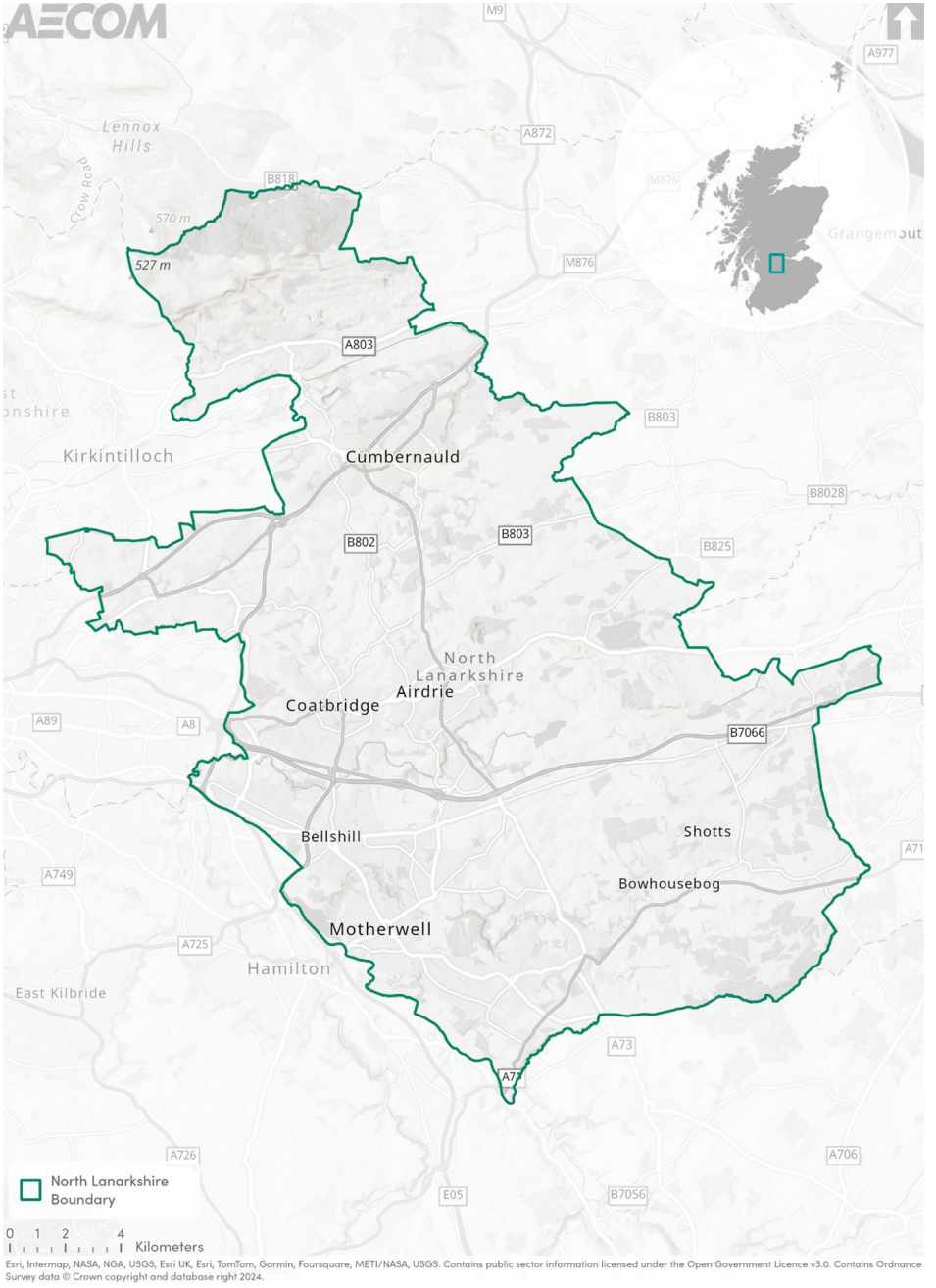


Figure 1: North Lanarkshire Council Area

On this basis, there is a need for a new ('emerging') LTS that sets priorities, defines the agenda, establishes clear direction, and process for change at the local level. This will provide a new 10-year LTS to replace the adopted 2010 version.

The emerging LTS will outline the future direction for NLC's approach to the development and upkeep of the transport infrastructure within the local authority area. Furthermore, the LTS shall also outline how NLC will meet requirements to deliver the national and regional obligations and provide a delivery plan for meeting local challenges and objectives.

To achieve this, transport policies and actions will be developed, and indicators identified to monitor the progress made on these actions.

A number of key tasks have been undertaken:

- Analysis of data, undertaking a Policy Review and consultation.
- Identification of a Vision Statement, Priorities and Objectives.
- Generation of options and development of an Action Plan.
- Developing alternative approaches.
- Undertaking a full Strategic Environmental Assessment (SEA), a Habitats Regulations Appraisal (HRA) and Integrated Impact Assessment (IIA).
- Development of a Draft LTS.

The final LTS is programmed to be completed and launched at the beginning of 2026.

1.3 Vision, Priorities and Objectives for the LTS

The following vision statement details what North Lanarkshire Council is aiming to achieve with the LTS:

'North Lanarkshire will be a well-connected place, with an efficient transport system that is sustainable, accessible and resilient, supporting inclusive economic growth, health and wellbeing of all and facilitating the safe movement of people and goods.'

The LTS will follow five priorities set out in the strategy:

- Priority 1: Improve accessibility and reduce inequalities
- Priority 2: Protect the environment and take climate action
- Priority 3: Enable a safe, resilient and equitable transport system that is sustainable
- Priority 4: Support inclusive economic growth
- Priority 5: Improve the health and wellbeing of our communities

The LTS will deliver a range of transport interventions, known as 'actions', under the following groups:

- Active Travel
- Behaviour Change
- Public Transport
- Shared Transport
- Environmental and Decarbonisation
- Safety in Transport
- Freight
- Maintenance
- Road Safety and Network
- Parking
- Digital and Technology
- Overarching

The following objectives form part of the criteria against which actions will be monitored and evaluated in future years:

- TPO1: Provide a sustainable and accessible transport network which strengthens connectivity across North Lanarkshire and supports environmental targets
- TPO2: Increase the mode share of trips undertaken by shared, active and public transport modes for work, study and leisure trips
- TPO3: Support the efficient and sustainable movement of people and goods to support the local, regional and national economy
- TPO4: Support safety improvements across the transport network and promote the personal safety and security of users
- TPO5: Promote a well maintained and resilient transport network that adapts to the effects of climate change

2. SEA Explained

2.1 Introduction

This report has been prepared in accordance with the European Directive 2001/42/EC and section 15 of the Environmental Assessment (Scotland) Act 2005 (hereafter referred to as the "2005 Act").

The 2005 Act requires all qualifying plans, programmes, and strategies (PPS) to undergo SEA. This provides a systematic process for identifying, reporting, and mitigating the environmental impacts of an emerging PPS.

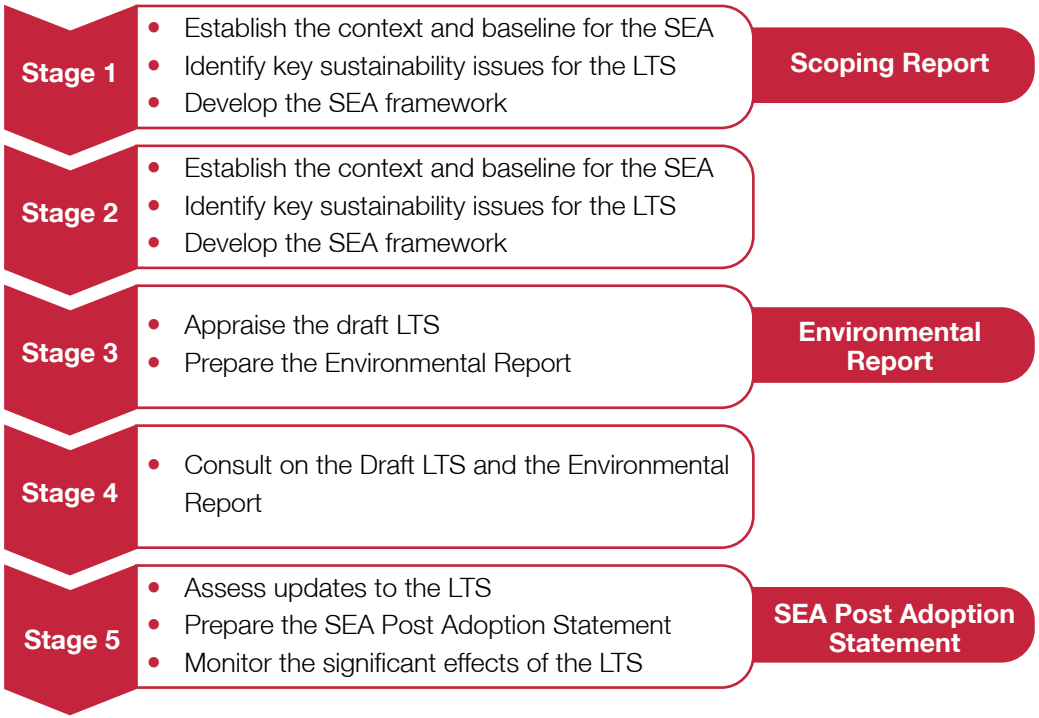
The LTS is a qualifying strategy in accordance with Section 5(3) of the 2005 Act, and an SEA is therefore required.

2.2 Key Stages of the SEA

This Environmental Report follows the process set out in the 2005 Act and guidance published by Scottish Government on undertaking an SEA. The 2005 Act and the published guidance will be used to guide this assessment.

The stages and outputs for the SEA (post-screening) are shown in Figure 2. The Environmental Report (the current stage) comprises Stage 3.

Figure 2: The Stages and Outputs for the SEA



2.3 Purpose of the Environmental Report

In line with the 2005 Act and Transport Scotland's Draft Guidance on Local Transport Strategies, a report (known as the Environmental Report) must be published for consultation alongside the Draft LTS. Its purpose is to identify, describe, and evaluate the likely significant environmental effects of implementing:

- the LTS; and
- reasonable alternatives for the LTS.

The report must then be considered, alongside consultation responses, when finalising the LTS.

The Environmental Report is the second document to be produced as part of the SEA process for the LTS. The first document was the Scoping Report prepared by AECOM in June 2025 (see Appendix A), which included information about the baseline and the 'framework' against which the proposals have been assessed.

2.4 Structure of the Environmental Report

2.4.1 SEA Topics

The information in this Environmental Report has been presented through eight SEA topics, which have been informed by the issues/topics in the 2005 Act. These are:

- Air quality and noise pollution;
- Biodiversity, flora and fauna, and geodiversity;
- Climatic factors;
- Cultural heritage;
- Landscape;
- Material assets;
- Population and human health; and
- Soil and water resources.

2.4.2 Environmental Report Chapters

In line with the provisions of the Environmental Assessment (Scotland) Act 2005, this Environmental Report has been structured as follows:

- Chapter 4 presents an overview of the scoping process for the SEA (Stage 1 in Figure 2).
- Chapter 5 presents an assessment of a number of alternative approaches relating to the broad principles underpinning the LTS. These have been assessed as reasonable alternatives (Stage 2 in Figure 2).
- Chapter 6 presents an assessment of the draft proposals, in terms of their likely significant environmental effects (Stage 3 in Figure 2).
- Chapter 7 presents proposals for monitoring the significant environmental effects of the proposals, and opportunities for enhancements (linked to Stage 5 in Figure 2).
- Chapter 8 subsequently sets out the next steps for the LTS and accompanying SEA process.

Consultation on this Environmental Report alongside the draft version of the LTS comprises Stage 4.

3. What is the Scope of the SEA?

3.1 SEA Scoping Report

The Environmental Assessment (Scotland) Act 2005 requires that: *"Before deciding on the scope and level of detail of the information to be included in the environmental report to be prepared in accordance with section 14; the responsible authority shall send to each consultation authority such sufficient details of the qualifying plan or programme as will enable the consultation authority to form a view on those matters"*.

In Scotland, the consultation bodies are Historic Environment Scotland (HES), the Scottish Environmental Protection Agency (SEPA) and NatureScot.

These authorities were consulted on the scope of the SEA for the LTS proposals through the release of an SEA Scoping Report (prepared by AECOM) in June 2025 (via the SEA Gateway).

Although an acknowledgement email was received, no further responses were received from the statutory consultees. A follow-up email was issued after the consultation deadline had passed; however, this also received no reply. It is therefore assumed that the consultees were satisfied with the content and scope of the Scoping Report. The Scoping Report is attached as Appendix A.

3.2 Content of the Scoping Report

Reflecting the requirements of the 2005 Act, the following information is presented in the Scoping Report for the eight SEA topics:

- Context review: This explored the environmental and sustainability 'context' for the SEA / LTS through reviewing high level messages (e.g. internationally, from central government and at the regional level) with a view to establishing the focus for the SEA.
- Baseline data: This established the baseline situation in the area in the absence of the LTS (including the future baseline) in order to help identify the strategy's likely significant effects.
- Key issues: This identified particular problems or opportunities ('issues') that should be a focus of the SEA.
- Considering this information, developing an SEA framework comprising SEA objectives and assessment questions, which can then be used as a guiding framework for the subsequent assessment.

3.3 Issues / Topics Scoped into the SEA

Scoping identified a range of environmental topics that should be a particular focus of SEA. In this respect, in terms of the SEA 'issues' suggested by Schedule 3 of the Environmental Assessment (Scotland) Act 2005, the following were scoped in through the scoping process:

- Air quality and noise pollution;
- Biodiversity, flora and fauna, and geodiversity;
- Climatic factors;
- Cultural heritage;
- Landscape;
- Material assets;
- Population and human health; and
- Soil and water resources.

It is noted that the Environmental Assessment (Scotland) Act 2005 highlights that the Environmental Report should present information on the likely significant effects on the environment, including on issues such as biodiversity; population; human health; fauna; flora; soil; water; air; climatic factors; material assets; cultural heritage, including architectural and archaeological heritage; landscape; and the inter-relationship between these issues.

3.4 SEA Framework

The key environmental issues relating to the proposals have been translated into an 'SEA Framework'. The SEA Framework provides a way in which the likely significant environmental effects of the LTS proposals and alternatives can be identified and subsequently analysed based on a structured and consistent approach.

As discussed above, the SEA Framework and the assessment findings in this Environmental Report have been streamlined and presented under eight SEA topics. In this respect the accompanying objectives for each topic have been refined as appropriate in recognition of the high-level nature of the proposals at this stage.

The SEA Framework is presented in Table 3 1.

Table 3 1: SEA Framework

SEA Topic	SEA Objectives
Biodiversity, Flora and Fauna, and Geodiversity	• Conserve and enhance internationally, nationally, and locally designated sites for biodiversity and geodiversity in accordance with their significance and in line with established good practice. • Take a strategic, landscape-scale approach, focused on habitat connectivity across the transport network and climate change resilience. • Ensure accordance with the mitigation hierarchy (avoid, mitigate, compensate) to reduce negative effects of new transport infrastructure on ecological and geological resources. • Prevent the spread of invasive non-native species (INNS) along transport corridors.
Climatic Factors	• Support climate change mitigation by limiting the contribution of transport to greenhouse gas (GHG) emissions. • Support the resilience of the transport network to the potential effects of climate change, including flooding and extreme heat events. • Support the restoration of natural processes linked to biodiversity objectives and avoid actions that further constrain the natural environment's ability to respond to climate change.
Air Quality and Noise Pollution	• Deliver improvements to air quality in North Lanarkshire by supporting the use of more sustainable modes of travel, including active travel and public transport. • Support the achievement of air quality objectives, including within Air Quality Management Areas (AQMAs). • Reduce noise from transportation sources.
Soil and Water Resources	• Promote efficient land use, with a focus on prioritising the protection of the best and most versatile agricultural land as far as possible. • Minimise the impact the transport network has on water quality and the physical state of water bodies.
Cultural Heritage	• Conserve and enhance North Lanarkshire's historic environment, including both designated and non-designated heritage assets. • Protect archaeological assets from disturbance due to the construction of new transport infrastructure. • Consider links to landscape and placemaking and promote an understanding of the local heritage resource.

Table 3 1: SEA Framework

SEA Topic	SEA Objectives
Landscape	• Protect and enhance the character, quality, and setting of North Lanarkshire's landscape, townscape, and villagescape features. • Integrate high-quality green infrastructure into new transport infrastructure, linking it to the wider landscape. • Recognise close links with other objectives, including biodiversity and heritage.
Material Assets	• Promote sustainable management and design solutions that encourage the reduction, re-use, and recycling of waste and materials during the construction, maintenance, and operational phases of transportation projects and schemes.
Population and Human Health	• Improve access to key services, facilities, and amenities. • Improve access to education, employment, and economic opportunities. • Improve access to high-quality green infrastructure networks. • Promote good health by encouraging active modes of travel (e.g., walking and cycling). • Improve road safety, including for vulnerable users.

4. Assessment of Reasonable Alternatives

4.1 Assessing Reasonable Alternatives in SEA

The assessment of 'reasonable alternatives' is a key element of the SEA process to meet the requirements of the 2005 Act.

A central facet of the SEA process to date has been the assessment of reasonable alternatives for the LTS. The 2005 Act is not prescriptive as to what constitutes a reasonable alternative, stating only that *"The report shall identify, describe and evaluate the likely significant effects on the environment of implementing (a) the plan or programme; and (b) reasonable alternatives to the plan or programme".*

The SEA Regulations allow flexibility in defining alternatives, depending on the nature of the plan and the realistic choices available to decision-makers.

In this SEA, the reasonable alternatives focus on different ways the plan's actions could be delivered. The vision, themes and outcomes for the LTS set the overall direction for transport in North Lanarkshire, and the key choices for the SEA lie in how these aims are achieved.

The assessment therefore looks at different levels of ambition and emphasis across the 12 action groups, to understand how varying the scale or focus of actions could lead to different environmental effects.

These assessments are designed to inform plan makers and stakeholders on the relative sustainability merits of alternative approaches the proposals could take on various elements associated with the proposals.

The SEA process has therefore considered reasonable alternatives through the approach set out above.

4.2 Defining Reasonable Alternatives

4.2.1 Development of Groups and Actions for the LTS

The process undertaken to develop actions for this LTS included a number of steps.

Subsequent to the identification of problems and opportunities for the LTS, and the development of a Vision Statement, Priorities and Objectives, the next step was to develop a list of actions. This was primarily informed by stakeholder engagement and public consultation findings, supplemented by North Lanarkshire Council officer input and actions identified in existing strategy / policy documents.

The actions retained following cleaning and sifting (short list) were then consolidated in 12 action groups, as follows:

- Active Travel;
- Behaviour Change;
- Public Transport;
- Shared Transport;
- Environmental and Decarbonisation;
- Safety in Transport;
- Freight;
- Maintenance;
- Road Safety and Network;
- Parking;
- Digital and Technology; and
- Overarching.

The short list of actions then underwent a high-level appraisal; actions retained following the appraisal form the basis of the Action Plans in the LTS.

To inform this process, the SEA process has considered a number of different approaches for the 12 LTS groups considered. Rather than assessing the 12 groups (and their actions) individually, packages of groups/actions have been considered as reasonable alternatives. This enables the relative environmental merits of different strategic approaches under each group/option to be effectively considered, recognising the interplay between the different LTS groups/actions being considered.

4.2.2 Alternatives Considered

In light of the above, the SEA has considered a series of reasonable alternatives under each LTS group. For ease of reference, these alternatives are presented ahead of their respective assessment tables (see Table 4 1 to Table 4 7).

Each set of reasonable alternatives includes one 'do minimum' option and one or more 'do something' options, reflecting a range of potential approaches within each LTS group.

All 'do something' reasonable alternatives will be supported by two cross-cutting actions: the first involves the collection of baseline data to enable effective and robust monitoring and evaluation of transport interventions across North Lanarkshire; the second is to enhance the integration of transport within development planning, with a particular focus on promoting active travel and aligning with the Infrastructure First policy.

4.3 Assessment Findings

Table 4 1 through to Table 4 7 present assessment findings in relation to the LTS groups introduced above. These are organised by the eight SEA topics. Section 4.4 provides a summary of the assessment rankings.

For each SEA topic, a commentary on the likely effects is presented. Options are also ranked numerically reflecting their relative sustainability performance, with '1' being the most favourable ranking.

The assessment of reasonable alternatives has been undertaken using a precautionary approach, particularly in relation to the uncertainty around the location and scale of future interventions. Where alternatives involve physical infrastructure, potential environmental risks have been identified based on the possibility of impacts occurring in sensitive areas. However, the assessment assumes the application of standard good-practice construction and

environmental management measures (e.g. noise barriers, dust suppression, pollution prevention, and ecological timing of works), which are typically embedded in project delivery. This approach ensures a proportionate and realistic assessment of likely effects, while recognising that more detailed mitigation and enhancement measures will be developed at later stages.

It is noted that where the relative performance of the alternatives is uncertain (such as when the ranking depends on specific details that are not yet defined) this is indicated with a '?' in the 'Rank of Preference' column.

Rather than re-evaluating the cross-cutting actions within each alternative, it has also been assumed that their implementation will result in beneficial effects. This assumption has been consistently applied across the assessment and ranking of all 'do something' reasonable alternatives.

4.3.1 Active Travel and Behaviour Change

- Alternative AT/BC-A Do Minimum: This would comprise a do minimum alternative, which would assume that only those plans, developments and schemes that have already received formal approval and funding will be delivered.
- Alternative AT/BC-B Active Travel Infrastructure: This alternative focuses on the delivery of additional infrastructure to support the active travel network. This includes, for example, the extension and improvement of the walking, wheeling and cycling network (including Community Hub improvements, strategic active travel network routes and local neighbourhood and connecting active travel routes); delivery of new active travel infrastructure within the City Deal programme; provision of additional cycle parking; better lighting and personal security features; and measures to support the development of local living.
- Alternative AT/BC-C Behaviour Change: This would focus on interventions designed to support behaviour change, with a particular emphasis on active travel modes. Actions would include working with partners to identify the most effective way of delivering behaviour change campaigns to support the use of active travel infrastructure; measures to promote and encourage walking, wheeling and cycling, including cycle training for schoolchildren; review of signage for each infrastructure project; promoting North Lanarkshire Council's active travel website; and monitoring and evaluation frameworks for active travel modes.

Table 4 1: Active Travel and Behaviour Change

SEA Topic	Discussion of Potential Effects and Relative Merits of Options			
	Alternative AT/BC-A Do Minimum Alternative AT/BC-B Active Travel Infrastructure Alternative AT/BC-C Behaviour Change			
		Rank of Preference		
		AT/BC-A	AT/BC-B	AT/BC-C
Air quality and noise pollution	AT/BC-A is unlikely to provide additional actions to reduce car dependency in North Lanarkshire. AT/BC-B provides the greatest long-term beneficial effects by enabling a sustained modal shift to walking, wheeling and cycling, limiting emissions and noise. AT/BC-C also supports a reduction in car dependency, but its success depends on uptake and long-term engagement.	3	1	2
Biodiversity, flora and fauna, and geodiversity	AT/BC-A has no additional impact as no new works are introduced. AT/BC-B has the potential for adverse effects due to construction of new active travel infrastructure, which could disturb habitats if not mitigated. However, infrastructure improvements could support habitats in the long-term if integrated with green corridors and sensitive design. AT/BC-C avoids physical works, so its direct impact is negligible; however, modal shift will result in less habitat disturbance and fewer animal collisions.	2	3	1
Climatic factors	AT/BC-A results in no additional reductions in greenhouse gas emissions or impacts to climate change resilience. AT/BC-B offers the largest potential of the options to contribute to emissions reductions by supporting long-term modal shift. AT/BC-C also provides moderate benefits, but its effectiveness depends on uptake and long-term engagement.	3	1	2
Cultural heritage	AT/BC-A has no additional impact beyond existing commitments. AT/BC-B introduces some risk of adverse effects if new infrastructure is proposed close to heritage assets, requiring careful design. AT/BC-C has negligible impact as it involves no physical works; however, additional active travel infrastructure may result in some beneficial effects by increasing accessibility to certain heritage sites.	2	3	1
Landscape	AT/BC-A results in no additional changes to landscape character. AT/BC-B could alter local character through new infrastructure, though good design can mitigate this. AT/BC-C has no physical impact on North Lanarkshire's landscape. The 'do something' alternatives may contribute to beneficial effects by reducing car dependency, which could enhance visual amenity and tranquillity.	=2	=2	1
Material assets	AT/BC-A maintains existing assets only. AT/BC-B is expected to result in increased material consumption through the development of new active travel infrastructure, though this is likely to be offset by long-term efficiency gains and reduced reliance on resource-intensive transport modes. AT/BC-C improves utilisation of existing assets through better information and engagement.	3	1	2

Table 4 1: Active Travel and Behaviour Change

SEA Topic	Discussion of Potential Effects and Relative Merits of Options			
	Alternative AT/BC-A Do Minimum Alternative AT/BC-B Active Travel Infrastructure Alternative AT/BC-C Behaviour Change			
		Rank of Preference		
		AT/BC-A	AT/BC-B	AT/BC-C
Population and human health	AT/BC-A offers no additional health benefits over and above existing provisions. AT/BC-B provides the greatest beneficial effects by enabling more active travel and physical activity in the council area. AT/BC-C also delivers strong benefits through behaviour change.	3	=1	=1
Soil and water resources	AT/BC-A has no additional impacts on soil and water resources. AT/BC-B introduces potential adverse effects from land take and release of pollutants during construction of infrastructure, although long-term benefits from a reduction in cars as a result of this alternative may limit environmental pollution. AT/BC-C has no direct physical impact and will also lead to a reduction in cars (yielding the same beneficial long-term effects as AT/BC-B).	=2	=2	1

4.3.2 Public Transport and Shared Transport

- Alternative PT/ST-A Do Minimum: This would comprise a do minimum alternative, which would assume that only those plans, developments and schemes that have already received formal approval and funding will be delivered.
- Alternative PT/ST-B Public Transport Infrastructure: This alternative focuses on physical infrastructure improvements to enable more efficient and attractive public transport services. Actions would include, for example, consideration of bus priority measures and supporting the development of Clyde Metro. This alternative is primarily focused on physical interventions that enable more efficient and attractive public transport services.
- Alternative PT/ST-C Integration and Accessibility: This alternative would seek to improve operational and physical integration between public transport modes and other modes of transport, and to enhance the user accessibility and experience of the public transport network. Actions would include, for example, provision of accessible bus stops, waiting facilities for passengers, and on and off-road provision for bus operators.
- Alternative PT/ST-D Expanded Public and Shared Transport Offer: This alternative focuses on service-level actions that would seek to improve the reach, frequency and responsiveness of public and shared transport as alternatives to private car use across North Lanarkshire. Actions captured under this alternative would include those such as working with partners to improve connectivity of public transport (including in rural areas, north-south connectivity, connections to University Hospital Monklands and connectivity for unserved / underserved communities); support measures to enhance Community and Demand Responsive Transport; and engage with SPT during the lifetime of their Strathclyde Regional Bus Strategy (including measures related to exploring bus franchising).

Table 4 2: Public Transport and Shared Transport

SEA Topic	Discussion of Potential Effects and Relative Merits of Options				
	Alternative PT/ST-A Do Minimum Alternative PT/ST-B Public Transport Infrastructure Alternative PT/ST-C Integration and Accessibility Alternative PT/ST-D Expanded Public and Shared Transport Offer				
		Rank of Preference			
		PT/ST-A	PT/ST-B	PT/ST-C	PT/ST-D
Air quality and noise pollution	PT/ST-A is unlikely to provide additional improvements to North Lanarkshire's air quality and noise pollution levels. While short-term adverse effects are likely from construction, PT/ST-B provides the greatest benefit in the long-term by enabling more efficient and attractive public transport, reducing car use and emissions. PT/ST-C and PT/ST-D both support modal shift without physical interventions, with PT/ST-D likely delivering broader benefits through increased service reach and frequency.	4	=1	3	=1
Biodiversity, flora and fauna, and geodiversity	PT/ST-A has minimal impact as no new works are introduced. PT/ST-B will result in modal shift, which will reduce habitat disturbance; however, risk of adverse effects to habitats remains due to infrastructure development. PT/ST-C and PT/ST-D will both result in modal shift (which is likely to reduce habitat disturbance from vehicles) and involve fewer physical works than PT/ST-B.	3	4	=1	=1
Climatic factors	PT/ST-A results in no additional reductions in greenhouse gas emissions or impacts on climate change resilience. PT/ST-B and PT/ST-D both offer strong benefits by promoting modal shift away from private cars, with PT/ST-D potentially achieving wider coverage. PT/ST-C also contributes positively to modal shift but to a lesser extent.	4	=1	3	=1
Cultural heritage	PT/ST-A has no additional impacts beyond existing commitments. PT/ST-B introduces some risk where new infrastructure intersects heritage assets, requiring careful design. PT/ST-C and PT/ST-D have minimal physical impact. The three 'do something' alternatives may result in benefits by increasing access to, and supporting the understanding of, heritage sites.	=3	=3	=1	=1
Landscape	PT/ST-A results in no additional changes to landscape character. PT/ST-B could alter local landscape character through new infrastructure, though good design can mitigate this. PT/ST-C and PT/ST-D involve limited physical works. The 'do something' alternatives may contribute to beneficial effects by reducing car dependency, which could enhance visual amenity and tranquillity.	=3	=3	=1	=1

Table 4 2: Public Transport and Shared Transport

SEA Topic	Discussion of Potential Effects and Relative Merits of Options				
	Alternative PT/ST-A Do Minimum Alternative PT/ST-B Public Transport Infrastructure Alternative PT/ST-C Integration and Accessibility Alternative PT/ST-D Expanded Public and Shared Transport Offer				
		Rank of Preference			
		PT/ST-A	PT/ST-B	PT/ST-C	PT/ST-D
Material assets	PT/ST-A maintains existing assets only. PT/ST-B is expected to result in increased material consumption through the development of new public travel infrastructure, though this is likely to be offset by long-term efficiency gains and reduced reliance on resource-intensive transport modes. PT/ST-C improves utilisation of existing assets, while PT/ST-D expands service provision and shared transport options - both with a moderate level of material consumption.	4	2	=1	=1
Population and human health	PT/ST-A offers limited additional health benefits over and above existing provisions. PT/ST-B and PT/ST-D have the potential for considerable beneficial effects by enabling greater access to public transport and reducing car dependency. PT/ST-C also results in benefits through improved accessibility and user experience.	4	=1	3	=1
Soil and water resources	PT/ST-A has no additional impacts on soil and water resources. PT/ST-B has the potential for short-term adverse effects on soil and water resources during construction; however, in the long-term beneficial effects are anticipated by the resultant reduction in car use and associated pollutants. Similar long-term beneficial effects are anticipated for PT/ST-C and PT/ST-D, both supporting modal shift without physical works.	4	3	=1	=1

4.3.3 Road Safety

- Alternative RS-A Do Minimum: This would comprise a do minimum alternative, which would assume that only those plans, developments and schemes that have already received formal approval and funding will be delivered.
- Alternative RS-B Behaviour Change and Education: This alternative would focus on improving road safety through behaviour-led approaches. It would aim to reduce higher risk behaviours and increase awareness through education, engagement, and communication. Actions could include road safety campaigns (including to work towards Scottish road safety targets).
- Alternative RS-C Physical Road Safety Measures: This alternative would deliver targeted physical interventions to improve road safety, particularly in problem sites identified through accident data analysis. Measures could include feasibility studies to consider improvements to road safety at targeted locations, the expansion of 20 mph speed limits, installation of traffic calming infrastructure and liaison with partners for road safety improvements on the trunk roads and the surrounding local road network. This alternative would also include revising North Lanarkshire Council's Road Safety Plan in line with national policy by 2026.

Table 4 3: Road Safety

SEA Topic	Discussion of Potential Effects and Relative Merits of Options			
	Alternative RS-A Do Minimum Alternative RS-B Behaviour Change and Education Alternative RS-C Physical Road Safety Measures			
		Rank of Preference		
		RS-A	RS-B	RS-C
Air quality and noise pollution	RS-A is unlikely to provide additional improvements to North Lanarkshire's air quality and noise pollution levels. RS-B offers benefits through education and awareness campaigns (potentially leading to people using cleaner modes of transport), while RS-C delivers the most direct improvements through physical safety measures, such as 20 mph zones (associated with reduce pollution) and traffic calming (reducing traffic and associated noise pollution).	3	2	1
Biodiversity, flora and fauna, and geodiversity	RS-A has no additional impacts on biodiversity as it involves no new works. RS-B also has negligible direct impact, while RS-C introduces some minor adverse risk of habitat disturbance due to physical interventions, though these are likely to be localised.	=1	=1	3
Climatic factors	RS-A results in no additional reductions in greenhouse gas emissions or impacts on climate change resilience. RS-B and RS-C may contribute positively by encouraging safer, lower-speed travel and behaviour change, which can support reduced car use and associated greenhouse gas emissions over time.	3	=1	=1
Cultural heritage	PT/ST-A has no additional impact beyond existing commitments. RS-B also has negligible direct impact to heritage assets; however, their setting may benefit from improved road safety awareness by reducing traffic-related risks near historic sites. RS-C could pose minor risks where physical works occur near heritage assets, requiring careful design; however, the alternative may also result in long-term beneficial effects through safety improvements (e.g. traffic calming near schools or town centres) that enhance the setting and accessibility of heritage assets.	3	2	1
Landscape	RS-A results in no additional changes to North Lanarkshire's landscape. RS-B also has no physical impact, while RS-C could introduce small-scale visual changes from traffic calming though these are generally low impact.	=1	=1	3
Material assets	RS-A maintains existing assets only. Negligible effects are anticipated from RS-B on material assets. RS-C may result in minor material consumption due to the delivery of road safety infrastructure, though impacts are likely to be localised and relatively low in scale.	3	2	1

Table 4 3: Road Safety

SEA Topic	Discussion of Potential Effects and Relative Merits of Options			
	Alternative RS-A Do Minimum Alternative RS-B Behaviour Change and Education Alternative RS-C Physical Road Safety Measures			
		Rank of Preference		
		RS-A	RS-B	RS-C
Population and human health	RS-A offers no additional population and health benefits over and above existing provisions. RS-B improves safety awareness, reducing accident risk, while RS-C provides the greatest benefit through physical interventions that reduce collision likelihood.	3	2	1
Soil and water resources	RS-A has no additional impacts on soil and water. RS-B also has no additional physical impact, while RS-C introduces minor risks during construction, though these are localised and manageable.	=1	=1	3

4.3.4 Improving Road Use

- Alternative RU-A Do Minimum: This would comprise a do minimum alternative, which would assume that only those plans, developments and schemes that have already received formal approval and funding will be delivered.
- Alternative RU-B Infrastructure and Network: This would focus on addressing congestion and supporting economic opportunities through physical network improvements, particularly at key road corridors and junctions. Actions would include support for projects within the City Deal Programme; and working with partners to consider feasibility of targeted network improvements across North Lanarkshire.
- Alternative RU-C Parking Management: This would aim to improve accessibility through stronger parking management and enforcement. Actions would include greater enforcement of parking controls (including in relation to pavement parking, double parking, dropped kerb parking, parking outside schools, and at bus stops and Illegal parking within town centres and mixed-use urban locations); and a review of parking across the council area.
- Alternative RU-D Maintenance: This alternative would focus on supporting measures in North Lanarkshire's Roads Asset Management Plan to maintain and enhance the local adopted road network. It would also include improvements to communication of planned road and footpath/footway closures.

Table 4 4: Improving Road Use

SEA Topic	Discussion of Potential Effects and Relative Merits of Options				
	Alternative RU-A Do Minimum Alternative RU-B Infrastructure and Network Alternative RU-C Parking Management Alternative RU-D Maintenance				
		Rank of Preference			
		RU- A	RU- B	RU-C	RU- D
Air quality and noise pollution	RU-A is unlikely to provide additional benefits as it relies only on existing commitments. RU-B may have short-term negative impacts during construction but could improve traffic flows and reduce congestion-related emissions over time. RU-C may lead to air quality improvements by reducing vehicle idling. RU-D could support smoother traffic and safer roads, contributing to slight long-term improvements in air quality and noise levels.	4	3	1	2
Biodiversity, flora and fauna, and geodiversity	RU-A has minimal impact on biodiversity as it involves no new works. RU-B introduces moderate risk due to construction of junction improvements having the potential to disturb habitats. RU-C and RU-D are anticipated to have negligible impacts as they involve limited or no physical works.	=1	3	=1	=1
Climatic factors	RS-A results in no additional reductions in greenhouse gas emissions or impacts on climate change resilience. RU-B may increase emissions through construction and potentially encourage car use if not carefully managed. RU-C may support emissions reduction by discouraging unnecessary vehicle use. RU-D may have minor positive effects by improving network reliability (increasing the network's resilience to climate change) and reducing congestion and its associated emissions.	4	3	1	2
Cultural heritage	RU-A has no additional impact on cultural heritage. RU-B could pose risk of adverse effects where junction works occur near heritage assets, requiring careful design. RU-C and RU-D may have minor beneficial impacts on the setting of historic assets by reducing inappropriate parking, improving access, and maintaining the visual quality of historic streetscapes.	3	4	=1	=1
Landscape	RS-A results in no additional changes to North Lanarkshire's landscape. RU-B could introduce small-scale visual changes from junction improvements, which may result in adverse effects. RU-C and RU-D may result in minor positive effects by improving the visual quality of public spaces through better parking management and maintaining existing infrastructure.	3	4	=1	=1

Table 4 4: Improving Road Use

SEA Topic	Discussion of Potential Effects and Relative Merits of Options	Rank of Preference			
	Alternative RU-A Do Minimum Alternative RU-B Infrastructure and Network Alternative RU-C Parking Management Alternative RU-D Maintenance	RU- A	RU- B	RU-C	RU- D
Material assets	RU-A maintains existing assets only. RU-B would result in increased material consumption due to physical infrastructure improvements. RU-C would have minimal impact, with only minor resource use associated with enforcement measures. RU-D would involve ongoing material use for maintenance activities, but this supports the efficient use and longevity of existing assets.	3	4	1	2
Population and human health	RU-A offers no additional population and human health benefits over and above existing provisions. RU-B may result in moderate beneficial effects by improving safety and reducing pressures from traffic congestion, while RU-D improves safety through better-maintained roads. RU-C may also lead to minor beneficial effects by supporting accessibility and reducing unsafe parking.	4	1	3	2
Soil and water resources	RU-A and RU-C have no additional impacts on soil and water. RU-B and RU-D introduces minor risks of diffuse pollution during construction / maintenance activities.	=1	=3	=1	=3

4.3.5 Environment and Decarbonisation

- Alternative ENV-A Do Minimum: This would comprise a do minimum alternative, which would assume that only those plans, developments and schemes that have already received formal approval and funding will be delivered. This would rely on existing national and local initiatives for climate change mitigation and adaptation.
- Alternative ENV-B: Transport Solutions for Environmental Sustainability: This alternative aims to reduce the environmental impact of transport in North Lanarkshire, including the limitation of air pollution, and addressing climate change beyond existing initiatives. It would further promote low-emission and alternative fuel vehicles (including within the council fleet), support the decarbonisation of buses, support the use of sustainable practices and materials in construction and maintenance projects, and contribute to the delivery of an accessible and affordable electric vehicle charging network. These actions will align with relevant North Lanarkshire Council strategy and policy documents, such as the Climate Plan ACT 2030.

Table 4 5: Environment and Decarbonisation

SEA Topic	Discussion of Potential Effects and Relative Merits of Options		
	Alternative ENV-A Do Minimum Alternative ENV-B: Transport Solutions for Environmental Sustainability		
		Rank of Preference	
		ENV-A	ENV-B
Air quality and noise pollution	ENV-A is unlikely to provide additional benefits as it relies on existing commitments. ENV-B offers the greatest benefit by actively promoting low-emission vehicles, decarbonisation of buses, and sustainable construction practices, significantly reducing environmental impacts of transport in North Lanarkshire.	2	1
Biodiversity, flora and fauna, and geodiversity	ENV-A has minimal impact on biodiversity as it involves no additional works. ENV-B may have positive effects by reducing pollution and promoting sustainable practices, which can help protect habitats and support ecological resilience. While this option may lead to minor short-term risks during infrastructure delivery (such as electric vehicle [EV] charging points), these are localised and manageable with standard mitigation. Higher EV ambition could also require electricity network upgrades, including substations, which may involve land take and habitat disturbance.	2	1
Climatic factors	ENV-A results in no additional reductions in greenhouse gas emissions or impacts on climate change resilience. ENV-B strongly supports climate objectives through decarbonisation measures and the promotion of alternative fuels.	2	1
Cultural heritage	ENV-A has no additional impact on cultural heritage. ENV-B may have minor positive effects if sustainable transport measures reduce pressure on historic environments, though impacts will depend on the location and design of interventions.	2	1
Landscape	ENV-A results in no additional change to landscape. ENV-B may have minor positive effects by promoting cleaner modes of transport and reducing visual clutter from conventional vehicles, though any physical infrastructure to support this (such as charging points or new substations) would need to be sensitively designed to avoid adverse landscape impacts.	2	1
Material assets	ENV-A maintains existing assets only. While ENV-B involves some material consumption, its emphasis on sustainable materials, circular economy principles, and low-carbon technologies helps reduce long-term resource use and environmental impact.	2	1
Population and human health	ENV-A offers no additional population and human health benefits over and above existing provisions. ENV-B promotes cleaner transport, active travel, and improved access to transport options, which can enhance physical health, reduce exposure to pollution, and support connected communities.	2	1
Soil and water resources	ENV-A has negligible impact on soil and water. ENV-B may involve some land disturbance through new infrastructure (including charging points and substations), but its use of pollution controls and environmental standards helps protect water quality and manage surface water more effectively.	2	1

4.3.6 Freight

- Alternative RN-A Do Minimum: This would seek to support existing freight infrastructure and facilitate its upkeep.
- Alternative RN-B Freight Network: This alternative recognises the important role of freight and its distribution in the local economy and would seek to support North Lanarkshire's freight transport network. This would include through engaging with freight facilitators, shifting Heavy Duty Vehicles (HDV) traffic from local road networks to strategic road networks, and supporting partners who are engaging with freight facilitators for opportunities around development. It would also seek to achieve a modal shift of freight from road to rail.

Table 4 6: Freight

SEA Topic	Discussion of Potential Effects and Relative Merits of Options		
	Alternative RN-A Do Minimum Alternative RN-B Freight Network		
		Rank of Preference	
		RN-A	RN-B
Air quality and noise pollution	RN-A is unlikely to provide additional benefits as it focuses only on maintaining existing freight infrastructure. RN-B supports more efficient freight movement and better HDV management, which could reduce idling, congestion, and emissions, leading to improvements in air quality and noise levels.	2	1
Biodiversity, flora and fauna, and geodiversity	RN-A has no additional impacts on biodiversity as it involves no new works. RN-B may result in beneficial effects by shifting freight to strategic routes and rail, which could reduce habitat disturbance and pollution on local roads.	2	1
Climatic factors	RN-A results in no additional reductions in greenhouse gas emissions or impacts on climate change resilience. RN-B could deliver moderate benefits by improving freight efficiency and reducing unnecessary mileage through better planning and facilities.	2	1
Cultural heritage	RN-A has no additional impact on cultural heritage. RN-B has the potential for benefits to the historic environment by improving freight management, helping to reduce visual, noise, and vibration impacts on sensitive heritage assets and their setting.	2	1
Landscape	RN-A results in no additional change to landscape. RN-B has the potential for beneficial effects on North Lanarkshire's landscape by reducing visual intrusion, noise, and vibration from freight activity, helping to preserve landscape character and enhance local tranquillity in sensitive areas.	2	1
Material assets	RN-A maintains existing assets only. RN-B may improve the use and management of transport infrastructure, reducing congestion and wear, leading to long-term benefits.	2	1

Table 4 6: Freight

SEA Topic	Discussion of Potential Effects and Relative Merits of Options	Rank of Preference	
	Alternative RN-A Do Minimum Alternative RN-B Freight Network		
		RN-A	RN-B
Population and human health	RN-A offers no additional population and human health benefits over and above existing provisions. RN-B aims to improve freight efficiency and HDV route management, which could reduce congestion, emissions, and noise exposure, supporting health, safety and wellbeing and the quality of life for nearby communities.	2	1
Soil and water resources	RN-A has negligible impact on soil and water. RN-B may deliver minor benefits through strategic road use and a shift to rail, which could reduce environmental pressures on local roads, benefiting soil and water resources by lowering pollution, runoff, and land disturbance.	2	1

4.3.7 Digital and Technology

- Alternative DT-A Do Minimum: This would comprise a do minimum alternative, which would assume that only committed plans, developments and schemes relating to digital infrastructure will continue.
- Alternative DT-B Smart Mobility and Infrastructure Enhancements: This would seek to promote the application of emerging technologies to support the transport network and wider transport system in North Lanarkshire. This would include initiatives such as exploring opportunities for the development of Mobility as a Service (MaaS), collection of baseline data to inform effective evaluation of North Lanarkshire's transport network and support the rollout of high-speed broadband.

Table 4 7: Digital and Technology

SEA Topic	Discussion of Potential Effects and Relative Merits of Options	Rank of Preference	
	Alternative DT-A Do Minimum Alternative DT-B Smart Mobility and Infrastructure Enhancements		
		DT-A	DT-B
Air quality and noise pollution	DT-A is unlikely to provide additional benefits as it relies only on existing commitments. DT-B could improve air quality and reduce noise pollution by enabling smarter transport systems, supporting modal shift through initiatives like MaaS, and making public transport more attractive, potentially reducing car use and congestion.	2	1
Biodiversity, flora and fauna, and geodiversity	DT-A has minimal impact on biodiversity as it involves no new works. DT-B may involve physical infrastructure upgrades (e.g. broadband rollout), which could disturb habitats if not carefully managed, though impacts are likely to be minor, localised, and easily mitigated.	=1	=1

Table 4 7: Digital and Technology

SEA Topic	Discussion of Potential Effects and Relative Merits of Options		
	Alternative DT-A Do Minimum Alternative DT-B Smart Mobility and Infrastructure Enhancements		
		Rank of Preference	
		DT-A	DT-B
Climatic factors	DT-A results in no additional reductions in greenhouse gas emissions or impacts on climate change resilience. DT-B has the potential to indirectly support climate change mitigation by enabling smarter transport choices, reducing car dependency, and improving energy efficiency through digital infrastructure.	2	1
Cultural heritage	DT-A has no additional impact on cultural heritage. DT-B could introduce minor risks where physical works occur (though impacts are likely to be minor, if any), although this alternative may also improve access to heritage assets through initiatives such as MaaS.	=1	=1
Landscape	DT-A results in no change to North Lanarkshire's landscape. DT-B could introduce small-scale visual changes from infrastructure upgrades, such as broadband rollout or smart signage. However, these impacts are expected to be small-scale and reversible.	=1	=1
Material assets	DT-A maintains existing assets only. DT-B may involve minor material consumption through installation of digital infrastructure.	1	2
Population and human health	DT-A offers limited population and human health benefits over and above existing provisions. DT-B could enhance access to transport services and improve user experience through smart mobility solutions.	2	1
Soil and water resources	DT-A has negligible impact on soil and water. DT-B introduces minor risks of pollution during physical works, though these are likely short-term and mitigated through best practice construction methods.	=1	=1

4.4 Summary of Assessment Findings

4.4.1 Active Travel and Behaviour Change

	Air Quality and Noise Pollution	Biodiversity, Flora and Fauna, and Geodiversity	Climatic Factors	Cultural Heritage	Landscape	Material Assets	Population and Human Health	Soil and Water Resources
AT/BC-A	3	2	3	2	=2	3	3	=2
AT/BC-B	1	3	1	3	=2	1	=1	=2
AT/BC-C	2	1	2	1	1	2	=1	1

Overall, the assessment indicates that Alternatives AT/BC-B (Active Travel Infrastructure) and AT/BC-C (Behaviour Change) generally perform more favourably than the Do Minimum option (AT/BC-A) across most SEA topics. AT/BC-B offers the strongest benefits for air quality, climatic factors, material assets, and population & human health, although it introduces moderate risks of adverse effects to biodiversity, landscape, and cultural heritage due to physical works.

These risks are identified on a precautionary basis, as detailed mitigation measures are not assumed at this stage. AT/BC-C performs well for themes where non-intrusive measures are advantageous, such as biodiversity, soil and water, and cultural heritage, while also supporting health and climate objectives. In contrast, AT/BC-A consistently provides the least environmental benefit, reflecting its limited scope for change beyond existing commitments.

4.4.2 Public Transport and Shared Transport

	Air Quality and Noise Pollution	Biodiversity, Flora and Fauna, and Geodiversity	Climatic Factors	Cultural Heritage	Landscape	Material Assets	Population and Human Health	Soil and Water Resources
PT/ST-A	4	3	4	=3	=3	4	4	4
PT/ST-B	=1	4	=1	=3	=3	2	=1	3
PT/ST-C	3	=1	3	=1	=1	=1	3	=1
PT/ST-D	=1	=1	=1	=1	=1	=1	=1	=1

The assessment indicates that PT/ST-D (Expanded Public and Shared Transport Offer) performs most favourably across all SEA topics, indicating strong alignment with environmental outcomes. PT/ST-C (Integration and Accessibility) also ranks well, particularly in areas where non-intrusive measures are advantageous (such as biodiversity, heritage, landscape, and material assets). PT/ST-B (Public Transport Infrastructure) performs positively across several SEA topics, including air quality and noise, climatic factors, and population and human health; however, it carries risks of adverse effects due to potential direct impacts associated with infrastructure provision. These risks are identified on a precautionary basis, as mitigation measures are not assumed at this stage. PT/ST-A (Do Minimum) consistently ranks lowest, offering the least environmental benefit due to its limited scope for change beyond existing commitments.

4.4.3 Road Safety

	Air Quality and Noise Pollution	Biodiversity, Flora and Fauna, and Geodiversity	Climatic Factors	Cultural Heritage	Landscape	Material Assets	Population and Human Health	Soil and Water Resources
RS-A	3	=1	3	3	=1	3	3	=1
RS-B	2	=1	=1	2	=1	2	2	=1
RS-C	1	3	=1	1	3	1	1	3

The assessment shows that RS-B (Behaviour Change and Education) performs most favourably across SEA topics, particularly in areas where non-intrusive interventions are beneficial (such as biodiversity, landscape and soil and water resources). RS-C (Physical Road Safety Measures) performs well in terms of population and human health, but its reliance on infrastructure-led interventions introduces potential risks of adverse effects to landscape, soil and water resources, and biodiversity. These risks are identified on a precautionary basis, as mitigation measures are not assumed at this stage. RS-A (Do Minimum) offers limited environmental benefit, reflecting its reliance on pre-approved schemes; however, it performs favourably for certain SEA topics where no physical interventions are preferred.

4.4.4 Improving Road Use

	Air Quality and Noise Pollution	Biodiversity, Flora and Fauna, and Geodiversity	Climatic Factors	Cultural Heritage	Landscape	Material Assets	Population and Human Health	Soil and Water Resources
RU-A	4	=1	4	3	3	3	4	=1
RU-B	3	3	3	4	4	4	1	=3
RU-C	1	=1	1	=1	=1	1	3	=1
RU-D	2	=1	2	=1	=1	2	2	=3

The assessment shows that RU-C (Parking Management) performs most favourably across many SEA topics, indicating minimal adverse environmental impacts. RU-D (Maintenance) also performs well, particularly in areas such as biodiversity, cultural heritage, and landscape, though it presents slightly higher impacts on certain topics (such as soil and water resources) due to the nature of maintenance activities. RU-B (Infrastructure and Network) performs well for population and human health, but direct physical interventions to the road network present several risks of adverse effects across multiple SEA topics. These risks are identified on a precautionary basis, as mitigation measures are not assumed at this stage. RU-A (Do Minimum) consistently ranks low, reflecting its reliance on pre-approved schemes; however, it performs relatively well for some SEA topics that are sensitive to direct physical changes.

4.4.5 Environment and Decarbonisation

	Air Quality and Noise Pollution	Biodiversity, Flora and Fauna, and Geodiversity	Climatic Factors	Cultural Heritage	Landscape	Material Assets	Population and Human Health	Soil and Water Resources
ENV-A	2	2	2	2	2	2	2	2
ENV-B	1	1	1	1	1	1	1	1

The assessment indicates that ENV-B (Transport Solutions for Environmental Sustainability) performs most favourably across all SEA topics. Although it introduces minor risks to biodiversity, landscape, and water and soil during infrastructure delivery, these are localised and manageable, with long-term beneficial effects outweighing any residual short-term adverse effects.

Additional electricity infrastructure to support EV charging may also be required, but early planning and siting can limit impacts. ENV-A (Do Minimum) consistently provides the least benefit, reflecting its reliance on existing initiatives without additional measures.

4.4.6 Freight

	Air Quality and Noise Pollution	Biodiversity, Flora and Fauna, and Geodiversity	Climatic Factors	Cultural Heritage	Landscape	Material Assets	Population and Human Health	Soil and Water Resources
RN-A	2	2	2	2	2	2	2	2
RN-B	1	1	1	1	1	1	1	1

The assessment indicates that RN-B (Freight Network) performs more favourably across most SEA topics, particularly for air and noise pollution, climatic factors, cultural heritage, landscape, and population and human health, while introducing negligible environmental risks. RN-A (Do Minimum) consistently provides the least benefit, reflecting its reliance on maintaining existing infrastructure without proactive measures. Some uncertainty exists, with effects to be determined by the location of any potential new freight routes.

4.4.7 Digital and Technology

	Air Quality and Noise Pollution	Biodiversity, Flora and Fauna, and Geodiversity	Climatic Factors	Cultural Heritage	Landscape	Material Assets	Population and Human Health	Soil and Water Resources
DT-A	2	=1	2	=1	=1	1	2	=1
DT-B	1	=1	1	=1	=1	2	1	=1

The assessment shows that DT-B (Smart Mobility and Infrastructure Enhancements) performs most favourably across many SEA topics, with consistently low rankings indicating minimal environmental impact, offering notable potential benefits for air quality and noise pollution, climatic factors, and population and human health. While DT-B introduces some minor risks associated with material use and physical works, these are still expected to be limited and manageable. DT-A (Do Minimum) generally performs equally or least favourably, providing limited environmental benefit due to its reliance on maintaining existing infrastructure without proactive measures, though it ranks slightly better for material assets as it avoids new infrastructure requirements.

5. Assessment of the Draft Version of the LTS

5.1 Introduction

This chapter presents assessment findings and recommendations in relation to the draft version of the LTS.

The chapter is structured to present:

- An outline of the proposals and its component parts;
- An assessment of the proposals under the eight SEA topics identified through scoping;
- Consideration of cumulative effects; and
- The overall conclusions at this stage and recommendations for the next stage of plan-making.

5.2 Methodology

The assessment identifies and evaluates 'likely significant effects' on the baseline, drawing on the SEA framework (see Table 3 1) identified through scoping as a methodological guide.

Every effort is made to predict effects accurately; however, this is inherently challenging given the strategic nature of the proposals under consideration and understanding of the baseline (now and in the future under a 'no strategy' scenario) that is inevitably limited. Given uncertainties there is a need to make assumptions, e.g., in relation to proposals implementation and aspects of the baseline that might be impacted. Assumptions are made cautiously and explained within the text (with the aim of striking a balance between comprehensiveness and conciseness). In many instances, given reasonable assumptions, it is not possible to predict 'significant effects', but it is possible to comment on merits (or otherwise) of the proposals in more general terms.

Finally, it is important to note that effects are predicted taking account of the criteria presented within Schedule 2 of the 2005 Act. As such, for example, account is taken of the probability, duration, frequency, and reversibility of effects as far as possible. Cumulative effects are also considered, i.e., the potential for the Strategy to impact an aspect of the baseline when implemented alongside other plans, strategies, programmes, and projects. These effect 'characteristics' are described within the assessment as appropriate.

5.3 Preferred Approach for the LTS

The preferred approach for the LTS has been developed through a multi-stage process.

Initially, identified transport related challenges and opportunities were used to shape a Vision Statement, Priorities, and Objectives. These elements were supported by a set of policies that guide the actions. An alignment exercise made sure that the objectives were informed by the identified challenges and opportunities, as well as the priorities and objectives outlined in the National Transport Strategy 2 (NTS2), Strathclyde Partnership for Transport's (SPT) Regional Transport Strategy (RTS) and North Lanarkshire's The Plan for North Lanarkshire.

The next phase involved generating a long list of actions. These actions were primarily informed by stakeholder and public consultation findings, and transport and socio-economic baseline data analysis, supplemented by input from North Lanarkshire Council officers and existing strategy and policy documents, while considering the 2010 North Lanarkshire Local Transport Strategy.

Special consideration was given to National Planning Framework 4 (NPF4), policies such as Infrastructure First and Local Living from which emphasises sustainable

travel and local living. The process also took into account the Sustainable Travel Hierarchy and Sustainable Investment Hierarchy in NTS2.

Additionally, wider policies not directly related to transport were considered due to the close relationship between transport and other areas like health, the economy, reducing inequalities, and tackling climate change.

This long list was then cleaned and sifted, with duplicate options merged, and options which were vague, ambiguous or not related to transport sifted out. The remaining options were grouped as required and informed the short list of options which was taken through appraisal against the LTS objectives, Scottish Transport Appraisal Guidance (STAG) criteria i.e. Environment; Climate Change; Health, Safety and Wellbeing; Economy; and Equality and Accessibility and Deliverability risk against Feasibility, Affordability and Public Acceptability. The retained options following the appraisal formed the LTS Action Plan presented in Table 5 1.

The preferred approach integrates elements from all of the 'do something' reasonable alternatives assessment in the SEA. It places a strong emphasis on promoting non-private vehicle modes of transport, such as active travel, public transport, and shared mobility, in line with national policy and sustainability objectives. Physical interventions are included only where necessary and are generally limited in scale, reflecting the SEA findings which identified greater environmental risks associated with physical infrastructure. This balanced approach is reflected in the structure of the draft LTS, which is organised around the 12 groups that guide the policies and actions being taken forward.

Table 5 1 : LTS Action Plan

Theme / Action	Description
Active Travel	
AT-1	Implement actions identified in North Lanarkshire Council's Active Travel Strategy (ATS) to facilitate strategic routes and Local Living, including: - Community Hub Improvements. - Strategic Active Travel Network Routes. - Local Neighbourhood and Connecting Active Travel Network Routes.
AT-2	Implement complementary measures that will help to promote and encourage walking, wheeling and cycling for everyday travel across North Lanarkshire, including: - Installation of cycle parking. - Supporting North Lanarkshire Council's Education services to manage cycle training for children (including working with third parties). - Monitoring and evaluation of active travel projects. - Review of active travel signage as part of each infrastructure project. - Promotion of North Lanarkshire Council's active travel website.
AT-3	Deliver new active travel infrastructure within the City Deal Programme, working with partners where there are added value opportunities. This includes: - Eurocentral Strategic Active Travel - East Airdrie Link Road Active Travel
Behaviour Change	
BC-1	Work with partners to identify the most effective way of delivering behaviour change campaigns, including: - Specific road safety campaigns. - Introducing behaviour change campaigns to support the use of active travel infrastructure.

Table 5 1 : LTS Action Plan

Theme / Action	Description
Public Transport	
PT-1	Support North Lanarkshire's bus network by engaging and working with Strathclyde Partnership for Transport (SPT) during the lifetime of the Strathclyde Regional Bus Strategy (SRBS). Actions and measures captured in the SRBS include those related to: - Bus franchising. - Decarbonisation of buses. - Bus priority infrastructure. - Accessible bus stops.
PT-2	Continue to deliver North Lanarkshire Council's Public Transport Infrastructure Improvement Programme, improving: - Accessibility to bus stops. - Waiting facilities for passengers. - On and off-road provision for bus operators.
PT-3	Work with partners to explore opportunities for: - Increased south-north public transport connectivity; - Improved rural public transport connectivity; - Services connecting to University Hospital Monklands; - Connectivity opportunities for unserved / underserved communities. - Progressing the development of Clyde Metro
Shared Transport	
SH-1	Work with partners to support measures in North Lanarkshire to enhance Community and Demand Responsive Transport.
Environmental and Decarbonisation	
ED-1	Work with partners to deliver an accessible and affordable public charging network for Electric Vehicles across North Lanarkshire, including through the Glasgow City Region Deal, and within new developments.

Table 5 1 : LTS Action Plan

Theme / Action	Description
ED-2	Align with the Scottish Government commitments to ensure that North Lanarkshire Council (NLC) will continue to work towards: - Phasing out petrol and diesel cars - Phasing out the need for new petrol and diesel light commercial vehicles from 2025 onwards. - Phasing out the need for new petrol and diesel Heavy Duty Vehicles (HDV) from 2030 onwards (Vehicles with a gross vehicles weight of more than 3.5ft or passenger transport vehicle of more than 8 seat buses and coaches). - Replacing the 846 Council owned fleet vehicles between 2025-2030.
ED-3	For the operational deployment of North Lanarkshire Council (NLC) fleet vehicles, appropriate infrastructure is required. We will support NLC colleagues to deliver appropriate charging facilities at NLC sites across North, Central and South areas.
ED-4	Work with North Lanarkshire Council (NLC) colleagues to reduce the impact of transport on the environment, such as air pollution, by supporting delivery of actions identified within relevant Council strategy and policy documents, such as NLC's Climate Plan ACT 2030.
Safety in Transport	
ST-1	Support measures to enhance personal safety and security of users on North Lanarkshire's transport network, including provision of street lighting on all active travel routes.
ST-2	Support measures to improve safety on North Lanarkshire's local road network, including through expansion of 20mph limits and traffic calming measures where justified in line with current policy.

Table 5 1 : LTS Action Plan

Theme / Action	Description
Freight	
FR-1	Support partners who are engaging with freight facilitators for opportunities around development, recognising the important role of freight and its distribution in the local economy.
FR-2	Facilitate a shift in HDV traffic from local road networks to strategic road networks through the delivery of new transport infrastructure within the City Deal Programme and wider supporting initiatives.
FR-3	Support partners to achieve a modal shift of freight from road to rail.
Maintenance	
MA-1	Revise and update North Lanarkshire Council's Road Asset Management Plan (RAMP) by 2026.
MA-2	Support measures within North Lanarkshire Council's Roads Asset Management Plan (RAMP) and maintain the local adopted road network.
MA-3	Improve communication of planned road and footpath/ footway closures.
MA-4	Support the use of sustainable practices and materials where possible when maintaining existing or constructing new infrastructure and facilities, building on work undertaken as part of Live Labs.
Road Safety and Network	
RSN-1	Develop North Lanarkshire Council's Road Safety Plan in line with national policy by 2026.
RSN-2	Work towards achievement of the Scottish road safety targets, as set out in the Scottish Government's Road Safety Framework to 2030.
RSN-3	Continue to analyse accident data across the area and provide priority measures to identified problem sites.

Table 5 1 : LTS Action Plan

Theme / Action	Description
RSN-4	Liaise with partners on trunk roads and the surrounding road network to improve safety, where possible.
RSN-5	Work with partners to undertake feasibility studies of network improvements in North Lanarkshire, including but not limited to: - Glasgow Road, Wishaw. - Craiglinn Interchange, Cumbernauld. - Windmillhill Street, Motherwell. - Station Road / Cumbernauld Road /Lindsaybeg Road, Chryston and Muirhead.
Parking	
PA-1	Undertake a review of parking across North Lanarkshire to consider: - The current parking demands within our town centres and villages. - Availability of disabled parking bays. - Parking standards. - Expansion of the off-street parking order (car parks) to facilitate the introduction and enforcement of disabled parking bays and electric vehicles charging bays.
PA-2	Provide effective enforcement of parking controls in North Lanarkshire, including in relation to: - Pavement parking, double parking and dropped kerb parking. - Parking restrictions outside schools. - Restrictions to parking at bus stops. - Illegal parking within town centres and mixed-use urban locations.

Table 5 1 : LTS Action Plan	
Theme / Action	**Description**
Digital and Technology	
DT-1	Support partners in developing Mobility as a Service (MaaS) solutions to serve those using the transport network.
DT-2	Support partners who are delivering the roll out of high-speed broadband across North Lanarkshire, in alignment with North Lanarkshire Council's Digital and IT Strategy.
Overarching	
OA-1	Collect baseline data, including through working with external partners, to support the effective and robust monitoring and evaluation of transport in North Lanarkshire.
OA-2	Continue to work with partners to enhance and integrate the role of transport in development planning and give stronger consideration to the role of active travel and the Infrastructure First policy.
OA-3	Deliver new transport infrastructure within the City Deal Programme, working with partners where there are added value opportunities. This includes: - East Airdrie Link Road. - Ravenscraig Access Infrastructure.

5.4 Approach to the Assessment

The assessment of the policies/actions included in the draft version of the LTS is presented below by SEA topic.

5.4.1 Air quality and noise pollution

Regarding air quality, several actions within the Environmental and Decarbonisation action group are likely to result in beneficial effects. Actions ED-1 (which supports the delivery of an accessible and affordable public charging network for electric vehicles) and ED-2 (which promotes low emission vehicles and alternative fuels within and beyond the council fleet) are expected to improve air quality by reducing transport-related emissions such as nitrogen dioxide (NO2) and particulate matter (PM10 and PM2.5). ED-4 further strengthens this by supporting actions in existing council strategies aimed at improving air quality levels (this includes the Climate Plan ACT 2030).

In addition, actions across other action groups (including Active Travel, Behaviour Change, Public Transport, Freight, and Shared Transport) encourage a shift away from private vehicle use towards cleaner, more sustainable modes of transport. This modal shift is expected to result in similar beneficial effects for air quality and noise pollution in the council area. However, the scale and significance of these beneficial effects will depend on uptake and the effectiveness of measures that promote integration with land use planning (which will be supported by the 'Infrastructure First' action, OA-2).

Freight actions FR-2, which aims to shift HDV traffic from local road networks to strategic road networks, along with FR-3, which seeks to shift freight from road to rail, are likely to result in beneficial effects by moving associated noise and air pollution away from more sensitive areas of North Lanarkshire.

The Safety in Transport and Maintenance actions, particularly ST-2, which includes the expansion of 20 mph zones and traffic calming measures, could reduce idling, vehicle acceleration and braking, which are associated with higher emissions and noise. Therefore, these may also contribute positively to North Lanarkshire's air quality and noise levels.

Conversely, certain infrastructure-led actions may result in mixed or adverse effects. For example, short-term adverse effects on air quality and noise are likely from construction activities, particularly due toidling caused by road closures (this could arise from infrastructure-related actions such as OA-3, AT-1, AT-3, PT-1, ED-1, and ST-1, as well as potential follow-on actions from feasibility studies through RSN-5). These adverse effects would be mitigated by following good-practice construction methods (supported by action MA-4) and traffic management (supported by action MA-2). The operational phase of new infrastructure also has the potential to result in adverse effects on air quality and noise in North Lanarkshire. While these developments may improve traffic flow and reduce idling, they also risk inducing demand and shifting congestion to other areas, potentially undermining efforts for reduced private car usage in other actions.

Finally, through action OA-1, the collection of baseline data with external partners will strengthen the monitoring of transport impacts in North Lanarkshire. This supports better understanding and management of air quality and noise pollution by identifying current conditions and enabling targeted, evidence-based interventions to reduce environmental harm.

Overall, the LTS presents **mixed but generally beneficial effects** in relation to air quality and noise pollution. There is **potential for significant long-term beneficial effects** from: decarbonisation of the vehicle fleet; promotion of active, shared, and public transport; and integration with existing environmental strategies. However, **potential for significant (short-, medium-, and long-term) adverse effects** may arise from the construction and operation of new infrastructure developments.

5.4.2 Biodiversity, flora and fauna, and geodiversity

LTS actions that promote a shift away from private car use (including those within the Active Travel, Behaviour Change, Shared Transport and Public Transport groups) are expected to deliver long-term indirect benefits for North Lanarkshire's biodiversity. By reducing dependence on private vehicles, these actions can help lower noise and visual disturbance, decrease wildlife collisions and create a cleaner environment through reduced emissions. These actions may also lead to a reduction in the need for new road infrastructure and help limit disturbance to sensitive habitats. Similarly, Environmental and Decarbonisation actions (ED-1 to ED-4) may offer indirect benefits by reducing air and noise pollution in North Lanarkshire. Resultant beneficial effects are likely to be greater in areas near to designated nature sites, green corridors, and urban greenspaces.

However, actions involving the development of new infrastructure (such as new transport infrastructure at planned developments through OA-3, substation upgrades required to meet demand for EV charging through ED-1, and potential network improvements that may emerge from feasibility studies through RSN-5) have the potential for direct adverse effects on biodiversity and geodiversity. The extent of these effects depends on the location and design of each project, but they may include habitat loss, fragmentation, and disturbance to species, particularly where works take place near designated sites or ecologically sensitive areas. For example, network improvements (as a result of feasibility studies in action RSN-5) could intersect with habitats or areas of geological interest, making early ecological assessment and appropriate mitigation important considerations. In addition, short-term adverse effects from new construction projects or maintenance works (MA-2) are anticipated due to associated noise, light pollution, and vibration (which would particularly affect nocturnal and migratory species). However, large infrastructure projects also have the potential to deliver environmental net gains (as required under National Planning Policy 4), which may help mitigate some of the adverse effects associated with these projects.

Avoidance of significant effects will be supported by the Council's early consideration of potential impacts on biodiversity, flora and fauna, and geodiversity at the optioneering stage of projects proposed through the LTS. Early integration of these considerations is important, as addressing potential impacts from the outset provides the greatest opportunity to avoid harm and deliver sustainable outcomes. Further assessments will then be undertaken during the design stages to avoid or mitigate adverse effects where appropriate. To strengthen this approach, the Council will engage with internal partners, including Greenspace, at the start of every relevant project to ensure any potential adverse effects are appropriately mitigated.

Through action OA-1, the collection of baseline data with external partners will strengthen the monitoring of transport impacts in North Lanarkshire. This will support a clearer understanding of how transport infrastructure and activity affect local biodiversity, habitats, and geodiversity, enabling more targeted and informed measures to protect and enhance these natural assets.

Overall, the LTS presents a **mixed set of effects in relation to biodiversity, flora and fauna, and geodiversity. Moderate (potentially significant) beneficial long-term effects** are likely to arise from actions that reduce car dependency and promote sustainable transport modes; however, there is also potential for **significant adverse effects in the short-, medium-, and long-term** that result from new infrastructure developments and maintenance. The significance of these adverse effects will vary depending on mitigation, location and ecological context of individual projects.

5.4.3 Climatic factors

Regarding climate change mitigation, the LTS is anticipated to result in direct beneficial effects, especially through the Environmental and Decarbonisation actions. Action ED-1 supports the development of an EV charging network, facilitating the transition to lower-emission transport modes. ED-2 promotes the uptake of low-emission vehicles and alternative fuels, both within the council fleet and externally, while PT-1 supports the decarbonisation of buses, which together will contribute to reductions in carbon dioxide (CO2) and other Greenhouse Gases (GHGs). ED-3 complements these efforts by ensuring the operational deployment of NLC fleet vehicles is supported by appropriate charging infrastructure across North, Central and South areas. ED-4 reinforces these efforts by supporting the delivery of climate-related actions within existing council strategies, including the Climate Plan ACT 2030 and other relevant Council strategies and policies. Collectively, these actions are expected to deliver long-term reductions in transport-related emissions and support the council's net zero ambitions.

Similarly, reducing private car travel and increasing the efficiency of the freight network in North Lanarkshire is expected to support climate change mitigation. The LTS aims to do this through improving active travel, public and shared transport in the council area, changes to freight routes, enabling more people to work from home through improved digital connectivity (see actions AT-1 to AT-3, BC-1, DT-2, PT-1 to PT-3, SH-1, and FR-1 to FR-3). The overall benefit will depend on effective implementation, influenced by factors such as scale and public uptake.

Actions associated with new infrastructure (such as OA-3, AT-1, AT-3, PT-1, ED-1, and ST-1) and maintenance (MA-2) have the potential for mixed effects on climate change mitigation. While improved junctions and new transport infrastructure may reduce congestion and idling in the short-term, they also risk reinforcing car dependency in the council area. Additionally, construction activities associated with these projects will generate emissions, which may be significant depending on the materials and methods used. The LTS does, however, provide some mitigation for this in the form of action MA-4, which supports the use of sustainable practices and materials in these maintenance and construction activities.

With regards to climate change adaptation, the LTS is likely to result in beneficial effects through maintenance of the road network (MA-2) and improved communication of road closures (MA-3), which can enhance climate resilience by ensuring safe and reliable transport during adverse weather events.

Finally, through action OA-1, the collection of baseline data with external partners will strengthen the monitoring of transport impacts in North Lanarkshire. This will improve understanding of how transport contributes to greenhouse gas emissions and climate resilience, supporting more effective strategies to mitigate climate change and adapt to its impacts.

Overall, the LTS is anticipated to result in **significant long-term beneficial effects in relation to the climatic factors SEA topic**, particularly through its support for low emission vehicles, active travel, and public transport. **Potential adverse effects (significance uncertain)** may arise from construction and maintenance activities.

5.4.4 Cultural heritage

Actions in the LTS that involve construction (such as OA-3, AT-1, AT-3, PT-1, ED-1, and ST-1, as well as potential follow-on actions from feasibility studies through RSN-5) have the potential for significant adverse effects on built heritage and archaeological assets. The most significant of these projects include new transport infrastructure at planned developments (such as the East Airdrie Link Road) and the potential for new junction improvements at various locations (subject to feasibility studies). If situated near historic assets (such as listed buildings, conservation areas, archaeological sites), construction activities and developments may alter the character or setting of heritage assets. Construction activities may also pose risks through vibration, ground disturbance, or visual intrusion. The use of appropriate materials and techniques will be important to avoid loss of historic fabric or character of historic roads, bridges, or public realm features. The LTS acknowledges this in action MA-4, which emphasises the adoption of sustainable practices in maintenance works and infrastructure projects, offering an opportunity to incorporate heritage-sensitive approaches.

Maintenance actions (MA-1-MA-4) are anticipated to result in beneficial effects to North Lanarkshire's historic environment through the regular upkeep of roads, paths, bridges, and other public realm features. These activities may provide direct benefits (for example, through maintenance of listed bridges) or indirect benefits (by improving the condition of the area surrounding historic environmental

features). The significance of these effects will be greater in sensitive historic areas, such as conservation areas, and will also depend on the extent to which proposed activities are designed to reinforce or complement the setting of the historic environment.

Several other actions in the LTS may also result in indirect benefits on cultural heritage. For example, improvements to active travel and public transport networks (AT-1 to AT-3 and PT-1 to PT-3) can improve existing access to heritage sites. Better connectivity and sustainable travel actions may support tourism and community engagement with local heritage, while reducing pressure from car parking (also supported by PA-2) and traffic congestion in sensitive areas. Similarly, behaviour change initiatives (action BC-1) could be used to promote responsible travel behaviour around heritage sites, including awareness of conservation needs and respectful access.

Finally, through action OA-1, the collection of baseline data with external partners may help identify transport-related risks to cultural heritage assets in North Lanarkshire. Improved data collection can support more informed planning decisions that consider and safeguard historic sites, buildings, and landscapes from potential adverse impacts.

Overall, the LTS has the potential for **mixed effects in relation to cultural heritage. Potential significant permanent adverse effects** may arise from infrastructure development near sensitive heritage assets, while **moderate (potentially significant) medium-term beneficial effects** may result from improved access, reduced traffic pressure, and opportunities for heritage-sensitive maintenance. The significance of the adverse effects will depend on proximity to heritage features and the extent to which mitigation is embedded in project design.

5.4.5 Landscape

The most notable potential effects on North Lanarkshire's landscape arise from new infrastructure proposals, particularly those outlined in OA-3, which delivers additional infrastructure at planned developments (such as the East Airdrie Link Road). Risks are also associated with RSN-5, which proposes a series of feasibility studies for network improvements across the council area. While these studies themselves will not affect the landscape, they are considered relevant under a precautionary approach because the types of projects they explore could pose similar adverse effects on the landscape. During both construction and operational phases, such developments have the potential for significant adverse effects on landscape quality, tranquillity, and sense of place if they alter the visual character of rural areas, introduce new built elements into open landscapes, and affect views from residential areas or landscape designations. Other actions that involve construction activities (such as AT-1, AT-3, PT-1, and ST-1) also have the potential for adverse effects on the council area's landscape, although their significance is likely to be less than that of the larger infrastructure projects.

Certain adverse effects may be mitigated if larger urban projects are required to deliver net gains (although these benefits will only be realised if delivered within the council area). Similarly, beneficial effects may also be delivered if the interventions are sensitively designed, for example, through the delivery of accompanying green infrastructure such as tree planting and habitat creation. These features can contribute positively to the visual environment, particularly in urban areas. In addition, action ED-4 (which aims to reduce the impact of transport on the environment) can further support the delivery of green infrastructure in line with relevant council strategies and policies (for example, the Climate Plan ACT 2030). Together, these measures can contribute positively to the visual and ecological quality of North Lanarkshire's landscapes.

Maintenance actions (MA-1 to MA-4) are anticipated to result in beneficial effects on North Lanarkshire's townscape and landscape through the regular upkeep of roads, paths, and bridges. By preserving the condition and appearance of streetscapes and structures, these measures can help support the long-term conservation of North Lanarkshire's historic townscapes.

In addition, actions within the LTS that aim to reduce traffic volumes through modal shift (including actions AT-1 to AT-3, BC-1, PT-1 to PT-3, FR-3, and SH-1) may also contribute positively to landscape quality. By limiting the presence of vehicles on the council area's roads, these measures can help reduce visual intrusion and noise pollution, which will support tranquillity and will enhance the North Lanarkshire's overall landscape character.

Finally, through action OA-1, the collection of baseline data with external partners will support a better understanding of how transport infrastructure and activity

affect the character and quality of the landscape in North Lanarkshire. This can inform planning decisions that help preserve visual amenity, local distinctiveness, and landscape integrity.

Overall, the LTS presents a **mixed set of effects in relation to landscape. Potential significant permanent adverse effects** may arise from new infrastructure developments, particularly in rural or visually sensitive areas, while **medium-to-long-term moderate (potentially significant) beneficial effects** may result from active travel infrastructure, sustainable maintenance practices, and increases in tranquillity. The significance of effects will depend on location and design quality, with short-term impacts likely during construction and longer-term outcomes determined by landscape planning and mitigation.

5.4.6 Material assets

The LTS is anticipated to deliver beneficial effects on material assets through Maintenance actions (MA-1 and MA-4), which focus on maintaining and enhancing the local road and path network. While maintenance activities require some material use, they help prevent the need for more extensive interventions by ensuring the longevity and safety of existing infrastructure, thereby reducing long-term material consumption. The inclusion of MA-4, which emphasises sustainable practices and materials in maintenance activities, will be important for reducing the environmental impact of necessary maintenance activities.

In contrast, actions that involve the creation of new infrastructure (particularly OA-3 and potential works arising from RSN-5 feasibility studies) have the potential to consume significant amounts of resources during their construction. Other actions that include construction activities (such as PT-1, ED-1, AT-1, AT-3, and ST-1) may have similar, but less significant adverse effects due to additional resource consumption. However, as noted above, MA-4 can help mitigate some of these impacts by promoting sustainable practices and the use of environmentally friendly materials.

Actions that promote active transport (AT-1, AT-2, and AT-3) may indirectly support material assets by promoting more efficient use of existing infrastructure and reducing wear and tear associated with high levels of private vehicle use. These actions may also reduce the need for future road expansion, conserving land and resources.

Overall, actions in the LTS are likely to result in **mixed effects. Moderate (potentially significant) medium-term beneficial effects** are anticipated through maintenance of the existing transport network, while sustainability-focused measures promote more efficient and environmentally responsible use of resources. However, there is the potential for **significant permanent adverse effects** related to the resource use associated with infrastructure projects.

5.4.7 Population and human health

The LTS' Active Travel actions (AT-1 to AT-3), which promote walking, wheeling, and cycling, are anticipated to result in beneficial effects on the health and wellbeing of North Lanarkshire's residents. These modes of travel are associated with increased physical activity, reduced risk of chronic disease, and improved mental wellbeing. The development of strategic and local active travel networks (AT-1) and installation of active travel infrastructure (AT-2 and AT-3), alongside complementary active travel behaviour change campaigns (BC-1), and more effective parking enforcement (PA-2) will help make active travel more accessible to a wider proportion of North Lanarkshire's population. These benefits are particularly relevant in areas with low car ownership or poor public transport access.

Public Transport actions (PT-1 to PT-3), alongside Shared Transport action (SH-1), Road Safety and Network actions (especially RSN-5), and an Infrastructure First policy (OA-2), also support population and human health by improving access to essential services, including healthcare, education, and employment. Improving the accessibility of bus stops (PT-1 and PT-2) and improving connectivity to University Hospital Monklands (PT-3) will be particularly beneficial for reducing transport-related barriers to healthcare facilities.

The LTS also includes actions that aim to make North Lanarkshire's transport network easier to use and more reliable. For example, MA-3 will improve how people are informed about planned road and path closures, helping them plan ahead. DT-1 looks at ways to make different types of transport work better together through Mobility as a Service, which is supported by DT-2, which works on roll out of high-speed broadband. Together, these actions will help create a

transport system that is more efficient and user-friendly.

Actions that support active travel and public transport, along with environmental measures like promoting electric and low-emission vehicles (ED-1 to ED-4), can improve public health by reducing air pollution from traditional vehicles. Freight-related actions (FR-1 and FR-3) also play a role by helping to move HDVs away from local streets and onto major roads or rail, which can reduce noise, pollution, and safety risks in residential areas. Together, these measures contribute to cleaner air, safer communities, and better health outcomes across North Lanarkshire.

Safety in the council area will increase through measures such as expanding 20 mph zones (SS-2), and better street lighting (ST-1) aim to reduce accidents and improve how safe people feel when travelling. Safety improvements on trunk roads and the surrounding road network (RSN-4) will further help protect all road users. Together, these actions are likely to lower the risk of injury and encourage more people to walk or cycle, supporting healthier and more active communities.

Beneficial effects will also be realised through DT-2, which supports the rollout of high-speed broadband. This will enable more people to work from home, reducing the need for daily commuting and helping to lower traffic volumes and associated air pollution. It can also improve access to online services, including healthcare, and education. There will also be economic benefits, enabling more people to access wider employment opportunities.

Through action OA-1, the collection of baseline data with external partners will enhance understanding of how transport affects population and human health in North Lanarkshire. This includes impacts from air and noise pollution, physical activity levels, and access to services, supporting more informed decisions that promote healthier, more inclusive communities.

Some infrastructure-led actions (such as OA-3 and potential works arising from RSN-5 feasibility studies) may lead to adverse health impacts. While improved junctions and new transport infrastructure can reduce congestion and improve road safety and journey times, they may also increase traffic volumes and associated pollution in certain areas if not carefully managed. In some cases, they may also result in the loss of community facilities or homes. Construction activities (through these actions, along with others such as AT-1, AT-3, PT-1, ED-1, ST-1) may also temporarily affect local communities through noise, dust, and disruption. These effects should be mitigated through careful planning and community engagement.

Overall, the LTS is anticipated to result in **significant short-, medium-, and long-term beneficial effects** with regard to population and human health, for example, through the delivery of active travel infrastructure, public transport improvements, and safety measures. **Potential significant adverse effects are** mostly associated with infrastructure development, which can be mitigated through appropriate design and engagement.

For every relevant project, such as our active travel projects, we engage with internal partners, including Greenspace, at the start of the consultation process and throughout to ensure any changes to greenspace are agreed /can be accommodated / correctly mitigated against.

5.4.8 Soil and water resources

LTS actions involving new infrastructure development (such as OA-3, potential works arising from RSN-5 feasibility studies, and ED-1) present risk of significant adverse effects on soil and water resources. Construction of new transport infrastructure (OA-3), and network improvements (subject to feasibility studies) (RSN-5), may cause soil sealing, erosion, and compaction. These impacts could lead to the permanent loss of greenspace, agricultural land, and habitats including, peatlands, grasslands and wetlands. These activities can also alter hydrological regimes, increase surface runoff, and introduce pollutants into watercourses if not carefully managed. Such risks may occur during both the construction and operational phases of the projects.

Several LTS actions offer opportunities to safeguard or enhance soil and water quality. Maintenance actions (MA-1 to MA-4), particularly MA-4 with its emphasis on sustainable practices and materials, can reduce the environmental footprint of infrastructure upkeep. For example, measures such as the use of permeable surfaces, recycled materials, and low-impact construction techniques can minimise soil disturbance and improve water infiltration.

Finally, through action OA-1, the collection of baseline data with external partners will improve understanding of how transport infrastructure and activity affect soil and water resources in North Lanarkshire. This can support the identification of risks such as contamination, erosion, and runoff, enabling more effective measures to protect these environmental assets.

The LTS presents the potential for **long-term moderate (potentially significant) adverse effects** on soils and water resources from infrastructure development. However, the significance may be reduced through sustainable maintenance practices, green infrastructure, and pollution reduction measures.

5.5 Cumulative Effects with Other Plans and Strategies

Adverse cumulative effects may arise from construction activities associated with new infrastructure proposed in other plans and strategies, which could strain local resources and infrastructure, and lead to increased traffic congestion and a temporary reduction in the quality of life for residents.

Additionally, the cumulative effect of multiple infrastructure projects could exacerbate local environmental degradation. For example, increased impermeable surfaces from new roads, parking facilities, and buildings could lead to higher runoff and potential water contamination. The loss of green spaces and habitats from projects delivered through other plans/strategies alongside the LTS could also negatively impact local biodiversity and ecosystem services.

To mitigate these adverse cumulative effects, it will be important to coordinate the implementation of the LTS with other local plans/ strategies, and to engage with locals through consultation events. Additionally, promoting sustainable practices, such as using renewable materials (as included in MA-4), coupling infrastructure development with the delivery of green infrastructure, and encouraging low-emission transport actions, can help reduce the overall impact on the environment and communities. **With these in place, no significant adverse cumulative effects are anticipated from the LTS**.

Positive cumulative effects across the SEA topics are also anticipated from actions in the LTS and other plans and strategies. In this respect, many of the Policies complement and reinforce the objectives and actions of Scotland's NTS2, Environment Strategy, Climate Change Plan, National Strategy for Economic Transformation, NPF4 and other key plans and strategies nationally.

5.6 Recommendations for Implementation of the LTS

A number of recommendations can be made at this stage in relation to each of the SEA topics. **Table 5 2** highlights these recommendations which should be considered during the development and implementation of schemes and proposals proposed for delivery through the LTS.

Table 5 2: Recommendations for Consideration During the Implementation of the LTS

Mitigation and Enhancement Measures for Consideration During the Implementation of the LTS	Relevant SEA Topic
Integrate biodiversity and green infrastructure into all relevant projects (e.g., active travel routes) and ensure compliance with biodiversity net gain requirements.	Biodiversity, flora and fauna / Landscape
The LTS should follow NatureScot's mitigation hierarchy (avoid, minimise, restore, offset) and engage all relevant stakeholders, such as Greenspace, while considering environmental effects at the earliest stage of the process.	Biodiversity, flora and fauna / Landscape
Indicate a preference for on-site replanting measures, if compensation if required from infrastructure projects.	Biodiversity, flora and fauna / Landscape
Require whole-life carbon and resource efficiency assessments for all new infrastructure projects.	Climatic factors / Material assets
Incorporate, where appropriate, Sustainable Drainage Systems (SuDS) and soil protection measures in all infrastructure project.	Climatic factors / Soil and water resources

Table 5 2: Recommendations for Consideration During the Implementation of the LTS

Mitigation and Enhancement Measures for Consideration During the Implementation of the LTS	Relevant SEA Topic
Prioritise active travel and public transport improvements in areas with poor health outcomes or transport deprivation to maximise health equity benefits.	Population and human health
Embed heritage-sensitive and landscape-sensitive design in all infrastructure projects, including early consultation with Historic Environment Scotland and landscape/visual impact assessments where relevant.	Cultural heritage / Landscape
Engage early with the electricity network operator (SPEN) to coordinate grid upgrades for EV infrastructure and apply siting principles to avoid sensitive habitats and prioritise brownfield land.	Biodiversity, flora and fauna / Climatic factors / Soil and water resources

6. Proposed Monitoring Programme

6.1 Monitoring in SEA

Monitoring in SEA is a means of evaluating the environmental performance of the plan or strategy and monitoring compliance through its implementation. It is also a way to check whether the effects predicted in the SEA arise as envisaged, or whether unforeseen issues arise.

Monitoring can help to evaluate whether a plan or strategy is fulfilling its core objective of delivering sustainable development and providing for a high level of environmental protection. The gathered information provides a basis to inform the review and preparation of subsequent iterations of plans, strategies and projects that sit within them, thus better informing future decisions.

Measuring indicators over time can identify long-term positive or negative changes in the environment and can build knowledge on how these trends will affect (or will be affected by) the implementation of the plan or strategy itself. In this respect monitoring environmental changes occurring during the LTS' implementation phase can help to identify the need for additional mitigation measures or for appropriate remedial action to be undertaken where issues are identified, as well as to inform project-level assessments.

6.2 Proposed SEA Monitoring Programme for the LTS

Schedule 2 of the 2005 Act highlights that the Environmental Report should include "a description of the measures envisaged concerning monitoring." In response to this, this Environmental Report presents a proposed draft monitoring programme for measuring the proposals' implementation. It draws on the identified potential significant effects identified through the assessment of the various components of the proposals and also suggests where monitoring is required to help ensure that the potential benefits of the proposals are effectively achieved through implementation. This will enable appropriate interventions to be undertaken if monitoring highlights negative or underperforming trends relating to the proposals' implementation.

Table 6 1 therefore outlines monitoring proposals for measuring the implementation of the LTS from the SEA perspective. It pays particular attention to the areas where the SEA has identified potential significant effects and also suggests where monitoring is required to help ensure that the positive effects of the proposals are achieved through implementation. It includes:

- The significant effect or environmental change to be monitored.
- The SEA topic(s) to which the monitoring proposal relates.
- The indicator to be monitored.
- The source of information and frequency of monitoring; and
- The trigger for where intervention should take place if monitoring suggests it is required.

The proposed indicators are designed to be integrated within North Lanarkshire Council's own monitoring programme for the LTS.

If monitoring shows that mitigation measures are ineffective, interventions may be triggered to prevent significant impact on the environment.. This allows for adjustments to help prevent significant deterioration.

Table 6 1: Proposed Monitoring Programme

Significant Effect/ Environmental Change to be Monitored	SEA Topic(s)	Indicator	Data Source	Frequency	Trigger for Intervention
Impact of proposals on designated habitats close to the transport network	Biodiversity, Fauna and Flora, and Geodiversity	Condition of designated site assessment findings	North Lanarkshire Council	Annual	Potential adverse effects should be assessed during design stages of any project to avoid and mitigate adverse effects, where appropriate. Intervention required when designated sites near to new infrastructure show a deterioration in quality.
Impacts on landscape character	Landscape	Landscape character assessment findings	North Lanarkshire Council	Ongoing	Where landscape character assessment suggests significant change has taken place as a result of transport interventions
Impacts on carbon emissions	Climatic Factors	Greenhouse gas emission statistics	North Lanarkshire Council	Annual	Where annual transport emissions rise
Impacts on local air quality	Air Quality and Noise Pollution	Monitoring at air quality stations in the council area	North Lanarkshire Council	Annual	When there is an increase in pollutants related to transport

7. Next Steps

The Environmental Report is being consulted on alongside the draft version of the LTS.

After the winter 2025/26 consultation period, comments will be reviewed and analysed. The updated proposals will then be developed prior to adoption. Any changes arising to the proposals will need to be assessed as part of the SEA process.

Part 3 of the Environmental Assessment (Scotland) Act 2005 requires that a 'statement' be made available to accompany the proposals, as soon as possible after their adoption. The purpose of the SEA Post Adoption Statement is to outline how the SEA process has influenced and informed the proposals' development process and demonstrate how consultation on the SEA has been taken into account.

To meet these requirements, an SEA Adoption Statement will be published with the adopted proposals. The SEA Adoption Statement will set out:

- the reasons for choosing the preferred proposals in light of other reasonable alternatives;
- how environmental considerations were integrated into the proposals' development process;
- how consultation responses were taken into account; and
- the measures decided for monitoring the significant effects of the proposals.

Appendix A - Scoping Report

Introduction

Purpose of this report

AECOM has been commissioned to undertake a Strategic Environmental Assessment (SEA) in support of the emerging North Lanarkshire Local Transport Strategy (hereafter referred to as "the LTS") on behalf of North Lanarkshire Council. This Scoping Report presents the scoping information for the SEA process.

The North Lanarkshire Local Transport Strategy

North Lanarkshire's adopted LTS was published in 2010 and presents a vision for transport in the local authority area (shown in Figure 3 below). This LTS was intended to cover the period 2012 and beyond, to reflect the timeframes of both the North Lanarkshire Community Plan and the Council's Corporate Plan (both of these plans cover the period 2013-2018).

Over a decade has passed since the LTS was published, extending its relevance beyond the initial implied period, ending in 2018. Consequently, North Lanarkshire Council is now in the process of developing a new strategy to cover the period from 2026 onwards.

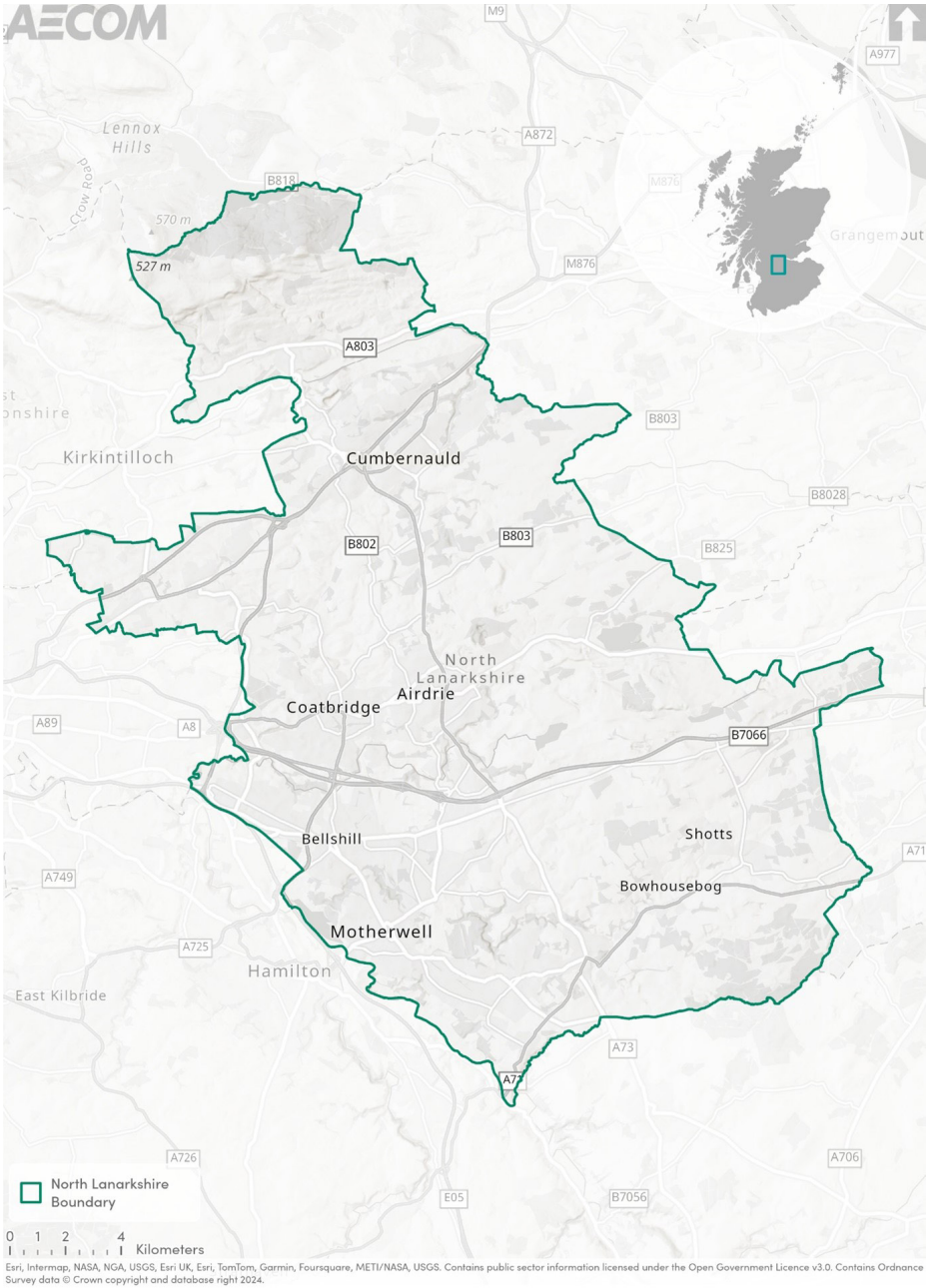
The emerging LTS for North Lanarkshire will set the future direction for the Council's approach to the development and upkeep of the transport infrastructure and policy within the council area. The emerging LTS will also set out how the Council will contribute to the delivery of the obligations set out in the National and Regional Transport Strategies and other key policy drivers. To achieve this, transport policies and actions will be developed, and indicators identified to monitor the progress made on these actions.

A number of key tasks have been completed or are in the process of being completed (as of autumn 2024):

- Analysis of data, undertaking a Policy Review and consultation.
- Identification of a Vision Statement, objectives and indicators.
- Generation of options and development of an Action Plan.
- Developing alternative approaches.
- Undertaking a full Strategic Environmental Assessment (SEA) and Integrated Impact Assessment.

The final LTS is programmed to be completed and launched in 2026.

Figure 3: North Lanarkshire Council Area



SEA explained

Introduction

This report has been prepared in accordance with the European Directive 2001/42/EC and Section 15 of the Environmental Assessment (Scotland) Act 2005 (hereafter referred to as the "2005 Act").

The 2005 Act requires all qualifying plans, programmes, and strategies (PPS) to undergo SEA. This provides a systematic process for identifying, reporting, and mitigating the environmental impacts of an emerging PPS.

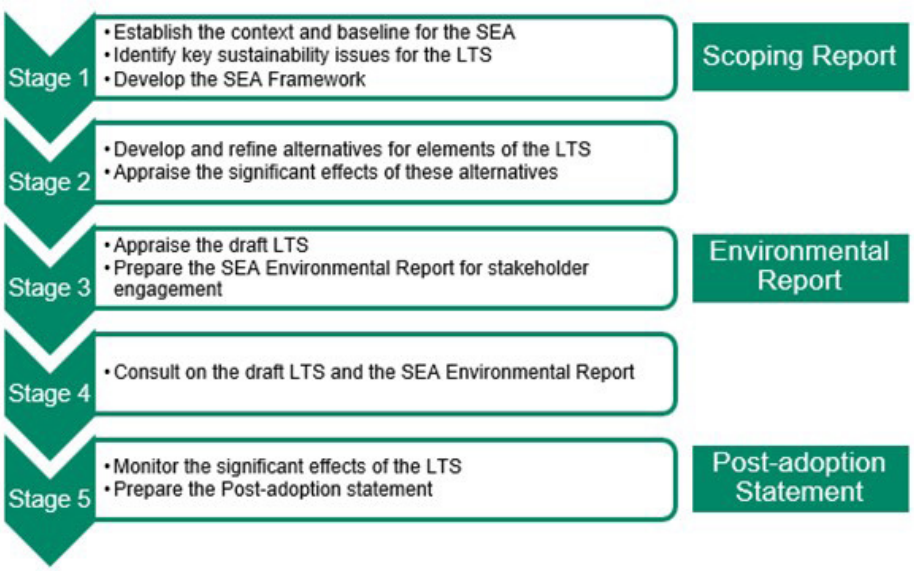
The LTS is a qualifying plan in accordance with Section 5(3) of the 2005 Act, and an SEA is therefore required.

Key stages of the SEA process

This SEA follows the process required by the SEA Regulations. There is guidance published by government on undertaking SEA, specifically 'A Practical Guide to the Strategic Environmental Assessment Directive' (known as the 'Practical Guide'). This sets out a five-stage process for undertaking SEA. This process, in conjunction with the SEA Regulations, guides this assessment.

The stages and outputs for the SEA are set out in Figure 4 below. Scoping (the current stage) comprises Stage 1 below.

Figure 4: Key stages of the SEA for the LTS, and corresponding SEA outputs



Purpose of the Scoping Report

This Scoping Report has been prepared to seek the views of the Consultation Authorities (CAs). The CAs, as defined by the SEA Act, are: Historic Environment Scotland (HES), Scottish Environment Protection Agency (SEPA), and NatureScot.

The scoping process requires the Council (as the Responsible Authority) to consider in conjunction with the CAs, the scope and level of detail of the environmental assessment and an appropriate consultation period. The purpose of this report is to set out sufficient information on the LTS and its potential environmental effects to enables the CAs to form a view.

Structure of the Scoping Report

SEA topics

The information in this Scoping Report has been presented through eight SEA topics, which have been informed by the Environmental Assessment (Scotland) Act 2005. These are:

- Biodiversity, flora and fauna, and geodiversity.
- Climatic factors.
- Air quality and noise pollution.
- Soil and water resources.
- Cultural heritage.
- Landscape.
- Material assets; and
- Population and human health.

Scoping Report chapters

This Scoping Report is presented through the following chapters:

- **Links with other plans, programmes, and strategies** – a summary of other relevant plans, programmes and strategies that are likely to influence the LTS.
- **Baseline and key sustainability issues** – an outline of the environmental, economic, and societal characteristics of North Lanarkshire and key sustainability issues by SEA topic.
- **SEA Framework** – sets out the objectives for each SEA topic which will inform the assessment of the draft LTS and reasonable alternatives.
- **Next steps** – presents the next steps for the SEA process.

Links with other plans, programmes and strategies

Introduction

This SEA must consider the relationships between the LTS and other relevant PPS and environmental objectives. In this context, the contents of the LTS will be partially influenced by, and will also have some influence over, objectives presented within other international, national, regional and local PPS of relevance for North Lanarkshire (and Scotland as a whole).

This chapter therefore provides an overview of other relevant PPS that are likely to inform the development of the LTS.

International

- Ambient Air Quality and Cleaner Air for Europe Directive [2008/50/EC].
- Biodiversity Strategy for 2030.
- Birds Directive [2009/147/EC].
- Bonn Convention.
- Convention of Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention).
- European Convention on the Protection of the Archaeological Heritage (1992).
- European Landscape Convention.
- Habitats Directive [92/43/EEC].
- Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) (2012).
- Kyoto Protocol UNFCCC (1997).
- Rio Declaration on Environment and Development (1992).
- SEA Directive [2001/42/EC].
- The Paris Agreement UNFCCC (2015).
- United Nations Sustainable Development Goals (2015).
- Waste Framework Directive.
- Water Framework Directive.
- World Heritage Convention.

National

- A Fairer, Greener Scotland: Programme for Government 2024-2025.
- Ancient Monuments and Archaeological Areas Act (1979).
- Approach to Climate Change Adaptation & Resilience (2023).
- Bute House Agreement: Scottish Government and Scottish Green Party: Shared Policy Programme (2021).
- Cleaner Air for Scotland 2: Towards a Better Place for Everyone (2021).
- Climate Change (Emissions Reduction Targets) (Scotland) Act (2019).
- Climate Change (Scotland) Act (2009).
- Climate Change Plan Update (2020).
- Climate Change Route Map (2022).
- Community Empowerment (Scotland) Act (2015).
- Cycling Framework and Delivery Plan (2022-2030).
- Environment Act (2021).
- Environment Strategy for Scotland 2020: Visions and Outcomes.
- Environmental Noise (Scotland) Regulations (2006).
- Flood Risk Management (Scotland) Act (2009).
- Guiding principles on the environment: draft statutory guidance (2021).
- Habitats Directive and Habitats Regulations.
- Historic Environment Policy for Scotland 2019 (HEPS)
- Historic Environment Scotland Regulations.
- Land Reform (Scotland) Act (2016).

- Land Use Strategy for Scotland 2021-2026.
- Levelling Up and Regeneration Bill (2022).
- Marine (Scotland) Act (2010).
- National Parks (Scotland) Act (2000).
- National Parks Advice to Ministers (2023).
- National Performance Framework (2022)
- National Planning Framework 4 (NPF4).
- National Strategy for Economic Transformation (2022).
- National Transport Strategy 2 (2020).
- Nature Conservation (Scotland) Act (2004).
- NatureScot Guidance (various).
- Net Zero Strategy (2021).
- Offshore Marine Regulations (2017).
- Our Past, Our Future: Strategy for Scotland's Historic Environment (2023).
- Our Place in Time: The Historic Environment Strategy for Scotland (2014).
- Planning (Listed Buildings and Conservation Areas) (Scotland) Act (1997).
- Planning (Scotland) Act (2019).
- River Basin Management Plan for Scotland 2021-2027.
- Scottish Biodiversity Delivery Plan (2024-2030).
- Scottish National Adaptation Plan (SNAP3).
- Scotland's Forestry Strategy 2019-2029.
- Scotland's National Peatland Plan (2015).
- Scotland's Zero Waste Plan (2010).
- Scotland's Energy Strategy and Just Transition Plan (currently in draft form).
- Scotland's Road Safety Framework to 2030.
- Scottish Biodiversity Strategy to 2045.
- Scottish Environment Protection Agency (SEPA) Regulations.
- Scottish National Marine Plan (2015).
- Scottish Soil Framework (2009).
- State of Nature Scotland Report (2019).
- The Birds Directive and Wildlife and Countryside Act (1981).
- The Scottish Government's Vision for Agriculture (2022).
- The Water Environment (Controlled Activities) (Scotland) Regulations (2011).
- Transport (Scotland) Act (2019).
- Transport Scotland's Active Travel Framework (to 2030).
- Transport Scotland's Transportation Noise Action Plan (2019-2023).
- UK Climate Change Risk Assessment (2022).
- Updating the Climate Change Plan 2018-2032.
- Vision For Scotland's Public Electric vehicles Charging Network (2023).
- Water Environment and Water Services (Scotland) Act (2003).

Regional

- Central Scotland Green Network Delivery Plan (2020-2030).
- Clyde and Loch Lomond Local Flood Risk Management Plan (2021).
- Clydeplan Strategic Development Plan (2017).
- Glasgow City Region City Deal (2014).
- Glasgow City Region Climate Adaptation Strategy and Action Plan (2021).
- Glasgow City Region Economic Strategy (2021) and Action Plan (2022).
- Glasgow and Clyde Valley Green Network Strategy (2008).
- Landscape Character Assessment: Glasgow and Clyde Valley (2020).
- Regional Transport Strategy for the west of Scotland (2023-2038).
- Regional Active Travel Strategy for the west of Scotland (2024-2038) (draft).

Local

- North Lanarkshire Active Travel Strategy (2021-2031).
- North Lanarkshire Air Quality Action Plan (2017).
- North Lanarkshire Biodiversity Action Plan (2023).
- North Lanarkshire Children's Services Plan (2023-2026).
- North Lanarkshire Climate Plan (ACT2030) (2021).
- North Lanarkshire Contaminated Land Strategy (2025-2030).
- North Lanarkshire Core Paths Plan (2011) (this is currently being reviewed and is undergoing consultation).
- North Lanarkshire Council Air Quality Action Plan (2023-2028).
- North Lanarkshire Digital and IT Strategy 2019-2024 (2020).
- North Lanarkshire Economic Regeneration Delivery Plan (2020-2030).
- North Lanarkshire Tree Risk Asset Management Strategy.
- North Lanarkshire LDP Local Landscape Character Assessment (2018).
- North Lanarkshire Local Development Plan (2022).
- North Lanarkshire Local Housing Strategy (2021 – 2026).

- North Lanarkshire Local Transport Strategy (2010).
- North Lanarkshire Open Space Strategy (2004).
- North Lanarkshire Parks and Public Open Spaces Action Plan (2019).
- North Lanarkshire State of the Environment Report (SER) (2005).
- North Lanarkshire The Place, The Vision (2020).
- North Lanarkshire Tourism Strategy and Action Plan 2022-2026 (2022).
- North Lanarkshire Woodland Action Plan (2022).
- Plan for North Lanarkshire (2019).

Biodiversity, flora and fauna, and geodiversity

Focus of the SEA topic

- Biodiversity designations.
- Key habitats and species.
- Ecological networks.
- Geological resources.

Summary of current baseline

Designated sites

A summary of the European and nationally designated sites located within North Lanarkshire is shown in Figure 5 at the end of this chapter. It is important to note that in some cases, sites might share overlapping boundaries if they have multiple designations. The Habitats Regulation Assessment (HRA) accompanying the LTS will provide further detail with respect to the potential impact pathways to European sites (and their Zones of Influence which may extend outside of North Lanarkshire). Locally important sites are shown in Figure 6.

The Convention on Wetlands of International Importance (the Ramsar Convention) is the intergovernmental treaty that provides the framework for the conservation and wise use of wetlands and their resources. The convention was adopted in 1971 and came into force in 1975. In the UK, the initial emphasis was on selecting sites of importance to water birds, and consequently, many Ramsar Sites were also designated as Special Protection Areas (SPAs).

SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and regularly occurring migratory birds within the European Union. SPAs are classified under the EC Birds Directive, and together with Special Areas of Conservation (SACs), form the Natura 2000 network. SACs are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs in terrestrial areas and marine areas out to 12 nautical miles are afforded protection through the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended).

Prior to the UK's exit from the European Union (EU), Scotland's SAC and SPA were part of a wider network of such sites known as the 'Natura 2000' network. They were consequently referred to as 'European sites'. Now that the UK has left the EU, Scotland's SACs and SPAs are no longer part of the Natura 2000 network but form part of a UK-wide network of designated sites referred to as the 'UK site network'. However, it is current Scottish Government policy to retain the term 'European sites' to refer collectively to SAC and SPA (including any which are designated following the UK's exit from the EU) (Scottish Government, 2020).

Ramsar sites

There are no Ramsar sites in North Lanarkshire. The closest Ramsar sites to North Lanarkshire are **Firth of Forth, Inner Clyde, and Loch Lomond**. These Ramsar sites are approximately 12 km, 14 km, and 24 km away from North Lanarkshire at their closest point, respectively.

Special Protection Areas

There is a singular SPAs within North Lanarkshire. This is **Slamannan Plateau SPA**. The SPA is 591 ha in size and is located just east of Cumbernauld, in the

headwaters of the River Avon. It consists of two small lochs and their surrounding peatlands and associated areas of rough and improved grassland. These habitats support roosting and feeding Taiga bean geese during periods in winter.

Special Areas of Conservation

There are three SACs within North Lanarkshire. These are:

- **Black Loch Moss SAC** – comprised of: Bogs, Marshes, Water fringed vegetation, Fens (96%); Humid grassland, Mesophile grassland (3%); and Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites) (1%). Size: 107 ha.
- **North Shotts Moss SAC** – comprised of: Bogs, Marshes, Water fringed vegetation, Fens (68%); and Humid grassland, Mesophile grassland (32%). Size: 54 ha.
- **West Fannyside Moss SAC** – comprised of: Bogs, Marshes, Water fringed vegetation, Fens (95%); and Humid grassland, Mesophile grassland (5%). Size: 34 ha.

Sites of Special Scientific Interest

There are eleven Sites of Special Scientific Interest (SSSIs) either wholly or partially within North Lanarkshire:

- **Black Loch Moss SSSI** - one of the largest areas of raised bog vegetation within Lanarkshire. Size: 109 ha.
- **Corrie Burn SSSI** – site comprises stream and quarry exposures which provide a complete Lower Carboniferous rock sequence, from the volcanic detritus of the Calciferous Sandstone Measures to the base of the Limestone Coal Group. Size: 12 ha.
- **Dullatur Marsh SSSI** – a good example of hydroseral zonation, from open water through fen-to-fen meadow, marshy grassland and fen woodland and is a remnant of the once extensive Kelvin Valley wetlands. Size: 87 ha.
- **Hassockrigg and North Shotts Mosses SSSI** – two neighbouring expanses of raised bog, Hassockrigg Moss in the north and North Shotts Moss in the south. They represent two of the best examples of this habitat in central Scotland. Size: 107 ha.
- **Lady Bell's Moss SSSI** – one of the best examples of raised bog in Lanarkshire. Size: 56 ha.
- **Longriggend Moss SSSI** –one of the best examples of blanket bog in Lanarkshire. Size: 37 ha.
- **Mollinsburn Road Cutting SSSI** – one of the best example of a linear dyke swarm in Britain. Size: 1 ha.
- **North Bellstane Plantation SSSI** – an area of wet woodland, which is the best example of its type within central and south west Scotland. Size: 31 ha.
- **Slamannan Plateau SSSI** – a mosaic of improved grasslands and rough pasture which includes wetlands dominated by Juncus species (rushes), raised, blanket and intermediate bogs and two shallow lochs within Fannyside Muir. The area attracts a nationally important population of taiga bean geese Anser fabalis fabalis. Size: 559 ha.
- **West Fannyside Moss SSSI** – an extensive area of blanket bog supporting peat-forming vegetation. Size: 34 ha.
- **Woodend Loch SSSI** – one of the best examples within central Scotland of a base-rich loch with well-developed littoral (shore) vegetation. Size: 29 ha.

National Nature Reserves

There are no National Nature Reserves within North Lanarkshire. There are several NNRs within 5 km of North Lanarkshire, including: **Clyde Valley Woodlands NNR** and **Blawhorn Moss**.

Local Nature Reserves

Local Nature Reserves (LNRs) are areas of natural heritage that are at least locally important. There are 75 LNRs in Scotland, usually close to towns and cities. Local authorities select and designate LNRs under Section 21 of the National Parks and Access to the Countryside Act 1949 (as amended). There are nine LNRs within North Lanarkshire:

- **Braedale Hill LNR** – home to habitats such as the Auchter Water, maturing woodland and managed grasslands. Size 20 ha.
- **Brownsburn LNR** – an extensive area of grassland, woodland, and wetland. Size 62 ha.

- **Cambusnethan Woodland LNR** – two adjacent areas of mature, mainly broad-leaf woodland, within a farming landscape. Size 43 ha.
- **Dumbreck Marsh LNR** – an open area of countryside including ponds and large areas of grassland. Size 19 ha.
- **Gartcosh LNR** – over 20 ponds set in pastures of wildflowers, and areas of woodland. The LNR is home to palmate and smooth newts, frogs, toads and other pondlife including a dragonflies and damselflies. Size 29 ha.
- **Greenhead Moss and Perchy Pond LNR** – an area that includes ponds, wildflower meadows, remnant raised peat bog, and old and new woodlands. Size 100 ha.
- **Kingshill LNR** – an area comprised of meadows, woodlands and ponds that support almost 20 species of butterfly. Size 113 ha.
- **Mosswater LNR** – young woodland and floodplain grassland, with larger ponds and ditches. Size 27 ha.
- **Ravenswood LNR** – wetland site that supports locally important wetland flora and fauna. Size 17 ha.

Geological Conservation Review Sites

Geological Conservation Review (GCR) sites contain geological and geomorphological features of national and international importance. They are selected through a process known as the Geological Conservation Review. There are nearly 900 GCR sites in Scotland.

Most of the GCR sites have statutory protection through designation as geological features in SSSIs; however, more than 200 GCR sites, (known as 'unnotified GCR sites') have no protective SSSI designation status. Significant areas of almost 30 further GCR sites also have no protective SSSI designation status. National Park authorities and some local authorities, therefore, treat unnotified GCR sites as 'candidate SSSIs' and afford them the same protection as SSSIs. Some unnotified GCR sites are also Local Nature Conservation Sites. As such, they are at least given the same protection as locally important sites – though they are actually nationally or internationally important. All other unnotified GCR sites have no statutory protection.

While there are no GCR within North Lanarkshire, there are several GCR within 10 km of the council area, including: **Carstairs Kames GCR** and **Skolie Burn GCR**, **Petershill GCR**, and **East Kirkton Quarry GCR**.

Sites of Importance for Nature Conservation

Sites of Importance for Nature Conservation (SINCs) in Scotland are designated areas that hold significant ecological value at a local level. They are identified by local authorities to protect a wide variety of habitats, species, and landscapes that may not be covered by national designations like SSSIs. These sites contribute to biodiversity conservation by safeguarding important ecosystems, supporting native wildlife, and maintaining natural features that enhance environmental quality.

SINCs are afforded protection in the North Lanarkshire Local Development Plan (2022). Planning permission for proposals affecting these sites will only be granted if the applicant can demonstrate that there will be no adverse impact, or that any impacts can be adequately mitigated in relevant environmental terms.

As shown in Figure 6, SINCs are distributed across North Lanarkshire.

Habitats, species and green networks

Habitat networks can help to make habitats more resilient and assist species' survival in a fragmented landscape and changing climate. A habitat network is one that is focused on the connectivity of a single habitat or species. Meanwhile, a green network focuses on delivering social and economic benefits as well as environmental improvements. An integrated habitat network combines the needs of several habitats and species.

North Lanarkshire's habitats and opportunity areas are shown in Figure 7 at the end of this chapter. It shows that a range of habitats can be found across the council area. Bog and heath habitats dominate the north and east, while woodland dominates in the west, central, and south. Many of North Lanarkshire's woodland habitats are identified as native woodland in the Native Woodland Survey of Scotland (shown in Figure 8). Finally, small patches of grassland and wetland habitats are found in the north and south-west.

The NBN Atlas Scotland combines information about habitats and species from multiple sources in a single location. It allows users to interrogate species records, habitat, climate and soil information, and geographical boundaries using

mapping tools. The tool produces a number of results for North Lanarkshire, which will be explored in more detail during the next stage of the SEA process (the Environmental Report).

Ecological features of interest, such as habitats, which might have the potential to be impacted by transport infrastructure include road verges, trees (including Tree Protection Orders – see Landscape section for more detail), and hedgerows. As these features play an important role in providing connectivity corridors and refuges for migrating and foraging species within North Lanarkshire, it will be important for the LTS to consider the potential implications on such features within the plan making process.

The installation of drainage and kerbs can also have significant effects on amphibian populations but can be successfully mitigated through good design. For example, through the use of dropped kerbs at key movement points, and installation of drains that allow amphibian escape, or retrofitting of 'amphibian ladders' to allow escape from drowning or starvation.

Habitat fragmentation occurs when larger areas of habitat are split into separate, smaller areas. This action affects wildlife in a number of ways. How easily a species can spread to new areas will affect how sensitive it is to habitat fragmentation. The overall ability of a species to disperse depends on a range of factors such as its mobility and reproductive ability. Therefore, habitat fragmentation is likely to have more of an effect on species with low dispersal ability. Mitigation for this issue may be the delivery of wildlife tunnels and bridges, where appropriate.

The Scottish Biodiversity Delivery Plan (2024–2030) (BDP) states that by 2030, local authorities have a responsibility to ensure the implementation of spatially defined Nature Networks. These networks aim to enhance connectivity between important biodiversity areas, support local priorities, and contribute to broader strategic goals at local, regional, and national levels. The BDP also requires local authorities to map opportunities for establishing Local Authority-wide Nature Networks by 2030. These networks should connect locally significant biodiversity areas, integrate with 30 by 30 sites, and address both local and regional priorities for climate and nature.

Invasive non-native species (INNS) pose a significant threat to local biodiversity, outcompeting native flora and disrupting ecosystems. Species such as Japanese knotweed (Reynoutria japonica), Himalayan balsam (Impatiens glandulifera), and giant hogweed (Heracleum mantegazzianum) spread aggressively, dominating riverbanks, woodlands, and grasslands. Transport corridors, such as roads, railways, and waterways, are major pathways for their dispersal, as seeds and plant fragments are easily carried by vehicles, water flow, and human activity. It will be important for future infrastructure projects to include mitigation strategies, such as strict biosecurity measures and targeted control efforts, to prevent the further spread of INNS and protect Scotland's ecosystems.

Summary of future baseline

Ecological and geological resources will potentially face increasing pressures from future transport development in North Lanarkshire. This may include (but is not limited to) the loss of habitats and impacts on biodiversity networks, and potential impacts on geological resources linked to erosion and disturbances. The potential impacts on biodiversity from climate change are likely to include changes in habitat, changes in species distribution, changes in hydrology, and changes in ecosystem functioning.

European and nationally designated sites are particularly sensitive to air quality issues. In this respect, exceeding critical values for air pollutants may result in changes to the chemical status of habitat substrate, accelerating or damaging plant growth, altering vegetation structure and composition and thereby affecting the quality and availability of nesting, feeding or roosting habitats. Additionally, the nature, scale, timing, and duration of some human activities can result in the disturbance of species at a level that may substantially affect their behaviour and consequently affect the long-term viability of their populations.

To maintain and improve the condition of biodiversity in the future, it will be important to not only protect and enhance important habitats but the connections between them. This should work alongside delivering net gains. It will be crucial to effectively coordinate the delivery of new transport infrastructure to ensure that opportunities to improve green infrastructure and ecological corridors are maximised within North Lanarkshire.

As part of its commitment to the Clyde Climate Forest, North Lanarkshire Council

will plant trees in areas most vulnerable to the negative impacts of climate change. This initiative will contribute to strengthening ecological networks, enhancing biodiversity resilience, and mitigating climate change effects within the region. As a result, forest cover within North Lanarkshire is expected to increase over time, further supporting climate adaptation and nature recovery efforts.

It is also noted that future work the council area's woodlands will be guided by the Woodland Action Plan, and tree asset management will include the management of diseased ash trees under the emerging Ash Dieback Action Plan. Actions in this plan will likely have a negative impact on carbon storage and habitat loss. Re-planting forms is a key principle for North Lanarkshire's tree management strategy, and compensatory planting should always be accommodated as part of any plans for new infrastructure.

Scotland will not be subject to the mandatory requirements for Biodiversity Net Gain (BNG) as required in England under the Environment Act (2021), but under policy 3b of National Policy Framework 4 (NPF4), Environmental Impact Assessment schemes will need to achieve significant biodiversity enhancements (in future this will be supported by the emerging Biodiversity Metric for Scotland's Planning System, which is expected to be produced towards the late 2020s). This is complimented by the BDP (2024-2030), which requires new transport and active travel infrastructure projects to incorporate elements of blue-green infrastructure and seek opportunities for enhancing/expanding blue-green infrastructure. Transport infrastructure projects, therefore, should be seen as a unique opportunity to create new/expand upon existing green and blue infrastructure networks, which can utilise roadside verges or be formed alongside active travel routes.

Key sustainability issues

The following key issues have been identified through the baseline review for this topic:

- The nature, scale, timing, and duration of some transport activities can result in the disturbance of species at a level that may substantially affect their behaviour and consequently affect the long-term viability of their populations. This can include effects of poor air quality on designated sites, severance of ecological networks from transport corridors, disturbance to species from noise and lighting, and road kills.
- Road verges are subject to a range of stresses imposed by passing traffic, including salt spray, oil, lead, and air pollutants. Parking and over running on verges can result in the complete loss of vegetation. Installation of infrastructure such as drainage and kerbs could also lead to the disruption of habitat networks.
- There is a singular SPA site within North Lanarkshire, as well as three SACs. All of these designations contribute to the local and national site network, providing important biodiversity connections to allow the safe movement of species.
- Other protected areas within North Lanarkshire include eleven SSSIs and nine LNRs. Several NNRs are also found within 5 km of the council area.
- Habitats within North Lanarkshire comprise of bog and heath (in the north and east) and woodland habitats (in the centre, west and south). Small patches of grasslands and wetlands are also found in the south-west and north of the council area.
- Transport corridors are major pathways for the dispersal of INNS.
- Fragmentation of wildlife habitats and Nature Networks into smaller, isolated areas caused by new and existing development, as well as increasing traffic, reduces the scope for wildlife to move and adapt to new conditions. Habitat creation in existing and new transport corridors, as well as the delivery of BNG, and interventions such as wildlife tunnels and bridges, can help mitigate the impact of transport on biodiversity.
- The LTS presents an opportunity to provide benefits for biodiversity by including consideration of important habitats, species, undesignated sites, and connections between designated sites and undesignated sites at a localised scale. This could be achieved at an early stage of planning for future enhancements to transport infrastructure.

Figure 5: European and nationally important sites for biodiversity or geodiversity conservation in North Lanarkshire

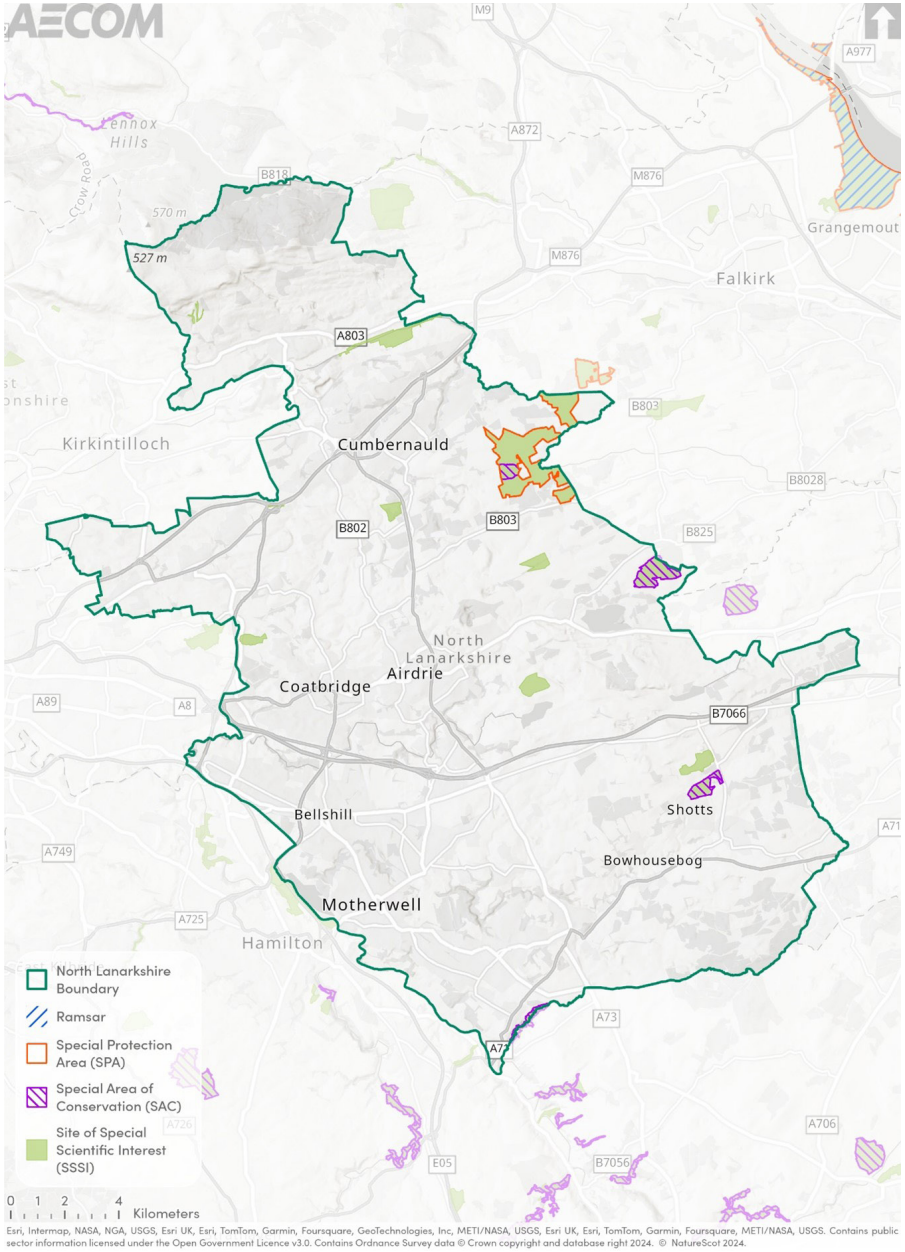


Figure 6: Locally important sites for biodiversity or geodiversity conservation in North Lanarkshire

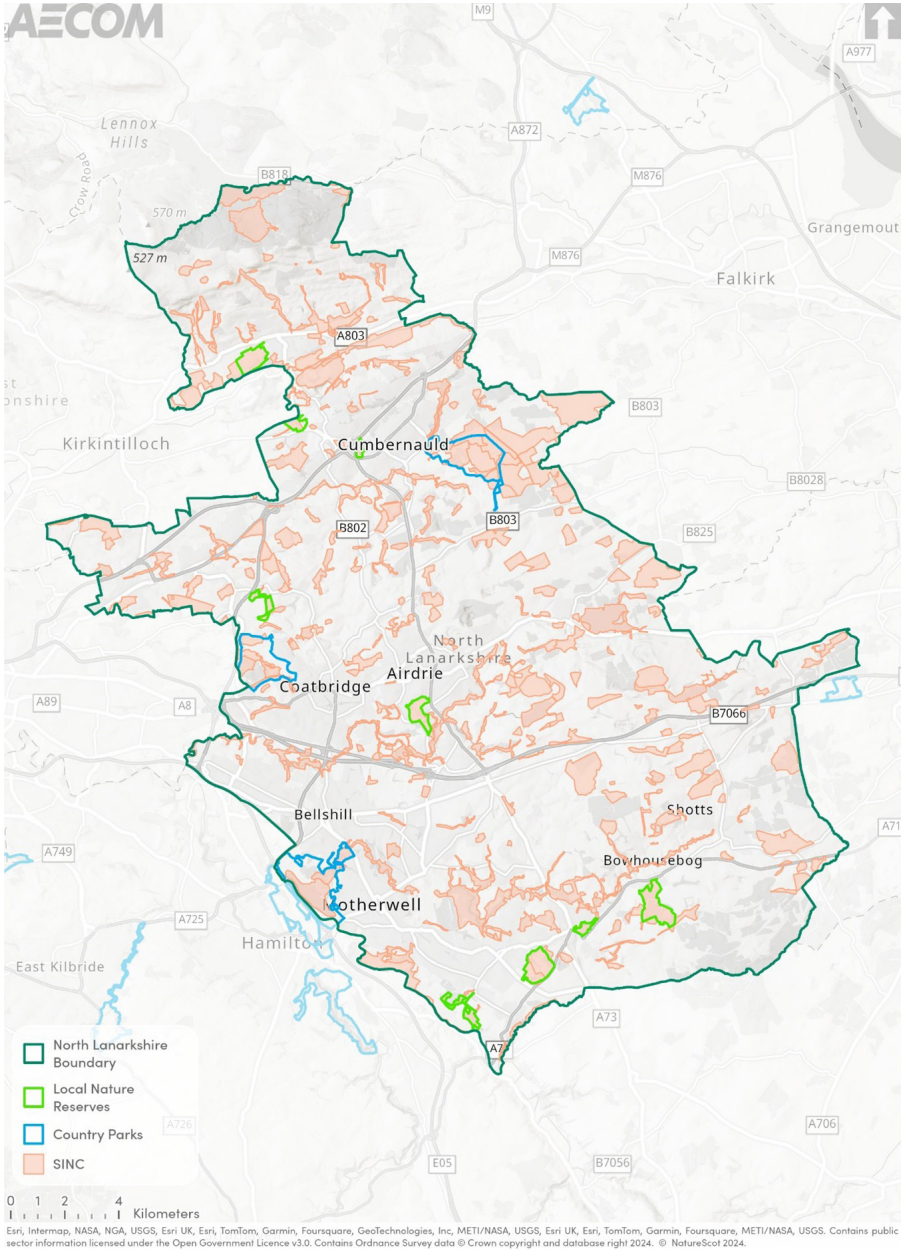


Figure 7: Habitats in North Lanarkshire

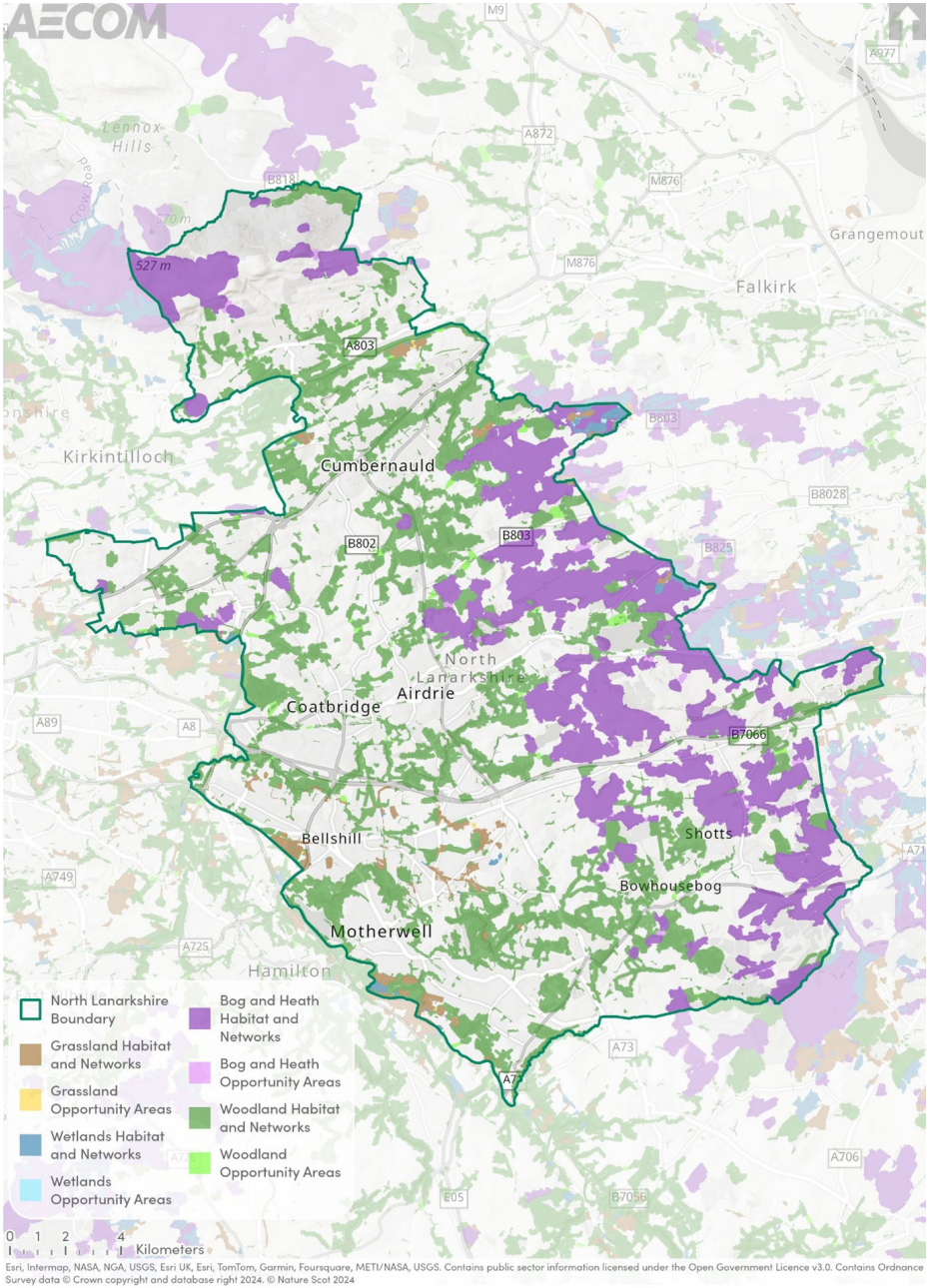
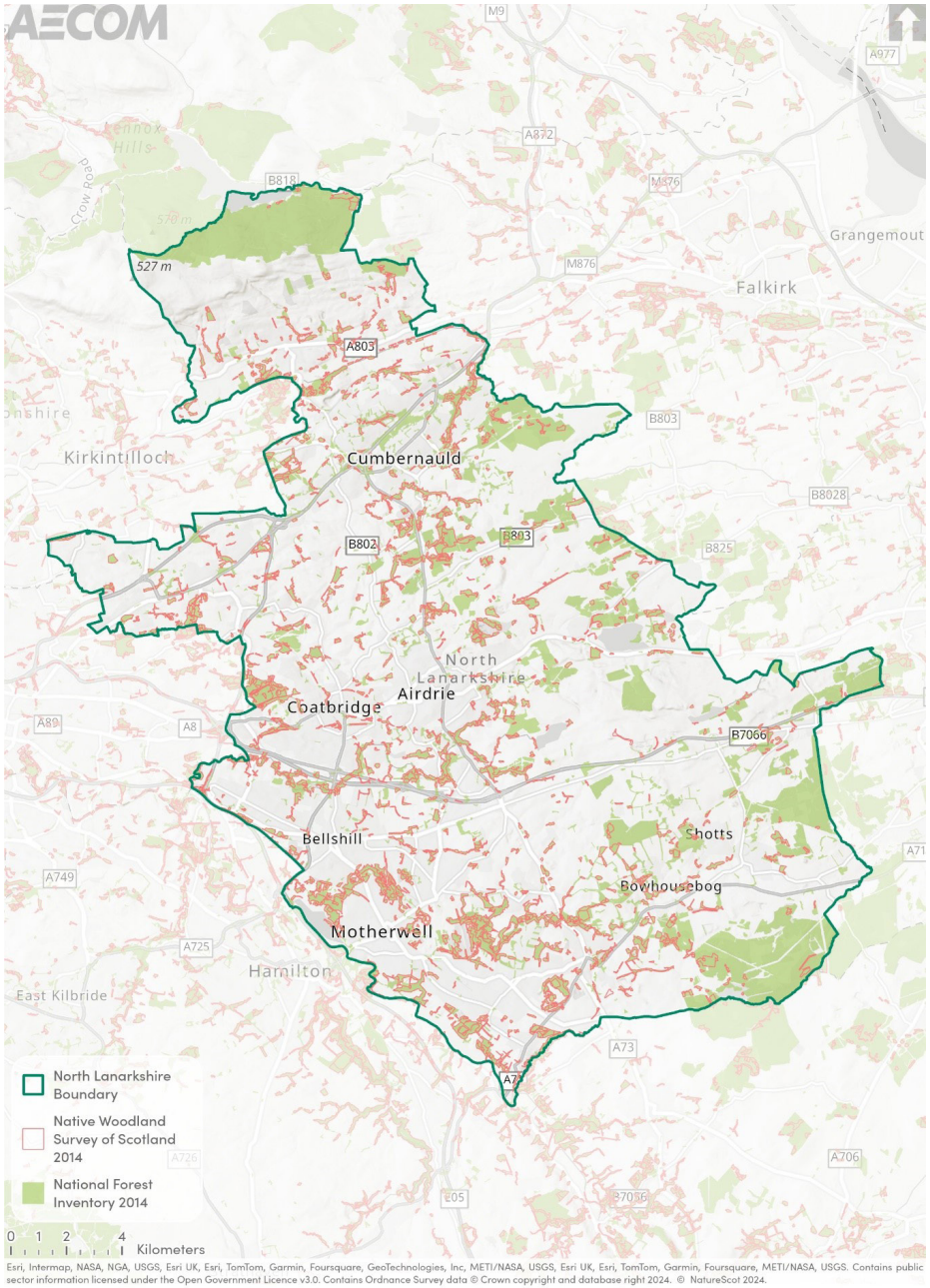


Figure 8: Woodland in North Lanarkshire



Climatic factors

Focus of SEA topic

- Greenhouse gas emissions.
- Potential effects of climate change.
- Flood risk.
- Climate change resilience.

Summary of current baseline

Climate change and transport

Scotland generally has cool summers, mild winters, and rainfall throughout the year. However, in recent decades, Scotland has experienced a warming trend and shifting rainfall patterns. **Figure 9** and **Figure 10**, overleaf, illustrate the climate projections for annual mean temperature and annual rainfall for Scotland. These are probabilistic projections that combine climate model data, observations and advanced statistical methods to simulate a wide range of climate outcomes for four emissions scenarios (RCP2.6, RCP4.5, RCP6.0, RCP8.5). A Representative Concentration Pathway (RCP) is a greenhouse gas concentration trajectory adopted by the IPCC. Four pathways have been selected for climate modelling and research, which describe different climate futures, all of which are considered possible depending on how much greenhouse gases are emitted in the years to come. The four RCPs, namely RCP2.6, RCP4.5, RCP6, and RCP8.5, are labelled after a possible range of radiative forcing values in the year 2100 relative to pre-industrial values. In the future, there is expected to be warmer, wetter winters and hotter, drier summers with more extreme events. These changes will have major implications for the country.

Emissions from transport are a significant contributor to climate change. As such, there are two linkages between transportation and climate change that are important: 1) transportation is responsible for a significant portion of climate change through the emission of vehicular greenhouse gas (GHG) emissions, and 2) a changing climate could have serious consequences on the resiliency and performance of transportation systems in response to environmental conditions.

The hazards of a changing climate (such as a warmer climate, changes in precipitation patterns, higher severity storms, increasing risk of flooding and larger storm surge) could have serious implications on a wide variety of natural and human systems, including transportation. In this respect, climate change is likely to damage transportation infrastructure, affecting the reliability and capacity of transportation systems. Climate change impacts will also likely increase the cost of Scotland's transportation systems.

Figure 9: UKCP18 annual mean temperature anomaly in Scotland

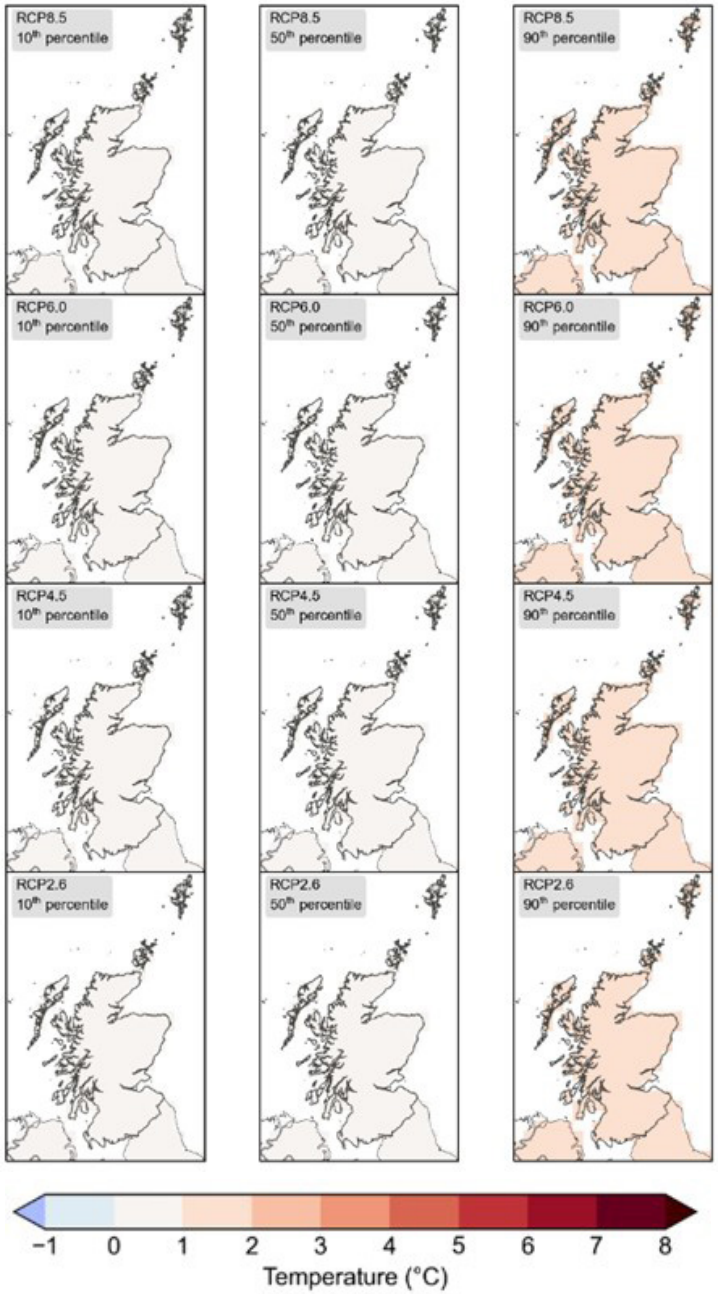
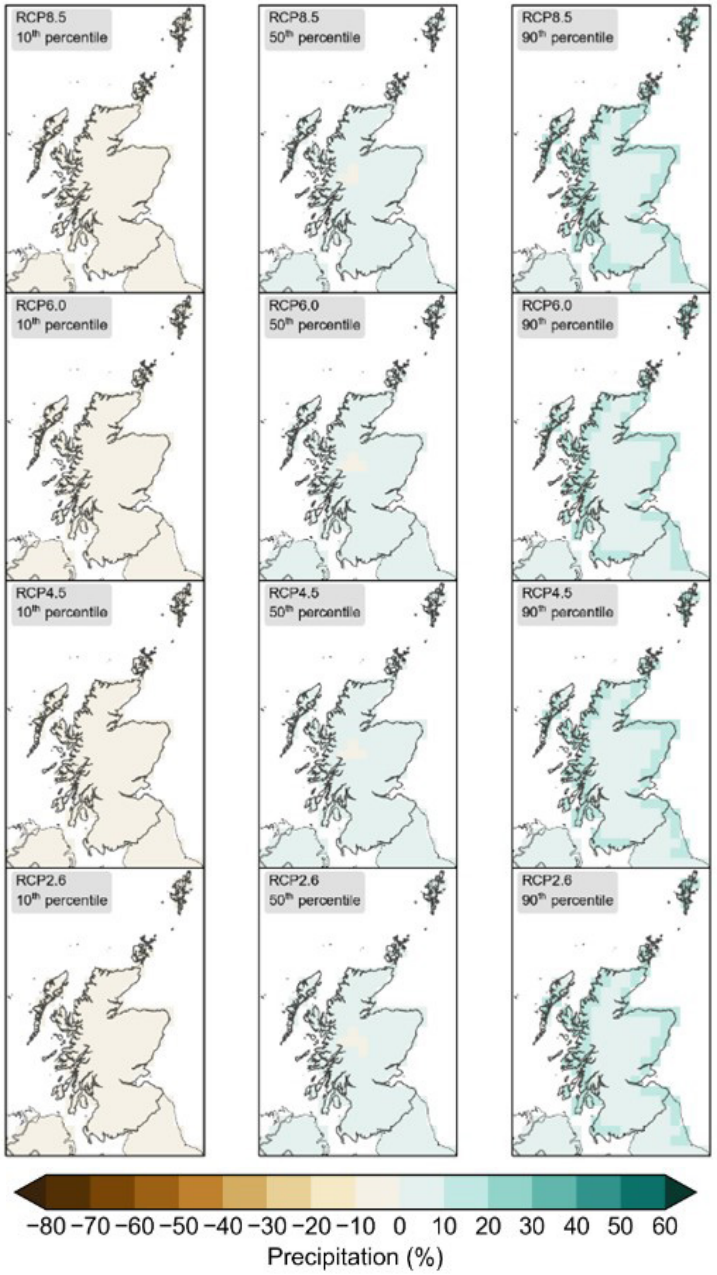


Figure 10: UKCP18 annual precipitation anomaly in Scotland



Mean annual maximum and minimum temperatures have been rising since the end of the 19th Century. There is some evidence of an upward trend in mean annual rainfall, with less rain falling in summer months.

Scotland is already seeing a number of changes as a result of climate change, including changes in the growing, breeding and migration seasons, shifts in species abundance and diversity, and changing weather patterns with the potential for more floods and droughts. Continued reliance on fossil fuels, combined with demand for energy for transport and housing, has the potential to escalate emissions of carbon dioxide to increasingly dangerous and potentially irreversible levels.

The third UK Climate Change Risk Assessment was published in 2022. The key findings for Scotland were:

- Milder winters are projected to reduce fuel poverty and overall financial pressures on households from the reduction in winter energy demand.
- Hotter summers, however, may lead to a rise in heat-related deaths and hospital admissions and increased demand for air conditioning.
- Less summer rainfall may lead to a reduction in river flows, affecting public water supplies and increasing the risk of pollution, and a reduction in soil moisture, potentially damaging natural ecosystems.
- Flooding may pose an increasing threat to people, property, critical infrastructure, agriculture and important natural habitats.
- Some native animal and plant species may decline in the face of threats presented by pests, diseases and non-native invasive species.
- Agricultural output may be adversely affected from droughts, pests and disease, exacerbated by higher temperatures.

The Scottish Greenhouse Gas Statistics (2022) outlines that in 2022, Scottish source emissions of the basket of seven GHGs were estimated to be 40.6 million tonnes carbon dioxide equivalent (MtCO2e). This level of emissions is essentially unchanged from the position in 2021.

In 2022, emissions in the Buildings and Product Use sector dropped significantly by 1.2 MtCO2e, mainly due to high fuel prices and mild early-year temperatures. Smaller reductions also occurred in Agriculture (0.3 MtCO2e) and Industry (0.1 MtCO2e). However, the fall in emissions in these sectors were offset by increases in other sectors. The sector that saw the largest growth in emissions between 2021 and 2022 was International Aviation and Shipping which grew by 0.7 MtCO2e.

Between 1990 and 2022, there was a 50.0% reduction in estimated emissions (40.8 MtCO2e decrease). The most significant contributors to this reduction were:

- A reduction in Electricity Supply emissions of 13.0 MtCO2e (an 88.1% reduction);
- A reduction in Industrial emissions of 7.2 MtCO2e (56.8% reduction);
- A reduction in Land Use, Land Use Change and Forestry (LULUCF) emissions by 5.8 MtCO2e;
- A reduction in Waste Management emissions (such as landfill) of 4.9 MtCO2e (a 75.4% reduction);
- A reduction in Agricultural emissions of 1.0 MtCO2e (a 11.9% reduction);
- A reduction in Buildings and Product Use emissions of 3.3 MtCO2e (a 49.9% reduction); and
- A reduction in Domestic Transport emissions of 1.0 MtCO2e (a 19.3% reduction).

In 2022, per capita GHG emissions in North Lanarkshire stood at 5.5 tCO2e – the average for the whole of Scotland was 7.1 tCO2e, demonstrating that GHG emissions per capita are lower in North Lanarkshire than the Scottish average. In terms of overall GHG emissions, this stood at 1,858.2 kt CO2e in North Lanarkshire in 2022. The largest contributing sector was the Transport sector (777.5 kt CO2e), followed by the Domestic sector (431.8 kt CO2e), and the Industry sector (208.6 kt CO2e).

Flood risk maps provided by SEPA identify that there are areas of high (10% chance or more per annum) likelihood of fluvial/coastal flooding. In North Lanarkshire, high flood risk areas are primarily concentrated along the major rivers and watercourses, particularly near the River Clyde, North Calder Water, and South Calder Water. A map of North Lanarkshire's fluvial / coastal flood risk is provided in Figure 11 at the end of the chapter.

With regard to surface water flooding, areas of high risk (10% chance or more per annum) can be found throughout the council area. Many of North Lanarkshire's towns, including Cumbernauld, Motherwell, Airdrie, and Coatbridge include

pockets of land with high likelihood of surface water flooding. A map of North Lanarkshire's surface water flood risk is provided in Figure 12 at the end of the chapter.

Summary of future baseline

Climate change has the potential to increase the occurrence of extreme weather events in Scotland, with increases in mean summer and winter temperatures, increases in mean precipitation in winter, and decreases in mean precipitation in summer. This is likely to increase the risks associated with climate change, including surface water and fluvial flood risk, as well as flooding by sea. This will result in an increased need for resilience and adaptation for transport infrastructure.

In terms of climate change mitigation, per capita emissions are likely to continue to decrease as energy efficiency measures, renewable energy production, and new technologies become more widely adopted. In particular, an ongoing increase in the use of electric vehicles (EVs), powered by renewable sources of electricity, has the potential to reduce emissions from transport. In this respect, the UK Government has stated that it will disallow the sale of petrol and diesel cars and vans after 2030, and hybrids after 2035. More stringent emission standards on manufacturers will also help accelerate the trend to alternatively powered vehicles.

Alongside promoting cleaner vehicle fuels, the Scottish Government are also aiming to reduce the overall distance travelled by cars by 20% (compared to a 2019 baseline). This can be achieved through a modal shift to more sustainable modes of transportation, as well as improving the active travel network and reducing the need to travel through encouraging home working, would be beneficial to reducing transport emissions in Scotland. North Lanarkshire's Active Travel Strategy (2021-2031) encourages walking and cycling to reduce carbon emissions and improve health in the council area. Over the Strategy period, it aims to increase the number of active travel journeys made in the council area by promoting accessible routes and infrastructure, by prioritising safe pathways active travel, and enhancing connections between key destinations like town centres, schools, and workplaces.

Key sustainability issues

The following key issues have been identified through the baseline review for this topic:

- Road transportation is a major contributor of CO2 emissions (which is one of the main components of GHGs) in Scotland, and therefore a major factor in exacerbating climate change impacts. However, the ongoing transition towards electric and hybrid vehicles, combined with an increase in home working and active travel uptake, has the potential to help reduce emissions from transport in the long-term.
- A range of flood risk issues exist across North Lanarkshire. This includes flooding linked to fluvial (river/watercourse), surface water (direct rainfall), and groundwater flooding. Future infrastructure projects should consult with Lanarkshire Council's Water Management team at preliminary design stage for their input on existing flooding issues. This would represent an opportunity for the scheme to have a positive impact on flood risk.
- The transport network of North Lanarkshire has the potential to become increasingly vulnerable to the potential effects of climate change in the future. As such the resilience of the transport network to the likely impacts of climate change will be a key factor in its effective functioning.

Figure 11: Fluvial Flood Risk in North Lanarkshire

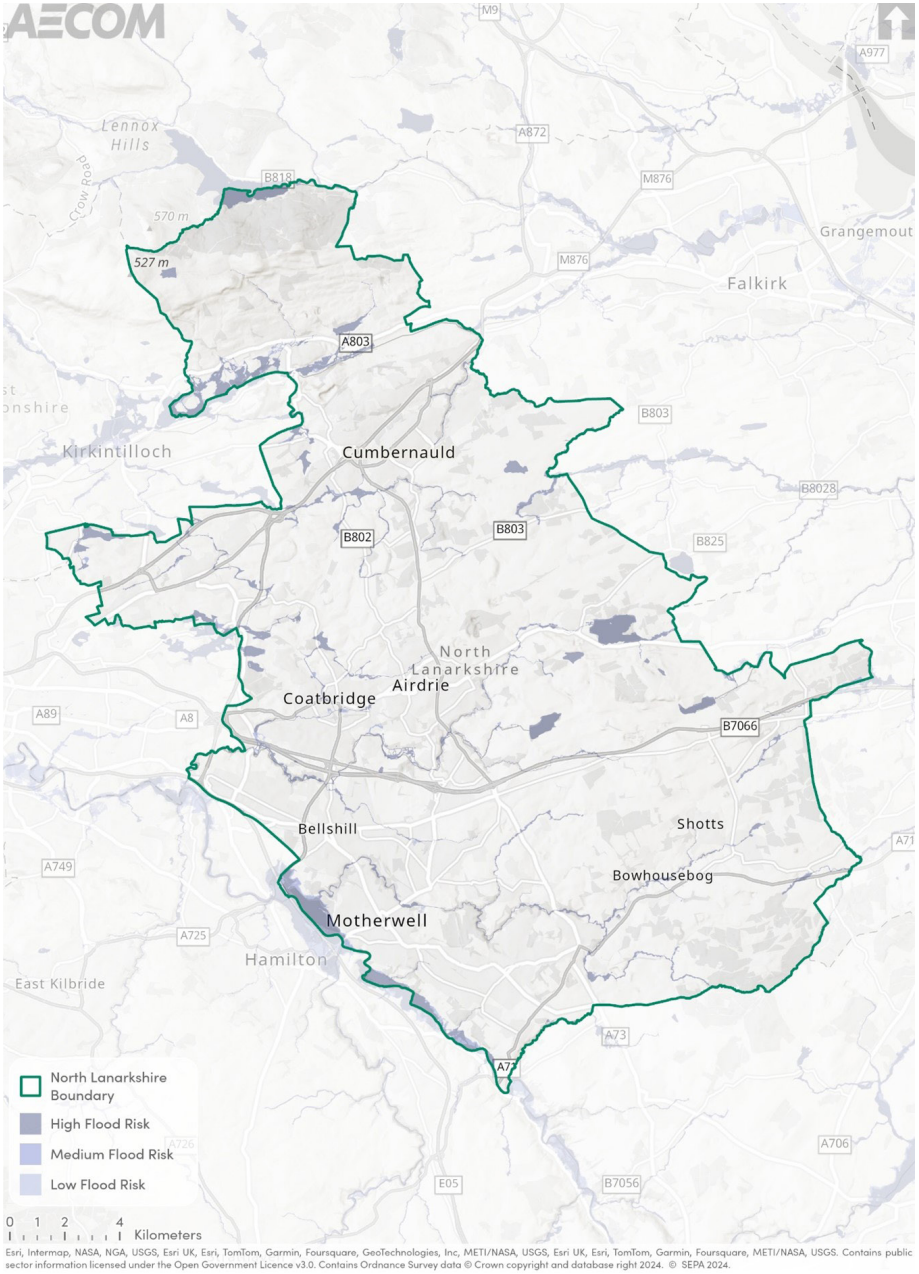
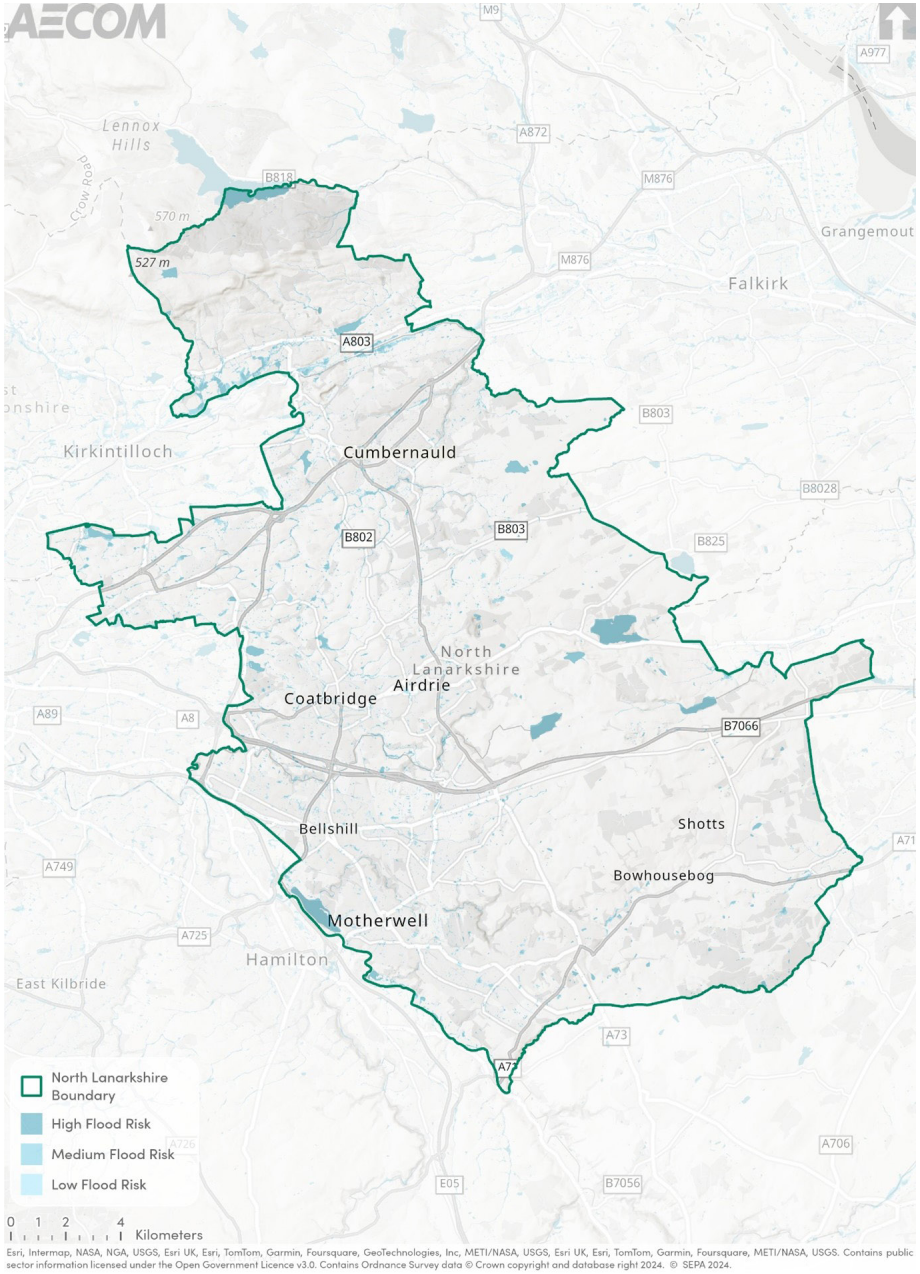


Figure 12: Surface Water Flood Risk in North Lanarkshire



Air quality and noise pollution

Focus of SEA theme

- Air pollution sources.
- Air quality hotspots.
- Air quality management.
- Noise pollution.

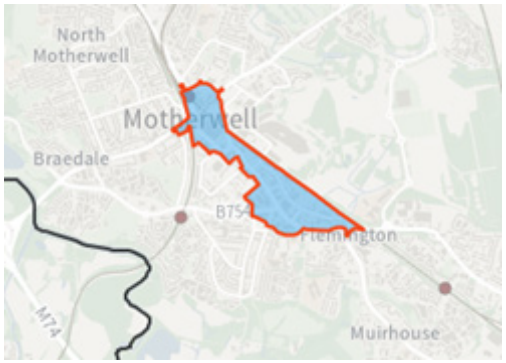
Summary of current baseline

Air Quality Management Areas

Local Authorities have a duty to designate any relevant areas where the air quality objectives are not (or are unlikely to be) being met as Air Quality Management Areas (AQMAs). AQMAs must be designated officially by means of an 'order'. The extent of the AQMA may be limited to the area of exceedance or encompass a larger area. Following the declaration of an AQMA, the local authority is required to develop and implement a plan (Air Quality Action Plan) to improve air quality in that area. AQMAs can be for a combination of nitrogen dioxide (NO2), sulphur dioxide (SO2) and particular matter (PM10 and PM2.5).

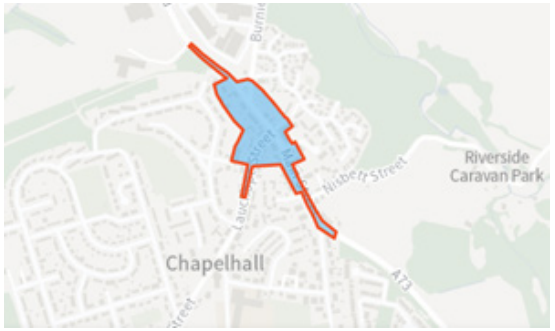
Until December 2024, North Lanarkshire Council had three AQMAs and therefore prepared an Air Quality Action Plan (2023) (AQAP) in line with its statutory obligations. The AQAP is designed to address the air quality problems identified within the council's three AQMAs. In December 2024, two of North Lanarkshire's three AQMAs were revoked, leaving only one active AQMA in the council area. The active AQMA and two revoked AQMAs are as follows:

- **Motherwell Town Centre (active)** – designated in 2012 for exceedances in the air quality objective for PM10.



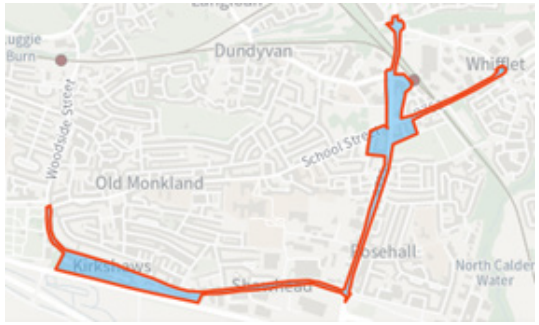
Source: North Lanarkshire Council

- **Chapelhall** – designated in 2012 for exceedances in the air quality objective for PM10 and NO2. The AQMA was revoked in December 2024 due to several years of compliance with the NO2 objectives.



Source: North Lanarkshire Council

- **Coatbridge** - designated in 2012 for exceedances in the air quality objective for PM10 and NO2. The AQMA was revoked in December 2024 due to several years of compliance with the air quality objectives.



Source: North Lanarkshire Council

It should also be noted that Croy AQMA, which covered Croy village and land to the east of the village, was also revoked in 2022 in line with advice

from the Scottish Government and SEPA. Air pollution, however, will continue to be monitored in the area.

The most recent Air Quality Annual Progress Report (APR) for North Lanarkshire was published in 2023. It indicates that in 2022 the monitored concentrations of NO2 all complied comfortably with the annual mean statutory objective. Additionally, all statutory air quality objectives for PM10 and PM2.5 were met in 2022. Measured concentrations of all NO2, PM10 and PM2.5 remained broadly consistent with measured concentrations from 2021. The APR also notes that North Lanarkshire Council expect to '…revoke the AQMAs in Chapelhall and Coatbridge for both NO2 and PM10…' during the reporting year of 2023; however, at the time of writing, these AQMAs are still active.

Noise pollution

The Environmental Noise Directive requires, on a five yearly cycle, the Scottish Government to produce strategic noise maps. Noise action plans will be prepared based on the results of the noise mapping, with a public consultation on the draft action plans. The Scottish Government has commissioned work on the collaborative development of modelling and mapping to describe the noise exposure in Scotland for 2021.

The noise maps will support the delivery of new noise actions plans to prioritise the management of noise in Noise Management Areas (NMAs), as specified by the Environment Noise (Scotland) Regulations 2006.

The current round three noise map demonstrates noise pollution in North Lanarkshire is largely linked to the strategic road network (predominantly the M8, M73 and M80).

Transport Scotland's Transportation Noise Action Plan (TNAP) (2019-2023) outlines strategies for mitigating environmental noise impacts, primarily from transportation sources like major roads and railways. The TNAP focusses on reducing noise in identified Noise Management Areas (NMAs) where high noise levels affect quality of life and preserving quieter zones that contribute to environmental well-being. The Plan identifies several sites as Candidate NMAs (CNMA) in North Lanarkshire. This includes road-related CNMAs in Coatbridge (two along the B804, two along the A89, and one along the A725), Cumbernauld (along the A8011), and Airdrie (two along the A89, and one along the A8010).

Future transport development should be in alignment with the strategies in the TNAP, as well as North Lanarkshire's Planning and Noise Supplementary Guidance document, which offers supplementary planning guidance around North Lanarkshire's noise policy.

Summary of future baseline

There is likely to be a continued reliance on private vehicles in North Lanarkshire, with potential for some modal shift to active/public transport. In addition, future transport infrastructure provision has the potential to increase the amount of traffic on key routes through North Lanarkshire. This is especially true for council area's motorways and through town centres. This has the potential to increase pollutants and impacts on the AQMAs within North Lanarkshire.

However, it is noted that cleaner vehicles, including the update of EVs and their associated infrastructure, have the potential to lead to improvements in air quality over the longer term. The provision and management of EV charging points across North Lanarkshire has the potential to lead to positive effects in terms of addressing EV challenges, including through increasing public confidence in charging infrastructure.

Key sustainability issues

The following key issues have been identified through the baseline review for this topic:

- There are three active AQMAs in North Lanarkshire, which cover the urban environments of Motherwell, Coatbridge, and Chapelhall. An Air Quality Action Plan is in place to address poor air quality in these areas. Several years of no exceedances of air quality objectives mean that North Lanarkshire Council are expecting to revoke Coatbridge and Chapelhall AQMAs in the near future.
- Road-related CNMAs have been identified in Coatbridge, Cumbernauld, and Airdrie. Outside key towns, areas of noise concern across North Lanarkshire broadly link to and follow the routes of the road network, particular the M8, M73, and M80.

- Future transport infrastructure provision has the potential to increase the amount of traffic on key routes through North Lanarkshire, with the potential for increasing pollutants.
- Modal shift away from journeys made by private vehicles and towards public transport or methods of active travel has the potential to reduce congestion and transport emissions within the council area, which would lead to better air quality in the council area.

Soil and water resources

Focus of SEA topic

- Soil resources.
- Water resources and quality.

Summary of current baseline

Soil resources

Land is a limited resource with competition for agriculture, forestry, and other uses. The value and use of land will generally depend on its quality; location and any restrictions placed on it. Figure 13 at the end of this chapter shows the location of prime agricultural land across the local authority area.

Scotland's national scale land capability for agriculture map provides information on the types of crops that may be grown in different areas dependent on environmental and soil characteristics. The land capability for agriculture (partial cover) was published later at a greater resolution and, where coverage exists, is seen as the definitive mapped assessment. Land capability for agriculture classes range from Class 1 (land capable of producing a wide range of crops) to Class 7 (land of very little agricultural value) (see Table 0 1 for the full list of classes). Land within Class 3 is subdivided to provide further information on potential yields; Classes 4 and 5 are further divided to provide information on grasslands; Class 6 is divided on the quality of the natural vegetation for grazing.

The majority of undeveloped land in the west of North Lanarkshire is underlain by Class 3.2 land (capable of average production). The undeveloped land in the central and eastern regions of North Lanarkshire are mostly underlain by less-productive Class 4.2 (capable of producing a narrow range of crops) and Class 5.2 (capable of use as improved grassland) land. There is a small stretch of Class 2 land (land capability for agriculture class; the council area's highest quality soil) found on the council area's south-western border.

Table 7 1: Land capability for agriculture classes in Scotland

Class	Description
Class 1	Land capable of producing a very wide range of crops.
Class 2	Land capable of producing a wide range of crops.
Class 3.1	Land capable of producing consistently high yields of a narrow range of crops and/ or moderate yields of a wider range. Short grass leys are common.
Class 3.2	Land capable of average production though high yields of barley, oats and grass can be obtained. Grass leys are common.
Class 4.1	Land capable of producing a narrow range of crops, primarily grassland with short arable breaks of forage crops and cereal.
Class 4.2	Land capable of producing a narrow range of crops, primarily on grassland with short arable breaks of forage crops.
Class 5.1	Land capable of use as improved grassland. Few problems with pasture establishment and maintenance and potential high yields.
Class 5.2	Land capable of use as improved grassland. Few problems with pasture establishment but may be difficult to maintain.
Class 5.3	Land capable of use as improved grassland. Pasture deteriorates quickly.
Class 6.1	Land capable of use as rough grazings with a high proportion of palatable plants.
Class 6.2	Land capable of use as rough grazings with moderate quality plants.
Class 6.3	Land capable of use as rough grazings with low quality plants.
Class 7	Land of very limited agricultural value.
Urban	Urban.

Source: Scotland's Soils

Scotland's Soils also provides data and information on the country's soils. This includes a national soil map of Scotland, which shows that soil types across North Lanarkshire are varied. The western region of North Lanarkshire is mostly underlain by mineral gleys. This soil type is also found in the central and southern regions of North Lanarkshire; however, these are accompanied by patches of other soil types, including peaty gleys, peat, brown soils, and mineral podzols.

Other data and information provided by Scotland's Soils includes a soil risk map, which shows areas of soil at risk of erosion, runoff, leaching and compaction, and a carbon and peatland map, which shows the distribution of carbon and peatland classes across the whole of Scotland. These maps will be explored in more detail during the next stage of the SEA process (the Environmental Report).

Water resources and quality

North Lanarkshire's waterbodies

The water resources located within North Lanarkshire include a network of main rivers, lochs, reservoirs, canals, streams, dams, and drainage ditches.

The Scottish Environment Protection Agency (SEPA) produces an annual Water Framework Directive (WFD) classification for all the waterbodies in Scotland. Most of Scotland's water environment is already in a good condition and subject to fewer pressures than most other European waters. However, there are significant environmental problems caused by a number of pressures, including diffuse and point source pollution, alterations to beds, banks and shores, alterations to water levels and flows and the presence of invasive non-native species.

North Lanarkshire's State of the Environment Report (SER) (2005) notes that due to the council area's historical underground coal mine industry, and the potential for rising mine water levels associated with cessation of mine water pumping, there is the potential for pollution of surface watercourses through discharge and supply of base flows from such sources. It also notes that water quality in North Lanarkshire is impacted by urban combined sewer overflows and diffuse pollution from agriculture. Recreational activities are also identified as a potential source of pollution for the council area's watercourses; however, when planned well, these can be an opportunity to improve water quality. Finally, the SER identifies that the promotion of best practice in watercourse engineering (such as bridging rather than culverting of watercourses) as an opportunity for new roads and development to reduce adverse impacts on North Lanarkshire's watercourses.

In order to measure pressures on water quality in Scotland, SEPA uses an aquatic classification system which covers rivers, lochs, estuaries, coastal and groundwater bodies. These are split into management units called waterbodies, with a classification produced for each body (the number of water bodies between years varies slightly, as some water body boundaries are reviewed to ensure that they can be managed appropriately).

The WFD requires the creation of River Basin Management Plans (RBMP). In these, surface waterbodies are classified using a system of five quality classes: high, good, moderate, poor, and bad. Meanwhile, ground waterbodies are classified as good or poor. In general, the classification of waterbodies is defined by how much their condition or status differs from near natural conditions. Whilst most waterbodies in Scotland have a good or moderate status, online mapping for the latest RBMP (2015-2027) identifies 21 surface waterbodies (87.5% of surface waterbodies surveyed) within North Lanarkshire that are classed as Poor condition in 2020. The mapping also identified that four of the nine groundwaters (44.4%) surveyed in North Lanarkshire were in Poor condition in 2020.

NatureScot works with SEPA and other bodies to implement RBMPs. This includes action to improve the condition of SACs and SPAs where impacts on the water environment are leading to unfavourable condition. The key pressures on waterbodies that have been identified in the RBMP for Scotland are:

- Pollution – rural diffuse pollution (mainly from agriculture); waste water discharges.
- Barriers to fish migration.
- Physical modification of waterbodies.
- Invasive non-native species.
- Pressures on flows and levels, for example abstraction.

Summary of future baseline

Population growth, development, and climate change is likely to increase pressure on water resources and associated WFD objectives. Climate change could also increase flooding, which could lead to adverse effects on water quality from overflowing of storm water drains and leaching of contaminated soils into surface waters. Soil erosion is likely to continue due to surface water flash flooding and other causes.

Compaction and sealing is also likely to continue from an increase in developed areas and impermeable surfaces (including new road infrastructure).

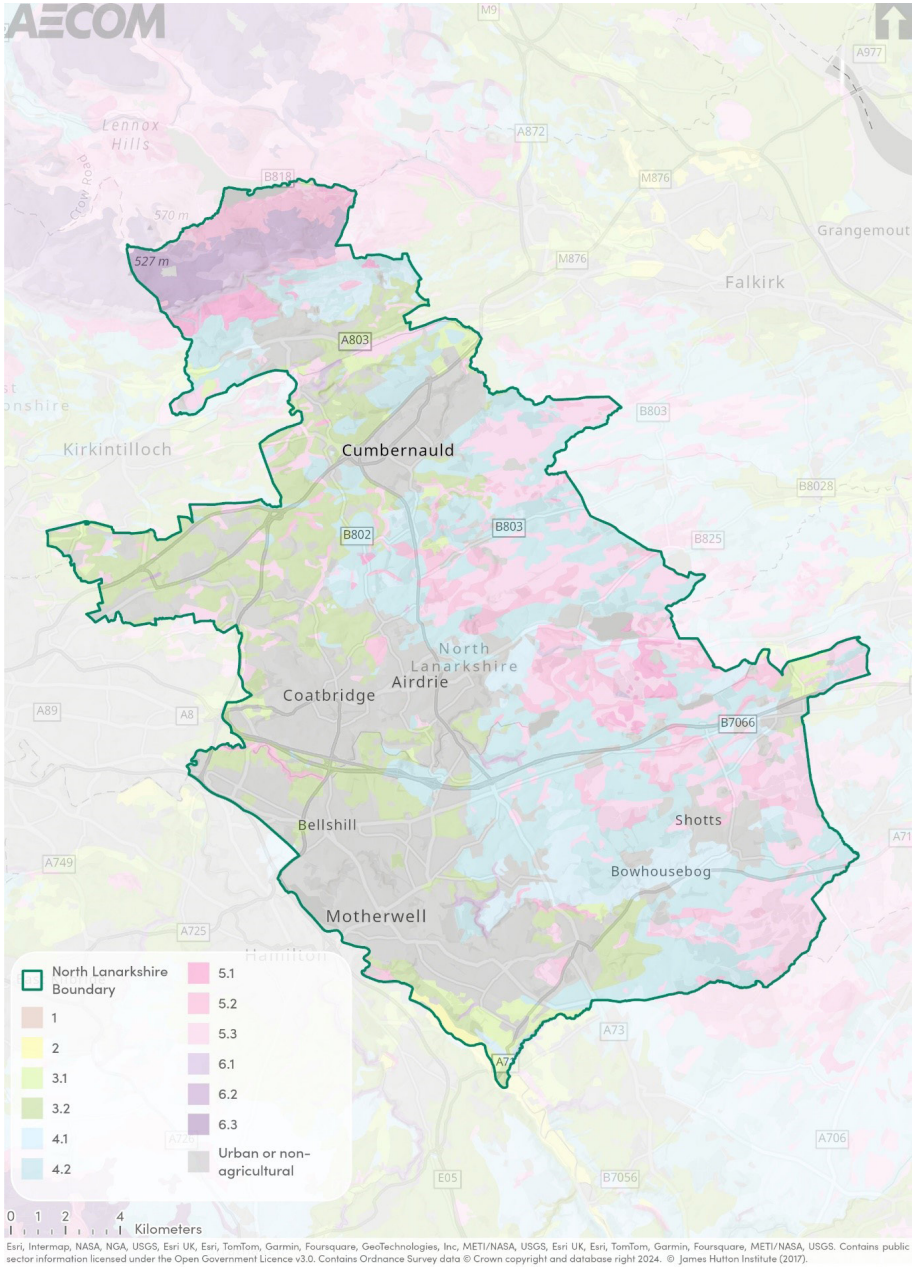
Pressure for development and new transport infrastructure within undeveloped areas of North Lanarkshire has the potential to lead to the loss of areas of productive agricultural land.

Key sustainability issues

The following key issues have been identified through the baseline review for this topic:

- Most of the land in North Lanarkshire is of average or worse quality for capability for agriculture. The exception to this is a small stretch of Class 2 land by the council area's south-western border. Therefore, this land should be protected from new transport infrastructure where possible.
- Increased soil erosion and compaction could be an issue for new transport infrastructure schemes, with impermeable materials reducing the drainage capacity and increasing the potential for surface water run-off issues.
- The construction and use of transport infrastructure can contaminate soils and water resources through the release of pollutants such as fuel, oils, and construction materials, as well as sediment runoff from disturbed land.
- The key pressures on waterbodies in Scotland are pollution, barriers to fish migration, physical modification of waterbodies, invasive non-native species, and pressures on flows and levels. North Lanarkshire's SER specifically notes that the promotion of best practice in watercourse engineering (such as bridging rather than culverting of watercourses) is an opportunity for new transport developments to reduce adverse impacts on North Lanarkshire's watercourses.

Figure 13: Prime Agricultural Land in North Lanarkshire



Cultural heritage

Focus of SEA topic

- Designated and non-designated heritage assets.
- Setting, special qualities, and significance of heritage assets.
- Locally important heritage assets.
- Archaeological resources.

Summary of current baseline

Introduction

Built heritage includes ancient monuments, archaeological sites and landscapes, historic buildings, townscapes, parks, gardens and designed landscapes and other features, and comprises both statutory and non-statutory designations. The historic built environment provides a sense of identity and continuity for communities – as such, it is highly valued.

Additionally, across Scotland there are a significant number of assets of historical and archaeological importance that do not meet the criteria for designation and are classed as 'record only'.

Compiled and managed by Historic Environment Scotland (HES), Canmore contains more than 320,000 records and 1.3 million catalogue entries for archaeological sites, buildings, industry and maritime heritage across Scotland.

HES's search tool produces 585 results for North Lanarkshire and will be an essential source of evidence during the next stages of the SEA.

A map of North Lanarkshire's designated heritage assets (excluding listed buildings) is found in Figure 14, whilst a map of North Lanarkshire's listed buildings and conservation areas is found in Figure 15. Both figures are found at the end of the chapter.

World Heritage Sites

There is a singular World Heritage Site (WHS) in North Lanarkshire; **Antonine Wall** (part of the **Frontiers of the Roman Empire WHS**), a 60 km long Roman fortification that spans the width of central Scotland. Within North Lanarkshire, it runs from Castlecary to Croy.

Listed buildings

HES holds a record of listed buildings of special architectural or historic interest. These assets have been listed under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997.

Listed buildings are placed into one of three categories according to their relative importance. These are as follows:

- **Category A** – Buildings of special architectural or historical interest which are outstanding examples of a particular period, style or building type.
- **Category B** – Buildings of special architectural or historic interest which are major examples of a particular period, style or building type.
- **Category C** – Buildings of special architectural or historic interest which are representative examples of a period, style or building type.

HES's search tool produces 501 results for listed buildings in North Lanarkshire – of which 33 are Category A, 246 are Category B, and the remaining 222 are Category C.

Scheduled monuments

HES maintains a schedule (a list) of monuments of national importance, listed under the Ancient Monuments and Archaeological Areas Act 1979. The aim of scheduling is to preserve Scotland's most significant sites and monuments of architectural value as far as possible in the form in which they exist today.

HES's search tool produces 62 results for scheduled monuments in North Lanarkshire.

Gardens and designed landscapes

Gardens and designed landscapes – grounds consciously laid out for artistic effect – are an important element of Scotland's historic environment and landscape. Such spaces play a big role in Scotland's heritage. HES select nationally important sites for the Inventory under the terms of the Ancient Monuments and Archaeological Areas Act 1979.

HES's search tool produces 15 results for gardens and designed landscapes in North Lanarkshire.

Historic battlefields

Historic battles hold a significant place in Scotland's national consciousness and play an important part the country's sense of identity. Sites where historic battles have taken place are designated under The Historic Environment (Amendment) (Scotland) Act 2011.

HES's search tool produces four results for historic battlefields in North Lanarkshire.

Conservation areas

There are seven conservation areas within North Lanarkshire:

- Blairhill and Dunbeth.
- Cumbernauld Village.
- Drumgelloch.
- Dullatur.
- Hamilton Road.
- Kilsyth.
- Victoria and Town Centre.

Associated appraisals and management plans for the conservation areas in North Lanarkshire have been published on the North Lanarkshire Council website.

Buildings at Risk

The Buildings at Risk Register, which is maintained by HES, brings together potential restorers and redevelopers with buildings and sites that are considered at risk or under threat. The historic places on the Register are all of architectural or historic importance. They are usually listed buildings or an unlisted building within a conservation area. A building at risk may be:

- Long-term vacant.
- Neglected and / or poorly maintained.
- Structurally unsound.
- Damaged by fire.
- Unsecured and open to the elements.
- Threatened with demolition.

According to The Buildings at Risk Register, there are 31 Buildings at Risk in North Lanarkshire. These will be explored in more detail during the next stage of the SEA process (the Environment Report).

Additional heritage features and areas of interest

It should be noted that not all historic environment features are subject to statutory designations. Consequently, there remain many non-designated features of historic interest and are an important part of local communities. For example, open spaces and key distinctive buildings are likely to have a local historic value.

Summary of future baseline

New transport infrastructure provision within North Lanarkshire has the potential to impact on the fabric and setting of heritage assets, for example, through ground disturbance and inappropriate design and layout. It should be noted, however, that existing historic environment designations offer a degree of protection to heritage assets and their settings, and there are a range of existing initiatives to enhance historic environment assets across Scotland.

Increasing traffic levels associated with an increase in population has the potential to negatively impact heritage assets. In urban areas, this can be from vibration affecting the structural integrity of vulnerable buildings, emissions, and from the

provision of street furniture affecting the setting of assets.

Increases in visitor numbers may increase demand for recreational activities associated with key heritage assets in North Lanarkshire.

An improvement in connectivity or alterations to public transport services throughout North Lanarkshire could enhance access to the council area's historic sites. Consequently, this could lead to a greater number of individuals being able to enjoy the area's heritage.

Key sustainability issues

The following key issues have been identified through the baseline review for this topic:

- There are many features and areas of historic environment interest present within North Lanarkshire. This includes a large number of listed buildings, scheduled monuments, gardens and designed landscapes, and conservation areas. There are also several structures on the Buildings at Risk Register. At this time, it is not possible to determine what effect, if any, transport infrastructure has on these designated areas, their settings, and specific features.
- New transport infrastructure provision has the potential to impact on the fabric and setting of historic environment assets, through ground disturbance, inappropriate design, and layout. This is especially important in conservation areas, where any new infrastructure must be carefully planned to ensure it complements the existing character and does not detract from the area's heritage value.
- There is a need for transport infrastructure development to avoid loss of or damage to heritage features and their setting, and where possible, recognise and better reveal the significance of heritage assets into transport infrastructure, providing opportunities for enhancing their fabric and setting.
- Accessibility to the council area's most important historic sites could be improved through the LTS, which would enable more people to appreciate the area's heritage.
- It is also recognised that the LTS has the potential to establish cross-cutting provisions relating to development. This could include the creation and enhancement of functional environmental infrastructure, ecosystem services and biodiversity, providing appropriate buffers to natural spaces and restoring and enhancing connectivity. In this context, improving the resilience of such networks is likely to protect the historic environment, important views, and/ or the setting of designated and non-designated assets, in addition to the wider character of key historic settlements across North Lanarkshire.

Figure 14: World Heritage Sites, Scheduled Monuments, and Gardens or Designated Landscapes in North Lanarkshire

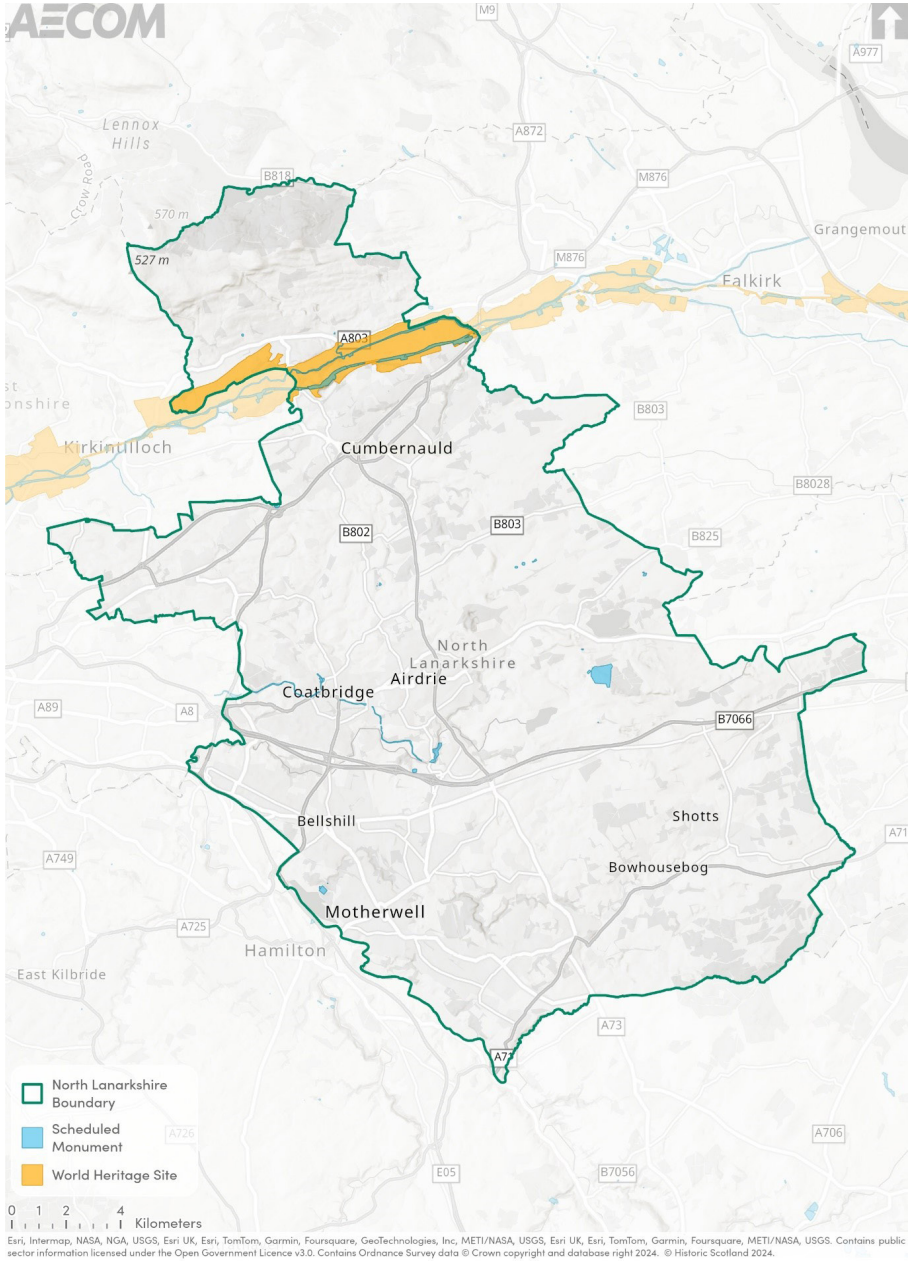
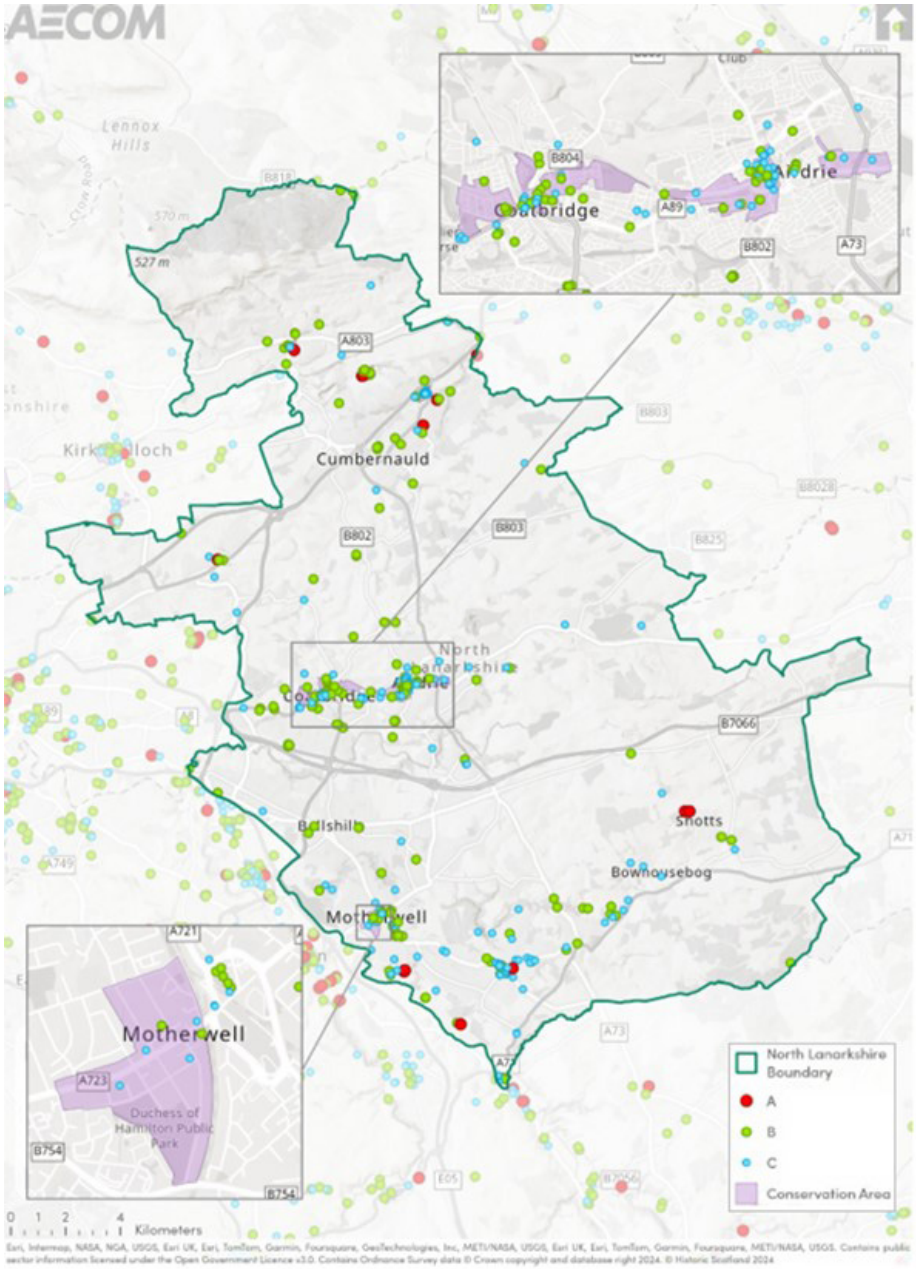


Figure 15: Listed Buildings and Conservation Areas in North Lanarkshire



Landscape

Focus of SEA topic

- Designated and non-designated sites and areas.
- Landscape character and quality.
- Visual amenity.

Summary of current baseline

National Scenic Areas

Scotland's 40 National Scenic Areas (NSAs) cover 13% of the country's land. The designation's purpose is both to identify Scotland's finest scenery and to ensure its protection from inappropriate development in the planning system. NSAs are broadly equivalent to the National Landscapes (previously Areas of Outstanding Natural Beauty, or AONBs) found in England, Wales and Northern Ireland.

There are no NSAs in or near to North Lanarkshire – the nearest is Loch Lomond, approximately 20 km to the north-west of the council area.

Landscape character and quality

The North Lanarkshire Local Landscape Character Assessment (2018) (LLCA) identifies that there are ten Landscape Character Types (LCT) in North Lanarkshire.

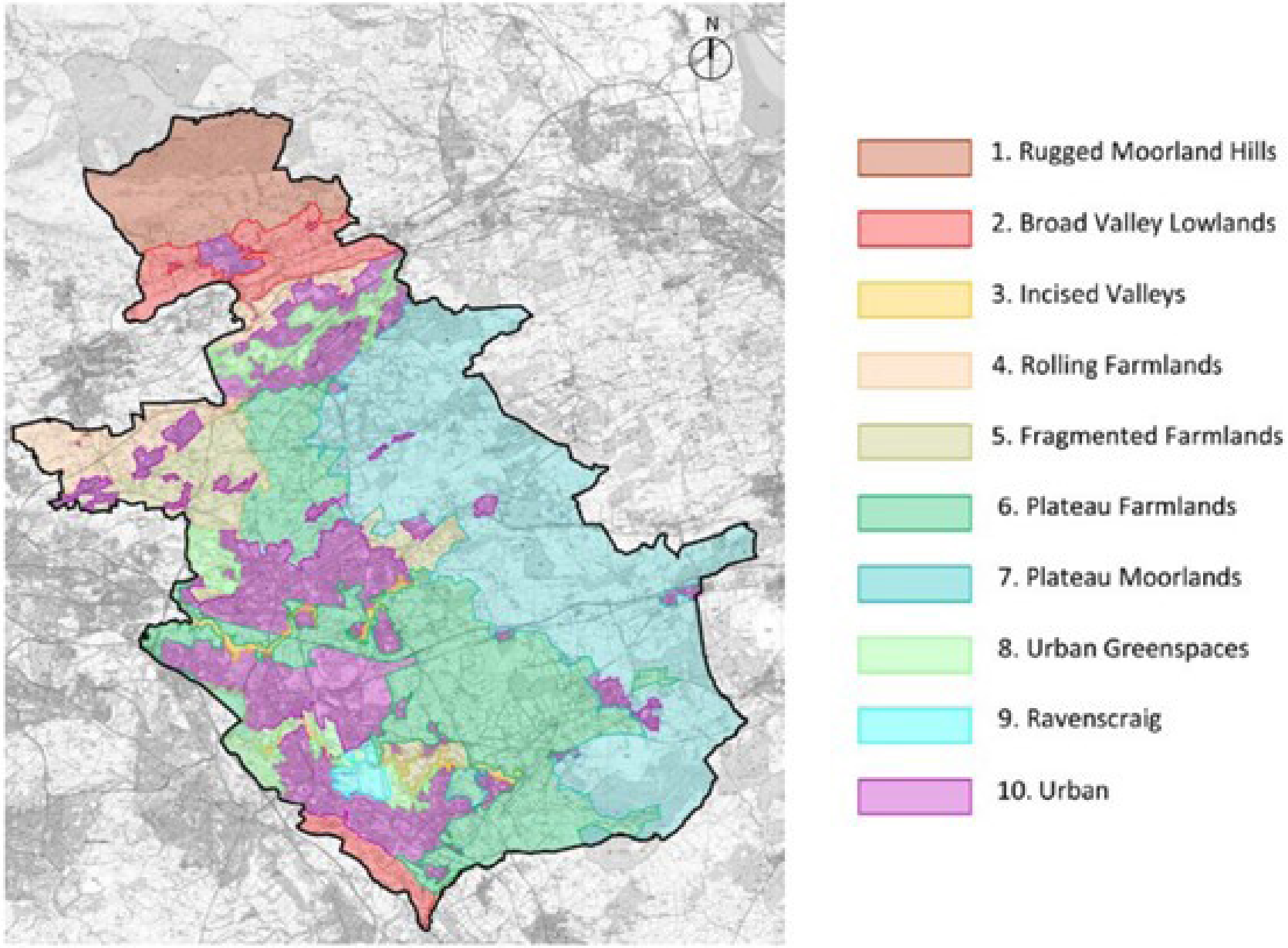
To the north, North Lanarkshire is dominated by Rugged Moorland Hills (LCT 1) and Broad Valley Lowlands (LCT 2), reflecting the more elevated and natural landscape. The central and southern areas contain a mix of Rolling Farmlands (LCT 4), Plateau Farmlands (LCT 6), and Plateau Moorlands (LCT 7). Areas of Urban Greenspaces (LCT 8) are distributed within and around the towns, particularly in the central and western parts of the council area, while Urban (LCT 10) areas are mostly found in the western half of North Lanarkshire. Fragmented Farmlands (LCT 5) and Incised Valleys (LCT 3) occur in patches across the council area. The Ravenscraig (LCT 9) area (a former iron and steel works) represents a zone of urban regeneration in the south.

Each LCT has distinctive features and qualities which contribute to their character (i.e., geology, landform, cultural and ecological features etc). The LLCA contains guidance for the management of RLCTs in response to new development, including transport infrastructure, which may adversely impact upon the distinctive qualities of each LCT in the absence of sensitive design.

The LLCA also identifies a number of Local Landscape Units (LLU) within the LCT areas. LLUs are areas of notable quality and value within which future development requires careful consideration to avoid potential significant impact on their landscape character. The LLCA identified that Kilsyth Hills LLU (on North Lanarkshire's northern boundary) and Clyde Valley LLU (on North Lanarkshire's south-western boundary), are particularly sensitive, and would be threatened and adversely affected by unsympathetic development within their boundaries. These two LLUs are identified as suitable candidates to be designated as Special Landscape Areas.

It is also worth noting LLU '4b – Farmland north of A80 Road Corridor' and LLU '5a – Area either side of M73 Road Corridor, south of the A80' are noted to be heavily influenced by the existing M80 motorway and adjacent urban areas; therefore, these LLUs have a low/ low-to-medium sensitivity to development.

Figure 16: North Lanarkshire's Landscape Character Types



Source: North Lanarkshire Local Development: Plan Modified Proposed Plan: Local Landscape Character Assessment: Background Report'

Landscape Character Areas

The Glasgow and Clyde Valley Landscape Character Area (LCA) covers the administrative areas of East Dunbartonshire, West Dunbartonshire, Glasgow City, Inverclyde, North Lanarkshire, East North Lanarkshire, North Lanarkshire and Renfrewshire. The LCA contains a diverse range of environments, ranging from extensive urban areas to remote rural areas.

NatureScot's 2019 assessment of the Glasgow and Clyde Valley LCA offers a description of the LCA's key characteristics. It begins with the Glasgow city region, which is surrounded by plateau moorlands, hills, and coastal waters, and has been significantly shaped by human activity. The River Clyde (and its tributaries) lies at the heart of the LCA, and has historically served as a hub for settlement, transportation, and industry. The LCA contains fertile soils and is home to a third of Scotland's population; therefore, the LCA experiences ongoing housing development, inner-city renewal, and an ageing population. While traditionally reliant on heavy industry, the LCA now embraces modern sectors like engineering and technology. Green spaces, including parks and woodlands, are integral to the region's landscape, facilitating movement for both people and wildlife. Approximately 17% of the area is covered by woodland, which is similar to the Scottish average.

Local Landscape Areas

In many places in Scotland, the scenery is highly valued locally, and local authorities often give these landscapes a local designation. These are defined as Local Landscape Areas (LLAs), following Scottish Government policy. It is noted that previous names include Special Landscape Areas (SLAs) and Areas of Great Landscape Value (AGLVs). LLAs are present across Scotland, as defined and mapped through local development plans. NatureScot does not maintain a national record of local landscape designations, but it does provide a nation-wide map which shows their coverage based on data from 2017. According to the mapping, one LLA extends into the south of North Lanarkshire council area. This is located where the River Clyde runs, just south of Motherwell (see Figure 17). Several other LLA border North Lanarkshire.

Green Belt

Green Belt land in Scotland is designated open space surrounding urban areas intended to limit urban sprawl, preserve the character of rural communities, and protect landscapes from overdevelopment.

In the case of North Lanarkshire, Glasgow's Green Belt designation is prominent across the council area, except for its eastern extent. In the central and western regions, Green Belt land surrounds North Lanarkshire's larger settlements, such as Cumbernauld, Airdrie and Motherwell (shown in Figure 7).

Wild Land Areas

Wild Land Areas (WLAs) are the most extensive areas of high wildness. They are identified as nationally important in Scottish Planning Policy but are not a statutory designation. NatureScot identified 42 wild land areas following a detailed analysis in 2014. Fieldwork for the wild land descriptions was undertaken between 2013 and 2015, and the final document was published in 2017. There are no WLA in North Lanarkshire; the closest WLA is 40 km west, in Renfrewshire.

Tree Protection Orders

Tree Protection Orders (TPOs) are used to safeguard trees that provide significant environmental, aesthetic, and cultural benefits. These orders ensure that trees contributing to the local landscape and biodiversity are preserved, preventing their removal or damage without explicit permission from the local planning authority.

Figure 19 maps the location of North Lanarkshire's TPOs. It shows that the council area's TPOs are concentrated in and around urban areas, including Coatbridge, Cumbernauld, Airdrie, Bellshill, and Motherwell, with additional clusters in the surrounding countryside.

Visual amenity

The views across North Lanarkshire are also an important consideration in the transport planning process as the location, design, layout and use of materials in transport infrastructure can impact important views if they are not considered and assessed.

Changes due to both development and landscape manipulation can see these views degraded over time.

In addition, views experienced from the road, rail and active travel network can often be far-reaching and dramatic, particularly within the more rural areas of North Lanarkshire and on the approach into key towns.

Summary of future baseline

New transport infrastructure provision across North Lanarkshire has the potential to lead to incremental but small changes in landscape character and quality. This includes from the loss of landscape features and areas with an important visual amenity value. Increasing traffic levels associated with an increase in population also have the potential to negatively impact landscape character and tranquillity.

Key sustainability issues

The following key issues have been identified through the baseline review for this topic:

- North Lanarkshire lies within one LCA and ten LCTs. The associated assessments provide a summary of the character, sensitivities, and forces of change for each area. Transport infrastructure has the potential to alter the visual, spatial, and experiential qualities of LCAs/LCTs, impacting their scenic value, tranquillity, and sense of place.
- Views are an important consideration in the transport planning process as the scale, height, and mass of development can ultimately impact important views if they are not appropriately considered through design and layout of new transport infrastructure.
- Transportation infrastructure such as roads, highways, and railways can lead to the loss of important landscape features (such as TPOs), and fragment natural habitats, leading to the loss of biodiversity and disruption of ecosystems.

Figure 17: Local Landscape Areas in North Lanarkshire

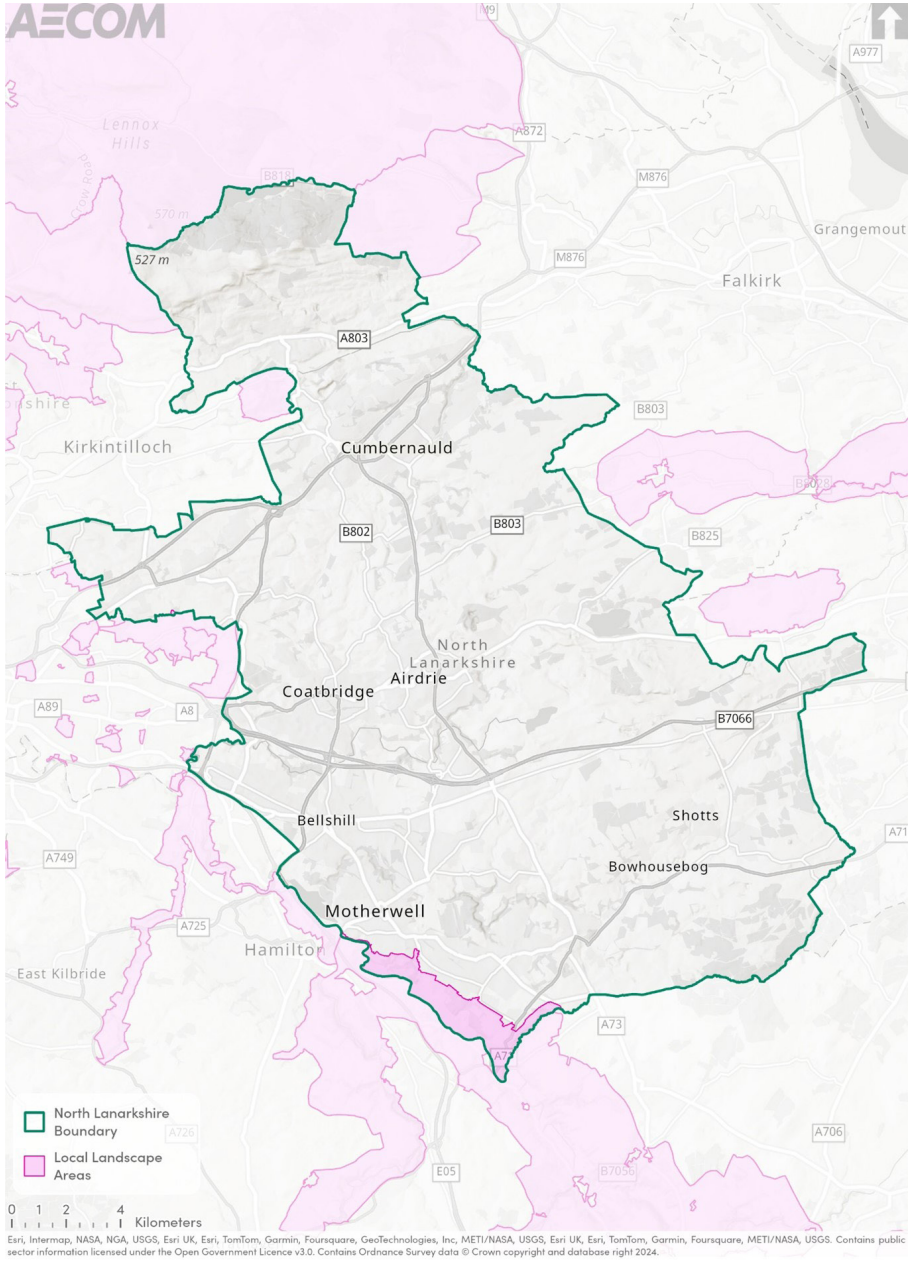


Figure 18: Green Belt in North Lanarkshire

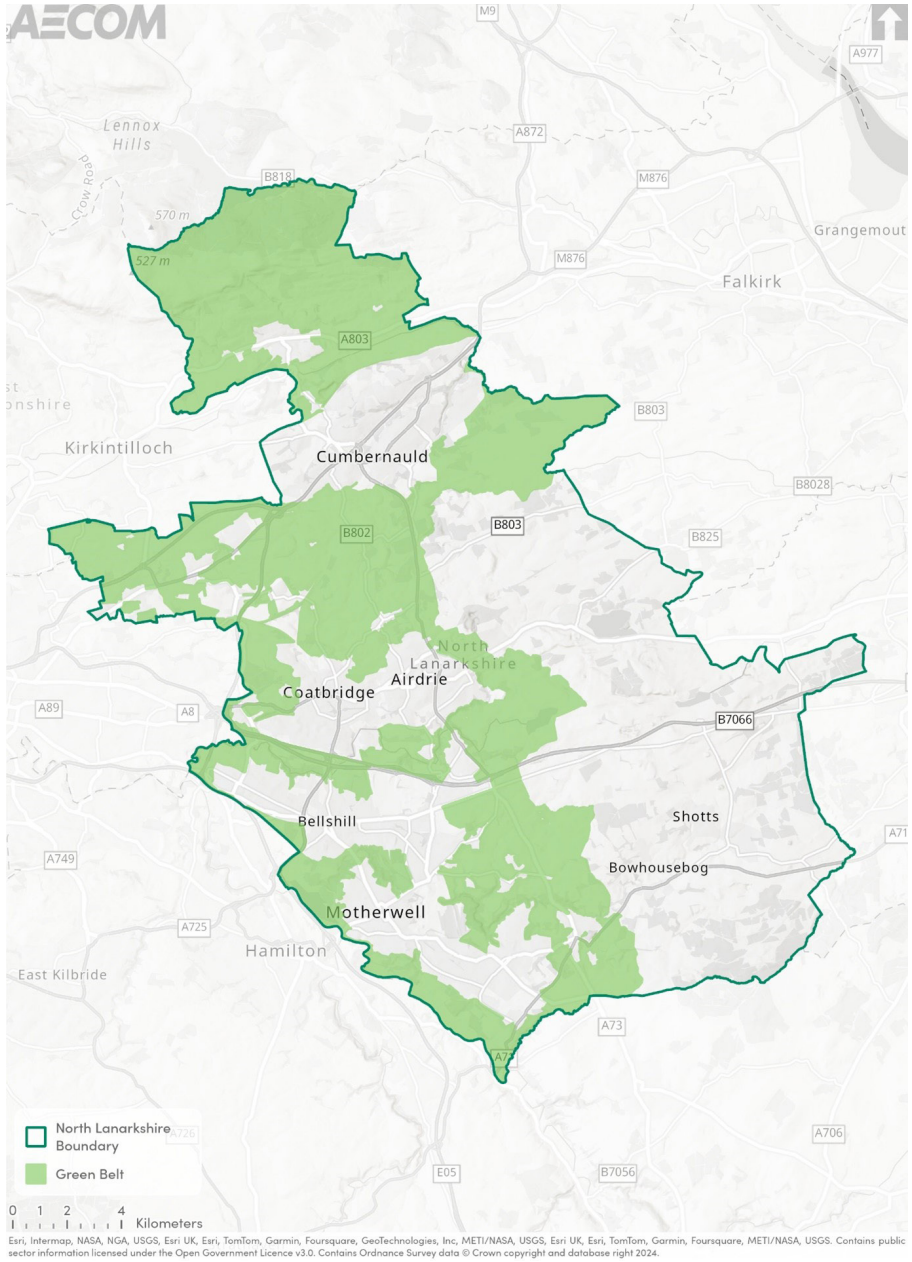
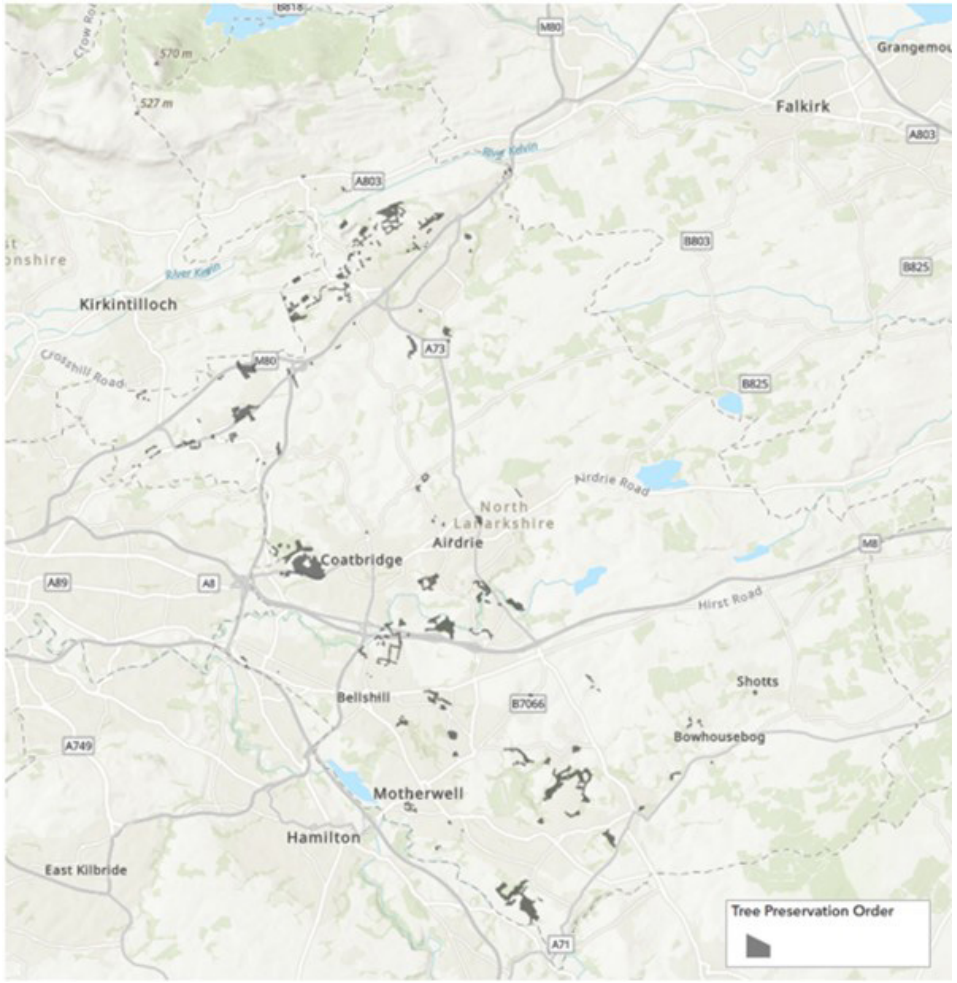


Figure 19: Tree Protection Orders



Material assets

Focus of SEA topic

- Mineral resources.
- Waste.
- Sustainable design.

Summary of current baseline

Geology

The geology of North Lanarkshire is shaped primarily by rocks from the Carboniferous Period, covering a span of approximately 60 million years. The council area contains sedimentary rocks such as sandstone, mudstone, and limestone, which are visible in the river valleys and old quarries. Notable features include volcanic formations like the Kilsyth Hills, formed by the Clyde Plateau Volcanic Formation, and igneous intrusions such as the Midland Valley Sill Complex, which are prominent across the central areas. Glacial deposits from the Ice Ages also contribute to the landscape, with till, moraines, and drumlins shaping much of the terrain. This varied geology has been fundamental to North Lanarkshire's industrial history, providing resources for coal mining, quarrying, and construction.

Mineral resources

Mineral resources are defined as natural concentrations of minerals or, in the case of aggregates, bodies of rock that are, or may become, of potential economic interest due to their inherent properties. Since minerals are a non-renewable resource, minerals safeguarding is the process of ensuring that non-minerals development does not needlessly prevent the future extraction of mineral resources, of local and national importance.

The North Lanarkshire Assessing Applications For Minerals – Supplementary Planning Guidance Note (2010) identifies that North Lanarkshire is an area that possesses a large quantity and wide range of minerals, and consequently, has a long history of minerals extraction.

According to the British Geological Society's Directory of Mines and Quarries (2020) there are six active quarries in North Lanarkshire, which extract a range of mineral resources, including Quartz-microgabbro (Quartz-dolerite), aggregates, roadstones, and armourstone.

Waste

The production and disposal of waste is becoming an increasingly important issue. Waste is produced by households, by industrial processes, by the construction and demolition industry, through commercial activities and agricultural practices and by public services and utilities. Waste can affect the environment through its visual impact, emissions to the air, leachate to groundwater, runoff to surface water as well as the contamination of land.

According to SEPA, in 2022, approximately 43% of household waste in North Lanarkshire was recycled. This is the same as the equivalent rate for Scotland in that year, which also approximately 43%. Compared to 2011 (the earliest year that SEPA have published household waste statistics online), North Lanarkshire's annual household waste recycling rate has slightly improved, having recorded an equivalent rate of approximately 39% in 2011 (therefore improving by around four percentage points). Over the same period, Scotland's equivalent rate improved by three percentage points.

Transport and material assets

The construction and maintenance of transport infrastructure in North Lanarkshire requires the use of material assets, particularly roads. Asphalt is the most common material used to construct roads; it is a mixture of aggregates, binder and filler. Aggregates are processed mineral materials such as crushed rock, sand, gravel, and various other materials. Binder is used to unite the aggregates together to form a cohesive mixture.

Notably, asphalt can be made using recycled materials or non-petroleum based renewable resources (bio-asphalt). The use of such materials will ensure that non-renewable resources are not depleted.

Summary of future baseline

The consumption of natural resources to maintain North Lanarkshire's transport network results is a source of adverse environmental effects. However, if maintenance is not undertaken, the integrity and quality of the transport network would deteriorate to the detriment of accessibility and economic growth. Additionally, there would be impacts on the environment, for example increased GHG emissions from longer travel times.

New infrastructure projects (including transport infrastructure) inherently use material assets and produce waste. It is anticipated that this trend will continue over the coming years.

Key sustainability issues

The following key issues have been identified through the baseline review for this topic:

- There is a need for the construction, maintenance and operation of transport infrastructure to reduce the quantity of primary materials required, make use of surplus materials, and minimise the disposal of waste via landfill.
- Transport infrastructure projects (akin to most development projects) inherently use material assets and produce waste. If not appropriately mitigated, waste can affect the environment through its visual impact or by emissions to the air, leachate to groundwater, and runoff to surface water as well as the contamination of land.

Population and human health

Focus of SEA topic

- Population.
- Health and wellbeing.
- Crime and community safety.
- Road safety

Summary of current baseline

Population estimates and change

On in June 2022, the population of North Lanarkshire was 340,930. This is a decrease of 0.1% from 341,410 in 2021. Over the same period, the population of Scotland increased by 0.5%.

Over a longer period, between 2001 and 2022, the population of North Lanarkshire has increased by 6.1%. Meanwhile, the population nationally has increased by 7.6%.

In terms of population age, the 45-64 age group was the largest in North Lanarkshire in 2021, with a population of 97,556 (28.6%). In contrast, the 75+ age group was the smallest, with a population of 26,294. Between 2001 and 2021, the three youngest age groups (0-15, 16-24, and 25-44) all saw a decline in numbers, with the 25-44 age seeing the largest percentage decrease (-11.2%). Over the same period, the three oldest age brackets (45-64, 65-74, and 75+) all grew in size, with 75+ seeing the largest percentage increase (+44.6%).

Scottish Index of Multiple Deprivation

The Scottish Index of Multiple Deprivation (SIMD) is a relative measure of deprivation across 6,976 small areas (called data zones). If an area is identified as 'deprived', this can relate to people having a low income, but it can also mean fewer resources or opportunities. SIMD looks at the extent to which an area (known as a 'data zone') is deprived across seven domains (income, employment, education, health, access to services, crime and housing). The SIMD provides each data zone with a ranking, from most deprived (ranked 1) to least deprived (ranked 6,976).

It is worth noting that SIMD is an area-based measure of relative deprivation: not every person in a highly deprived area will be experiencing high levels of deprivation. Data zones in rural areas tend to cover a large land area and reflect a more mixed picture of people experiencing different levels of deprivation. This means that SIMD is less helpful at identifying the smaller pockets of deprivation found in more rural areas, compared to the larger pockets found in urban areas.

The SIMD (2020) mapping tool shows that there are areas in North Lanarkshire that fall within the 10% most deprived data zones in Scotland. These can be found in parts of Airdrie, Cumbernauld, Coatbridge, Bellshill, Motherwell, Caldercruix and Wishaw.

North Lanarkshire's SER (2005) notes that there are pockets of deprivation dispersed through North Lanarkshire. People in areas with deprivation may experience disadvantage, and encounter problems associated with low income, poor health, low educational attainment and lack of access to learning opportunities and employment.

Health and wellbeing

Public Health Scotland's (PHS) local area profile summaries provide a comprehensive overview of health and its wider determinants at a local level. These profiles present a range of indicators that offer insights into various health outcomes, risk factors, and socio-economic conditions affecting communities. The data for these profiles is sourced from a variety of national and local datasets, including health surveys, administrative records, and census data.

North Lanarkshire's local area profile from PHS shows that the council area performs below the national average for many health and wellbeing indicators. At the time of writing, of the 55 indicators with available data, North Lanarkshire performed worse than the national average in 37 indicators (with 26 of these indicators falling in the lowest 25th percentile). Indicators that performed particularly poorly in North Lanarkshire when compared to Scotland were alcohol-related deaths, asthma patient hospitalisations, and Emergency patient hospitalisations. Fourteen indicators were at similar levels to the Scottish equivalent figures. North Lanarkshire performed better than Scotland in only four indicators, including 'road traffic accident casualties', and 'people aged 65+ with high levels of care needs who are cared for at home'.

North Lanarkshire's life expectancy at birth was higher for females (78.8 years) than for males (74.1 years) during the period 2019-2021; both of these figures are lower than their national equivalent figures.

Data from Scotland's 2021 Census shows that 46.0% of the population of North Lanarkshire during this time were in very good health, 29.5% were in good health, 15.5% were in fair health, 6.7% were in bad health, and 2.2% were in very bad health.

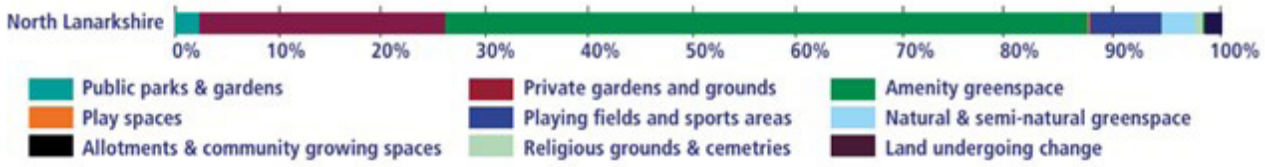
The 2022 Census recorded the method of travel to work for all people aged 16 and over in employment in North Lanarkshire. It shows that the main mode of travel to work or study for North Lanarkshire's residents is driving a car or van (51%), which is higher than the Scotland-wide figure of 46%. Approximately 30% is mainly working from home, which is similar to the national average (32%). Passengers in a car or van is the next most common mode of transport, with 5% of journeys made by this mode; this is similar to the national average (4%). Rail use in the council area is slightly higher than the national average (3% compared to 2%).

A small proportion of journeys to work or study in the council area were made by active travel modes of transport: 4% travelled on foot (this is just around half of Scotland's equivalent rate); and under 1% travelled by bicycle (this is similar to Scotland's equivalent rate).

There is well documented evidence that environmental deprivation is related to health and health behaviour. Access to good quality greenspace and the wider countryside are important in promoting healthy lifestyles. Although now quite dated, North Lanarkshire Council's Open Space Strategy (2004) suggests that the council area is home to a range of open space sites, including: 970 ha of parkland, 6 town parks and 1,070 amenity open spaces, 263 formal pitches and 86 kick about areas, and 281 play spaces.

The more recent Third State of Scotland's Greenspace (2018) (SSG) report from Greenspace Scotland suggests that North Lanarkshire is among the best performing council areas in urban Scotland with regard to the amount of available greenspace, which was recorded at almost 13,000 ha. **Figure 20**, lifted from the SSG, shows that the majority of North Lanarkshire's greenspace is amenity greenspace, followed by private gardens and grounds. Amenity greenspace refers to landscaped areas providing visual appeal or separating land uses, such as residential zones or transport corridors. Unlike public parks, which prioritise recreation and accessibility, these spaces are primarily functional and aesthetic.

Figure 20: Proportions of different greenspace types in North Lanarkshire



Country parks have been established in many parts of Scotland. Local authorities may designate country parks where they see a need, using powers under Section 48 of the Countryside (Scotland) Act 1967. Local authorities provide and manage most of Scotland's 40 country parks.

There are three country parks partially or wholly within North Lanarkshire, which are:

- Drumpellier Country Park – a 200-ha site that includes two natural lochs, moorland, woodlands and grasslands.
- Palacerigg Country Park – a 40-ha area on the site of a former upland farm, where hundreds of thousands of native trees and shrubs have been planted.
- Strathclyde Country Park – a 400-ha site of countryside in the valley of the River Clyde.

North Lanarkshire Council's Country Parks for the Future is a 10-year delivery plan (from 2019) to create a shift in the way communities use their local parks and greenspaces from passive, leisure use to active, engaged community involvement that delivers improvements in specific health, wellbeing, and social outcomes.

The masterplans for each park aim to build on its role as a community asset, focussing on improving the core visitor facilities, developing new attractions to meet the evolving needs of local communities, improving connections to communities through new and enhanced gateway facilities and access infrastructure, and promoting third sector and private-sector involvement and facilities.

Economic Regeneration

North Lanarkshire Council's Economic Regeneration Delivery Plan (2023-2028) aims to foster inclusive economic growth, while also improving quality of life and community wellbeing. It focuses on expanding affordable housing, revitalising town centres, enhancing business infrastructure, and upgrading transport and digital connectivity. Key objectives include a 5,000-home affordable housing target by 2035, investment in town centre redevelopment, increasing the area of commercial space in the council area, and improving accessibility through road, rail, and digital projects.

Focussing on transport issues, the Plan mentions that many of the council area's strategic business locations are hard to travel to without access to a car, with there being limited public transport options between these locations and settlements across North Lanarkshire. The Plan also notes that the issue of limited public transport extends more generally to individuals in smaller and rural settlements when trying to access employment opportunities in general. To resolve these issues, the Plan aims to promote *'…a mix of development across [North Lanarkshire's] motorway corridors and accessible business locations…'* and *'… establish transport hubs connecting up bus and rail networks'*. Finally, the Plan also supports *'…the delivery of Electric Vehicle Charging infrastructure and other green energy transport solutions across North Lanarkshire'*.

A recent example of a transport infrastructure project in North Lanarkshire was the Motherwell Town Centre And Rail Station (part of the Pan Lanarkshire Orbital Transport Corridor works). This project has improved facilities and transport links at Motherwell Rail Station and helped increase the role of the station as a key transport hub in the future.

Crime and community safety

According to data provided by the Scottish Government, there were 19,501 recorded crimes and 11,310 recorded offences in North Lanarkshire during the period 2023/ 2024. This represents 6.5% of all recorded crimes and 6.5% of all recorded offences in Scotland during this period.

With regard to perceptions of crime in North Lanarkshire, 72.1% of adults in North Lanarkshire perceived the local crime rate as 'the same or improved' between 2019 and 2021 (the equivalent figure for Scotland is 75.0%). This suggests that 27.9% of adults in North Lanarkshire perceived the local crime rate as deteriorating over the period of 2019-2021

Road safety

Results from the Reported Road Casualty Statistics (RRCS) (which uses data from Police Scotland for people killed or seriously injured on Scotland's roads) show that number of people seriously injured on roads in North Lanarkshire decreased during the period 2013 to 2022, dropping from 661 to 258 (a drop of around 60%).

The number of people killed on roads in North Lanarkshire remained at similar levels between 2013 and 2022, recording six fatalities per annum at the beginning and end of the period.

Scotland's Road Safety Framework sets out the vision for road safety in Scotland. It includes specific casualty reduction targets to be achieved by 2030. The framework targets an 18% reduction to the number of people seriously injured on roads, and a 50% reduction in the number of fatalities on roads by 2030 (when compared to 2022 levels).

Summary of future baseline

North Lanarkshire has an aging population, the 75+ age group growing by 18% between 2011 and 2021. Over this period the 75+ population increased its share in North Lanarkshire's population profile by one percentage point. This trend of ageing is expected to continue into the future. This has associated transport and accessibility issues.

New housing and employment provision has the potential to increase traffic and cause congestion at key pinch points on North Lanarkshire's transport network. This could lead to declining road safety for pedestrians.

Obesity is seen as an increasing issue by health professionals, and one that will contribute to significant health impacts on individuals, including increasing the risk of a range of diseases, including heart disease, diabetes and some forms of cancer. Transport planning will play a key role in encouraging active transport choices (for example, walking and cycling) as well as accessibility to sports and recreation facilities.

Changes in air quality and noise quality in the vicinity of certain routes in North Lanarkshire are likely to take place with the implementation of ongoing transport improvements. This will likely impact upon the health of residents.

Key sustainability issues

The following key issues have been identified through the baseline review for this topic:

- Although there was a slight population decline between 2021 and 2022, North Lanarkshire has seen moderate population growth over the longer period since 2001. If the population follows these longer-term trends, an increasing population is likely to translate into a slightly higher demand for transport.
- The population of North Lanarkshire is ageing; this has implications for transport provision and accessibility.
- Areas in all of North Lanarkshire's largest settlements are amongst the 'most deprived' areas nationally according to the overall SIMD.
- In 2019, 8.9% of North Lanarkshire's population were in bad or very bad health.
- The majority of people in North Lanarkshire drive to work and only 5% of North Lanarkshire's population walk or cycle to work/study. This could imply that functioning active travel infrastructure provision across the council area, or access to this provision, is currently limited.
- There were 19,501 recorded crimes and 11,310 recorded offences in North Lanarkshire during the period 2023 / 2024, representing 6.5% of all recorded crimes and 6.5% of all recorded offences in Scotland for this period.
- In terms of road safety, in 2022 there were six casualties and 258 people seriously injured on North Lanarkshire's roads.

SEA Framework

Proposed SEA Framework

Given the breadth of potential impacts, no topics have been screened out of the SEA process. **Table 7 2** below sets out the proposed SEA Framework, providing SEA objectives against each topic. blt is important to note that the Framework is deliberately high-level to ensure flexibility to respond to the scope of the emerging LTS/ alternatives and the latest evidence. Equally, there is flexibility to make modest adjustments to the SEA Framework over the course of the plan-making/ SEA process

Table 7 2: Proposed SEA Framework

SEA topic	SEA Objectives
Biodiversity, flora and fauna, and geodiversity	• Conserve and enhance internationally, nationally, and locally designated sites for biodiversity and geodiversity in accordance with their significance and in line with established good practice. • Take a strategic, landscape-scale approach, focused on habitat connectivity across the transport network and climate change resilience. • Ensure accordance with the mitigation hierarchy (avoid, mitigate, compensate) in order to reduce negative effects of new transport infrastructure on ecological and geological resources. • Prevent the spread of INNS along transport corridors
Climatic factors	• Support climate change mitigation through limiting the contribution of transport to GHG emissions. • Support the resilience of the transport network to the potential effects of climate change, including flooding and extreme heat events. • Linked to the biodiversity objective, support the restoration of natural processes, and avoid actions that further constrain the natural environment's ability to respond to climate change.
Air quality and noise pollution	• Deliver improvements to air quality in North Lanarkshire by supporting the use of more sustainable modes of travel, including active travel and public transport.

Table 7 2: Proposed SEA Framework

SEA topic	SEA Objectives
Air quality and noise pollution	• Support the achievement of air quality objectives, including within air quality management areas (AQMAs). • Reduce noise from transportation sources.
Soil and water resources	• Promote the efficient use of land, with a focus on avoiding the loss of best and most versatile agricultural land as far as possible. • Minimise the impact the transport network has on water quality and the physical state of water bodies. • Conserve and enhance North Lanarkshire's historic environment, including both designated and non-designated heritage assets. • Protect archaeological assets from disturbance as a result of the construction of new transport infrastructure. • Consider links to landscape and place-making and promote an understanding of the local heritage resource.
Cultural heritage	• Conserve and enhance North Lanarkshire's historic environment, including both designated and non-designated heritage assets. • Protect archaeological assets from disturbance as a result of the construction of new transport infrastructure. • Consider links to landscape and place-making and promote an understanding of the local heritage resource.
Landscape	• Protect and enhance the character, quality and setting of North Lanarkshire's landscape, townscape and villagescape features. • Integrate high quality green infrastructure into new transport infrastructure, linking it to the wider landscape. • Recognise close links with other objectives, including biodiversity and heritage.
Material assets	• Promote sustainable management and design solutions that encourage the reduction, re-use and recycling of waste and materials during the construction, maintenance, and operational phases of transportation projects and schemes.
Population and human health	• Improve access to key services, facilities and amenities. • Improve access to education, employment and economic opportunities. • Improve access to high quality green infrastructure networks. • Promote good health by encouraging active modes of travel (for example, walking and cycling). • Improve road safety, including for vulnerable users.

Next steps

Consultation on the Scoping Report

Public involvement through consultation is a key element of the SEA process. At the scoping stage, the SEA Regulations require consultation with the Consultation Authorities (CAs). This Scoping Report will be issued to HES, SEPA and NatureScot via the SEA Gateway for a 35-day consultation period. CAs are invited to comment on the content of this Scoping Report, in particular the evidence base for the SEA, the identified key issues and the proposed SEA Framework.

Subsequent stages for the SEA process

Scoping is the current stage in the five-stage plan-making / SEA process. The next stage will involve appraising 'reasonable alternatives' for a range of LTS issues and feeding back initial findings so that they might be considered when preparing the draft LTS. Once the draft LTS has been prepared, it will be subjected to SEA, and an SEA Environmental Report prepared for consultation alongside it.

Environmental Report Assessment Methodology

In accordance with Schedule 3 of the Environmental Assessment (Scotland) Act 2005, the SEA Environmental Report must contain a range of specified information including:

- A summary of the likely significant effects on the environment as a result of the LTS policies.
- An appraisal of the draft LTS and reasonable alternatives.
- An outline of the reasons for selecting the alternatives dealt with; and
- Other information including a summary of the SEA scope and a description of measures envisaged for monitoring.

The reasonable alternative appraisals in the Environmental Report will evaluate the environmental performance of groups of intervention options, rather than assessing individual options. These groups will be organised by intervention themes (e.g., one theme for active travel alternatives, and another for road network and freight). This approach allows for an effective comparison of the environmental merits of different strategic approaches within each theme, taking into account the interplay between the various LTS options.

The reasonable alternatives and draft LTS will be appraised against the SEA framework set out in **Table 7 2**. The appraisal of the draft LTS will conclude with recommendations on how to enhance its environmental performance. The purpose of providing this information in the SEA Environmental Report is to inform both:

- Those who may want to make representations on the draft LTS approach/ alternatives.
- Those tasked with finalising the LTS.

Environmental Report Consultation

The draft LTS and SEA Environmental Report will be subject to a consultation period of at least six weeks. Following this, the LTS will be updated, and further SEA work will be undertaken, where appropriate.

Adoption

At adoption, a Post-adoption Statement will be prepared. The purpose of the Post-adoption Statement is to: highlight the reasons for choosing the preferred Strategy in light of other reasonable alternatives; how environmental considerations have been integrated into the Strategy's development process; how consultation responses have been considered; and to highlight what measures have been taken to monitor the significant environmental effects of the LTS.

This document can be made available in a range of languages and formats, including large print, braille, audio, electronic and accessible formats.

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